

Lessons learnt from a Japanese life insurer's challenge with low interest rates

For OECD Roundtable on revisiting the impact of the low interest rate environment on insurers and pension funds

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Fighting against low interest rate and negative spread problems

2

Measures taken by a Japanese insurer to reduce negative spreads

3

Japanese life insurance insolvencies and the resolution system in Japan

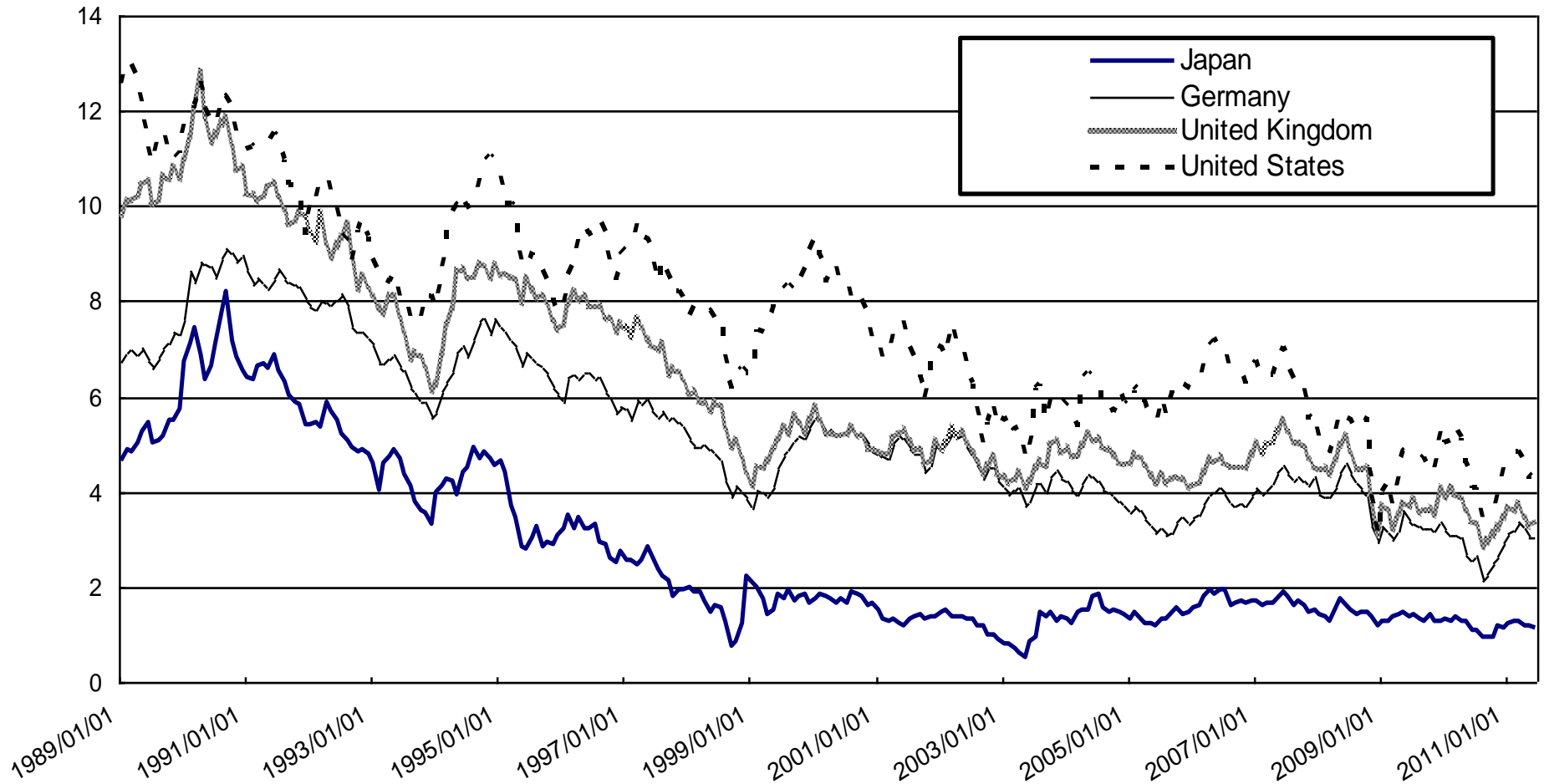
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Conclusion – yin and yang

Japan experienced a low interest rate environment

■ Interest rates remain low for a long time

Government / Treasury Bonds (10 year) Interest Rate



Stock market has been also disappointing

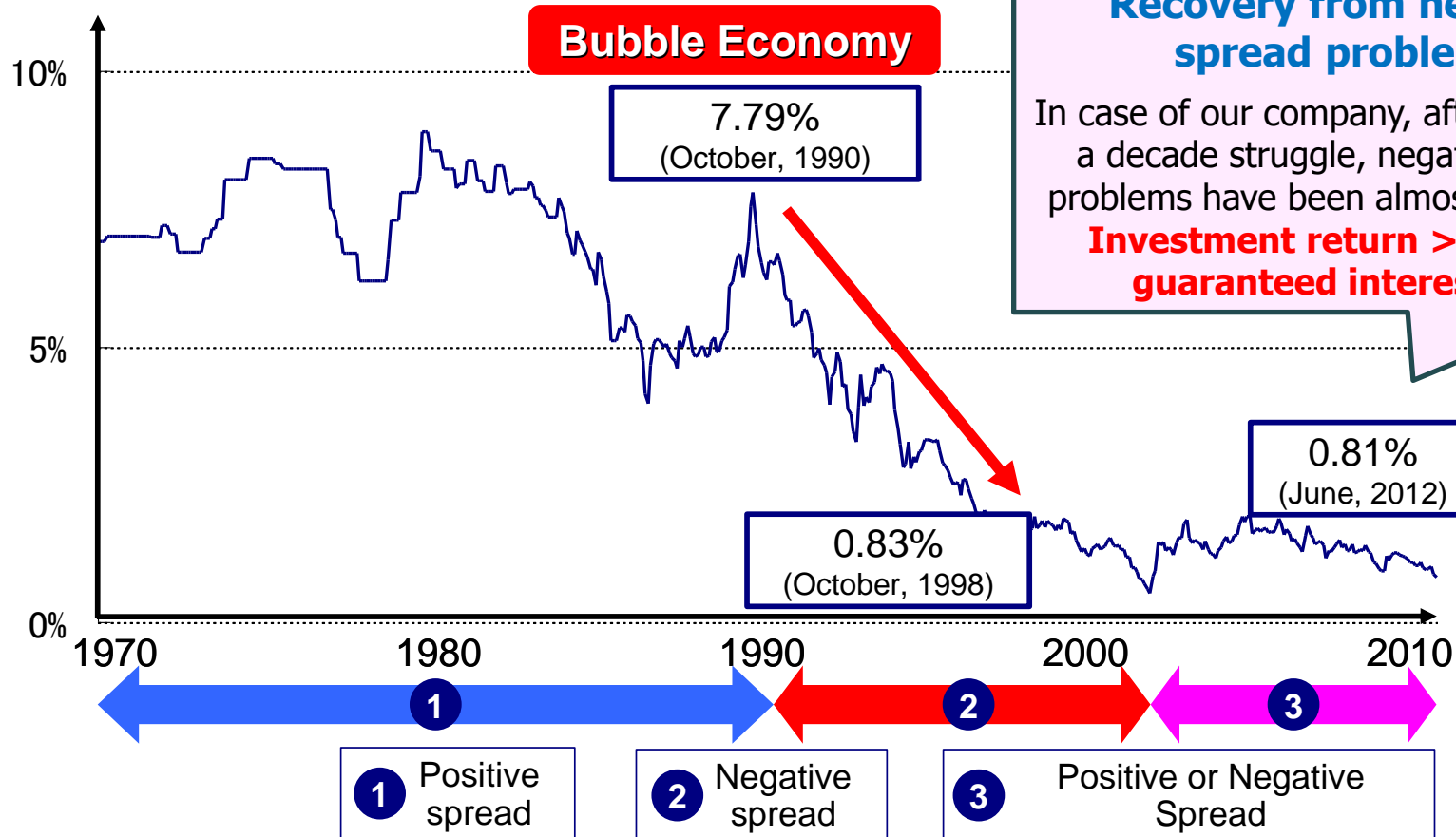
- Low interest rate coincided with poorly-performing stock prices



Negative spread problems in 1990s

- After the collapse of the bubble economy, Japan experienced a long-lasting, severe investment environment with low interest rates and poor performing stock prices. This, combined with a market dominated by long-term insurance products with high guaranteed returns, led to negative spread problems in the mid 1990s, although most Japanese life insurers endured the severe business environment.

10-year Interest Rate in Japan



Recovery from negative spread problems:

In case of our company, after more than a decade struggle, negative spread problems have been almost overcome;

Investment return > Average guaranteed interest rate

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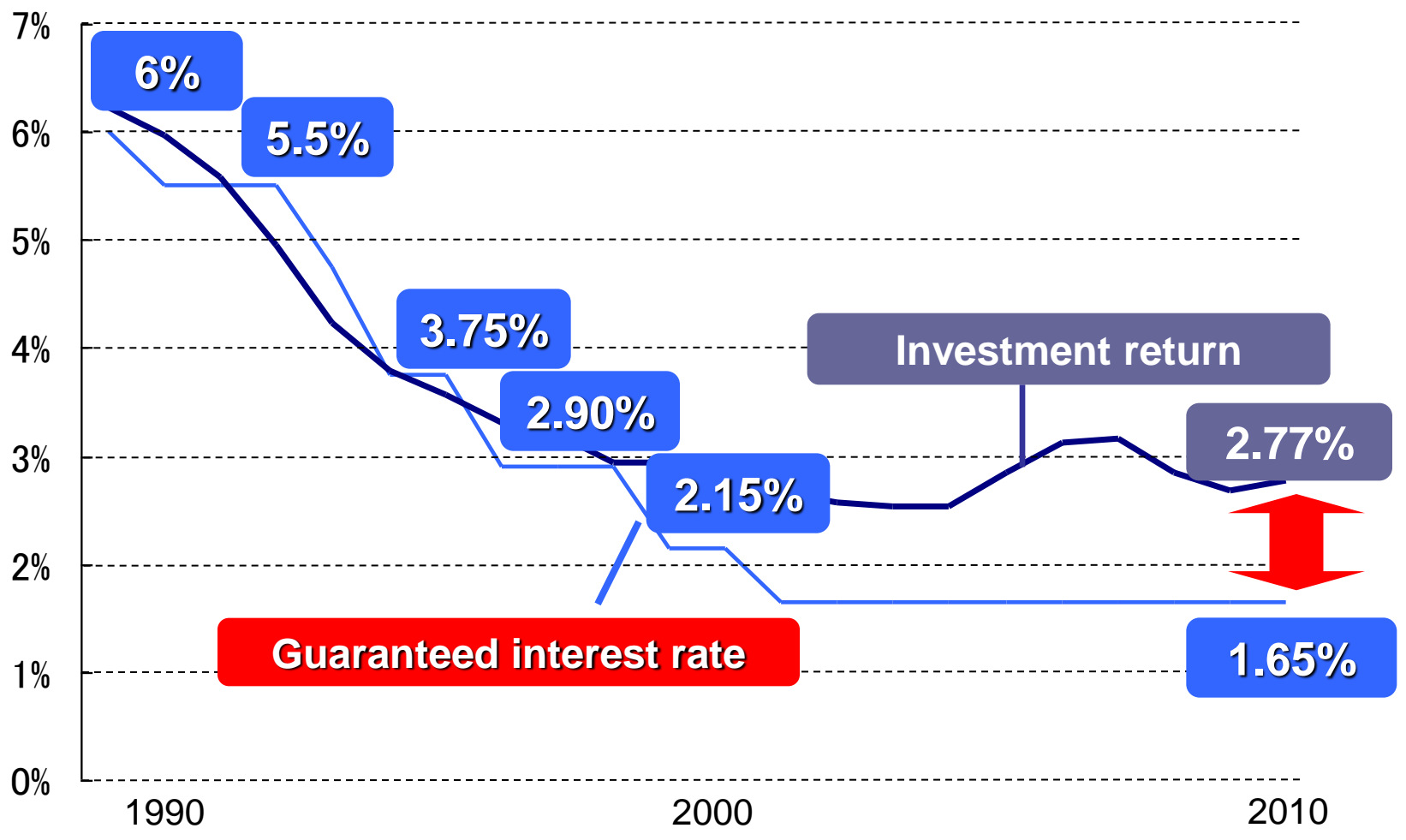
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Conclusion – yin and yang

Measure I: Lowering guaranteed interest rate

■ Reduced the guaranteed interest rate gradually for new policies

Lowered guaranteed interest rate

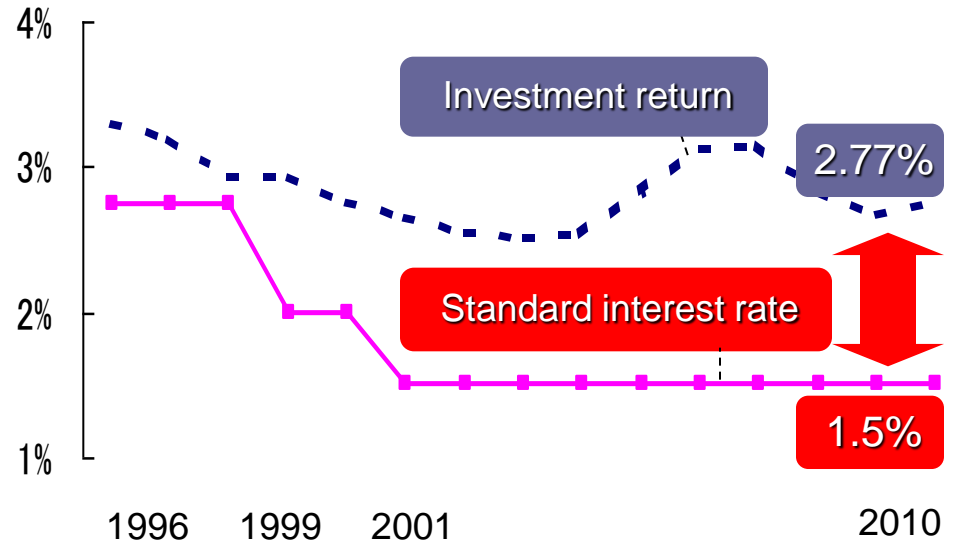


Regulatory incentives to reduce assumed interest rate

Standard Reserve Valuation System (Since 1996)

- This system requires to calculate the minimum policy reserve by using an interest rate prescribed by the supervisory authority. (based on 10 year Japanese government bonds)
- Where pricing is detached from the statutory interest rate, they may be significant additional reserving costs

Trends in the Standard Interest Rate



Continuity test – a mechanism to reflect the effect of rate change

- This amended Insurance Business Law also requires life insurance companies to conduct future cash flow tests to ascertain whether there would be any difficulty with the firm continuing its operations
- Japan's Actuarial Standards of Practice allows covering negative spread by surplus from future new business when conducting the "continuity test".

Measure II: Securing mortality profit

- Secured stable mortality profit
- Continued to develop protection-oriented products

Stable mortality profit

(Billions of Yen)

	2005	2010
Mortality profit	540	437.4

Undistributed earnings	236.8	231.2
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Protection-oriented products

Customers can select insurance products from a well-balanced product portfolio

Whole life

Term life

Death coverage

Dread Disease

Nursing care

Serious diseases and nursing care coverage

Medical coverage

Medical

Cancer

Saving and retirement coverage

Endowment

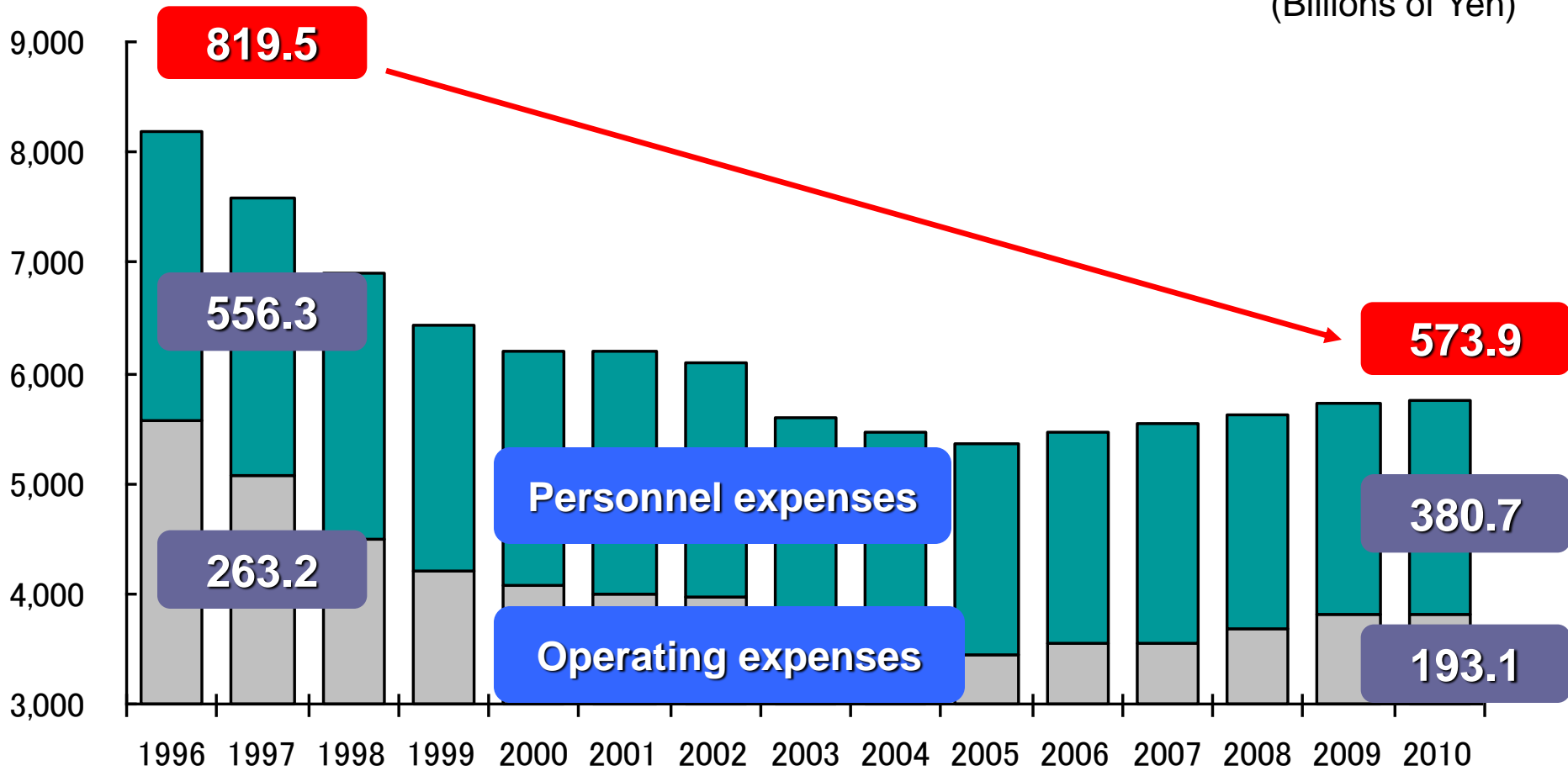
Annuity

Measure III: Reducing expenses

■ Reduced operating expenses and personnel expenses

Trends of expenses

(Billions of Yen)



Measure IV: Changing investment strategies

- Changed investment strategies with more focus on ALM
 - increase in yen-denominated fixed income asset
 - extend asset duration

Breakdown of asset portfolio

	2000	2005	2010
Public and corporate domestic bonds	27%	36%	46%
Loans receivable	29%	20%	18%
Domestic stocks	17%	22%	13%
Foreign securities	11%	10%	12%

※hedged foreign bonds is included in the bond category.

(Market Conditions)

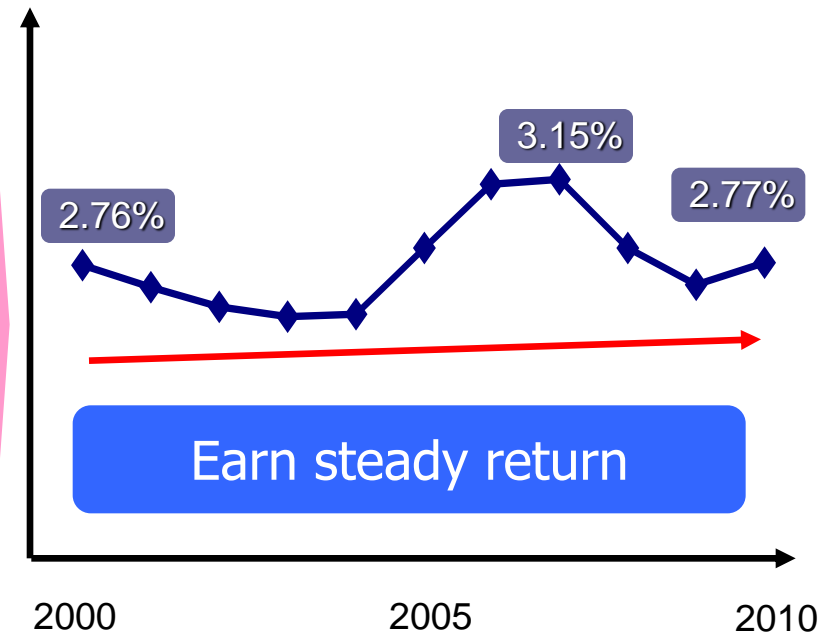
Long-term interest rates	1.28%	1.77%	1.25%
Nikkei Stock Average	\13,000	\17,060	\9,755

Shift to long-term assets

	2000	2005	2010
Average asset duration	6.1years	8.0years	10.9years

※for public and corporate domestic bonds

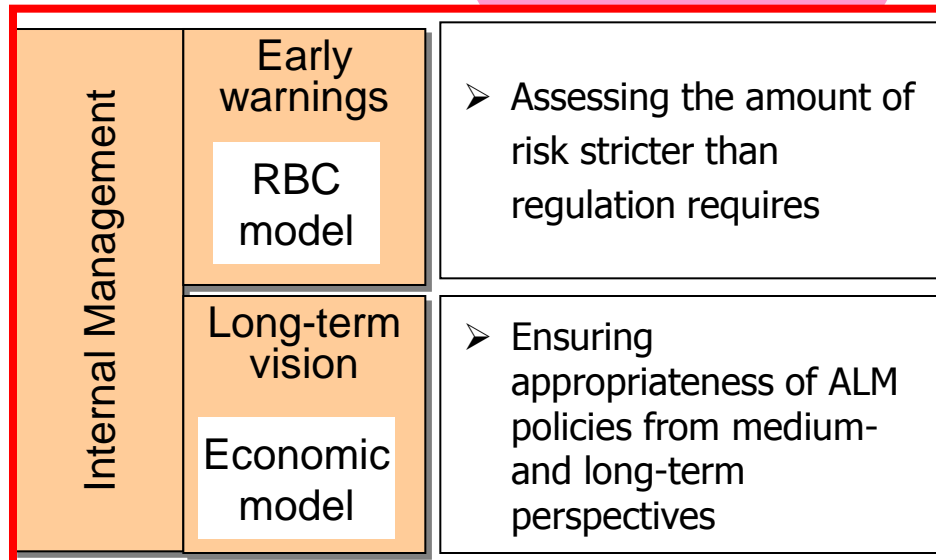
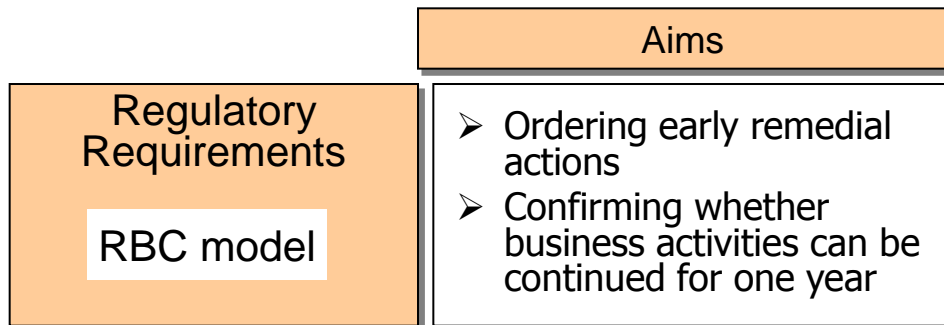
Investment return



Measure V: Enhancing risk management

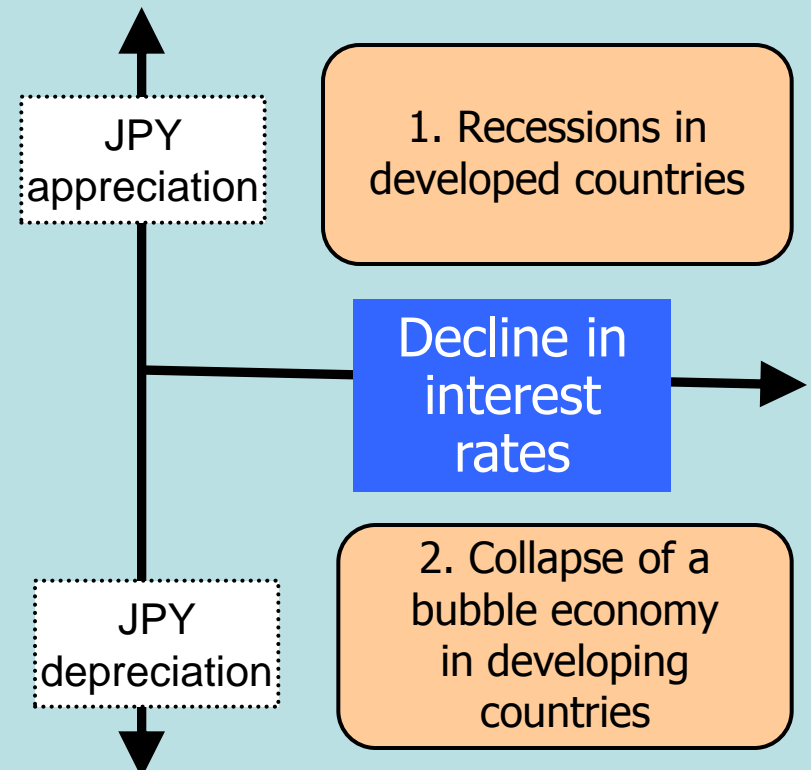
- For the purpose of internal management, developed and used both an RBC model (**early warnings**) and an economic model (**long-term vision**)

Regulatory Requirements and Internal Management



- Stress Tests:** Verify the adequacy of the ability to respond to a variety of events that could have a significant effect on profits

Stress scenario



Measure VI: Accumulating policy reserves

- Accumulated additional policy reserves, corresponding to the estimated future effect of "negative spreads"

Accumulation of additional policy reserves

Policy Reserves

Approx.
□40trillion

- Reserves set aside by "lock-in method" in accordance with the laws and regulations
 - For example, policies issued in 1990 are still evaluated at 6 percent, their guaranteed interest rate.



Additional policy reserves

Approx.
□1.2trillion

- Accumulated additional policy reserves approx. □1.2 trillion since 2006

Reduction of the Negative Spread

Negative Spread Improvement Effect

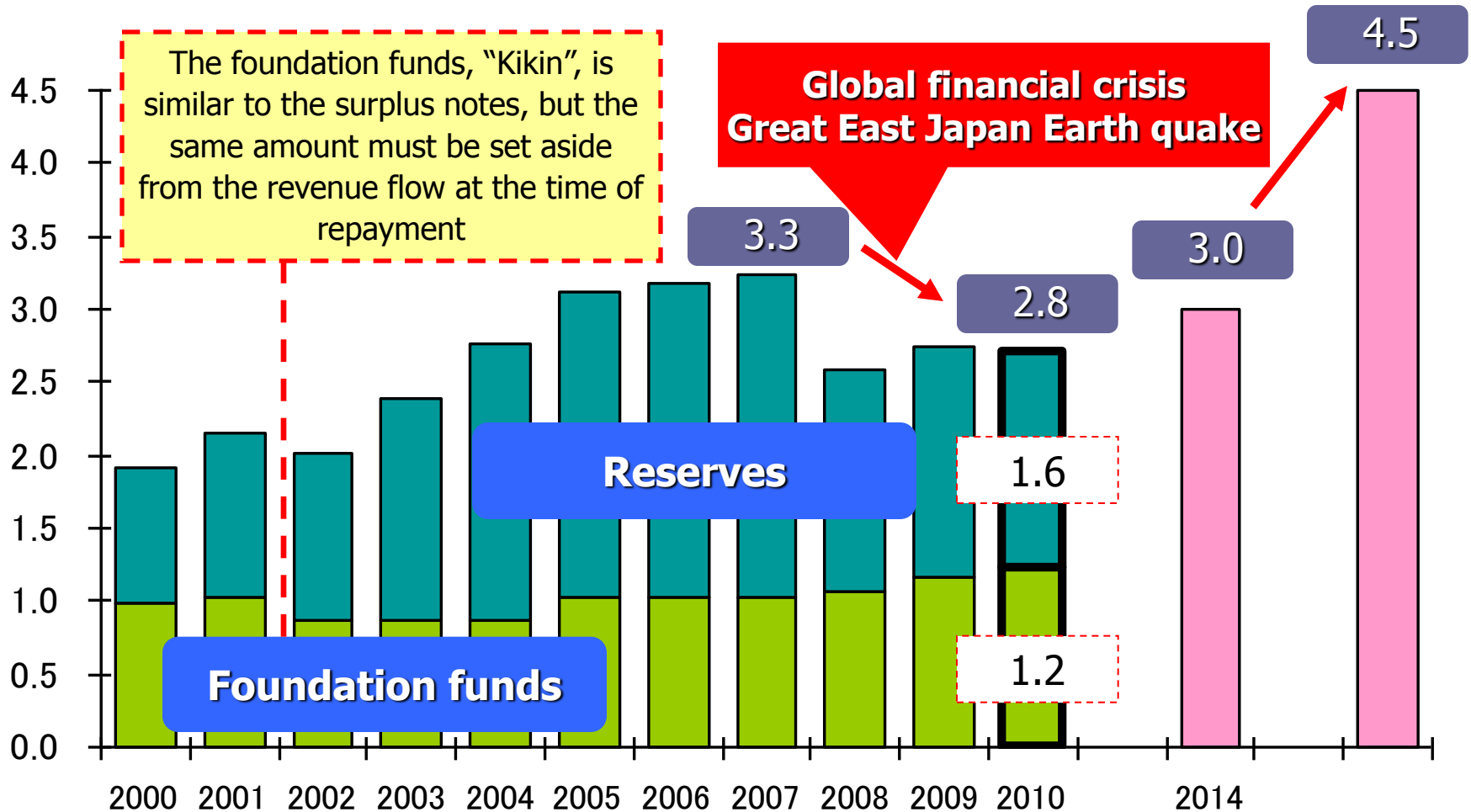
In terms of	2010
Amount	□60 billion
Average guaranteed interest rate	24BP

Measure VII: Enhancing capital

■ Enhanced capital by accumulating internal reserves and pursuing external foundation funds

Enhancement of capital

(Trillions of Yen)



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Life insurance insolvency in Japan

- There were several life insurance companies which went insolvent around year 2000 in Japan, mainly due to the significant downturns described earlier.
- Nevertheless, Japanese life insurers did not require any government funding as opposed to banks. Moreover, some companies did not require any financial support from the industry through the Policyholders Protection Corporation of Japan (PCCJ).

(Unit: Billion JPY)

	Nissan Mutual	Toho Mutual	Daihyaku Mutual	Taisho Life	Chiyoda Mutual	Kyoei Life	Tokyo Life	Yamato Life
Going insolvent	25-Apr-1997	4-Jun-1999	31-May-2000	28-Aug-2000	9-Oct-2000	20-Oct-2000	23-Mar-2001	10-Oct-2008
Procedure	Administrative	Administrative	Administrative	Administrative	Judicial	Judicial	Judicial	Judicial
Assets	1,823	2,190	1,300	155	2,233	3,725	690	195
Liabilities	2,126	2,840	1,618	191	2,828	4,415	763	259
Negative net worth	303	650	318	37	595	690	73	64
Reduction of technical provisions	None	10%	10%	10%	10%	8%	None	10%
Financial support from the industry (PPCJ)	200 ^(※)	381	145	27	None	None	None	28
Financial support from the government	None	None	None	None	None	None	None	None
Financial support	200	381	145	27	None	None	None	28

※The financial support was provided by the predecessor of PPCJ.

Modification of contract conditions at insolvency

- Japan established a resolution system that guarantees most of the accumulated interest in the past, while allowing to prospectively modify the future premium rates of existing contracts at the time of insolvency.
- As a result, the financial burdens associated with resolution have been limited (limited support from the Policyholders Protection Funds and no support from the government.) The resolution process was carried out in an orderly way.

Life insurance resolution system in Japan

Interest accumulated in the past

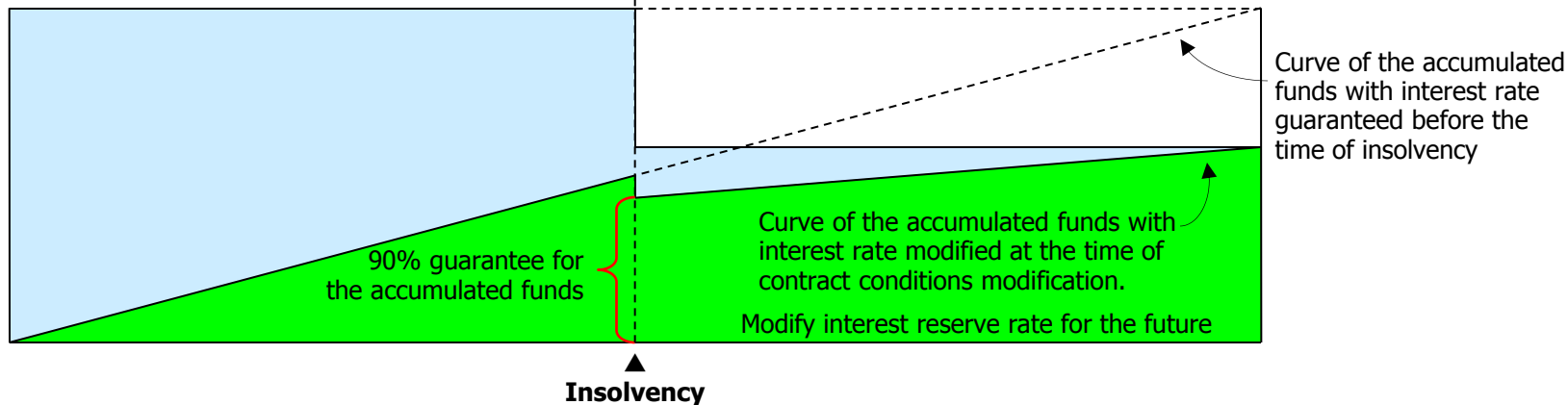
In general, 90% of the existing policyholder's interest at the time of insolvency would be guaranteed.

While reflecting the impairment of the asset value, the accumulated interest of the existing policyholders is protected.

Interest to be accumulated in the future

Premium rate/insured amount (assumed interest rate, etc.) of existing contracts is prospectively adjusted so that they are no more favorable than newly issued contracts.

Future negative spreads are avoided.



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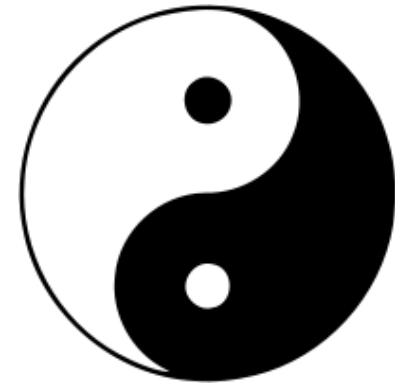


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Conclusion – yin and yang

■ Some words from Taoism

- Be aware that the world is cyclical
- Don't go to the extreme, otherwise you will fall
 - Bring the balance of yin and yang to the universe
- In order to manage the world, you should control yourself
 - In order to implement international standards, you should first know your own country

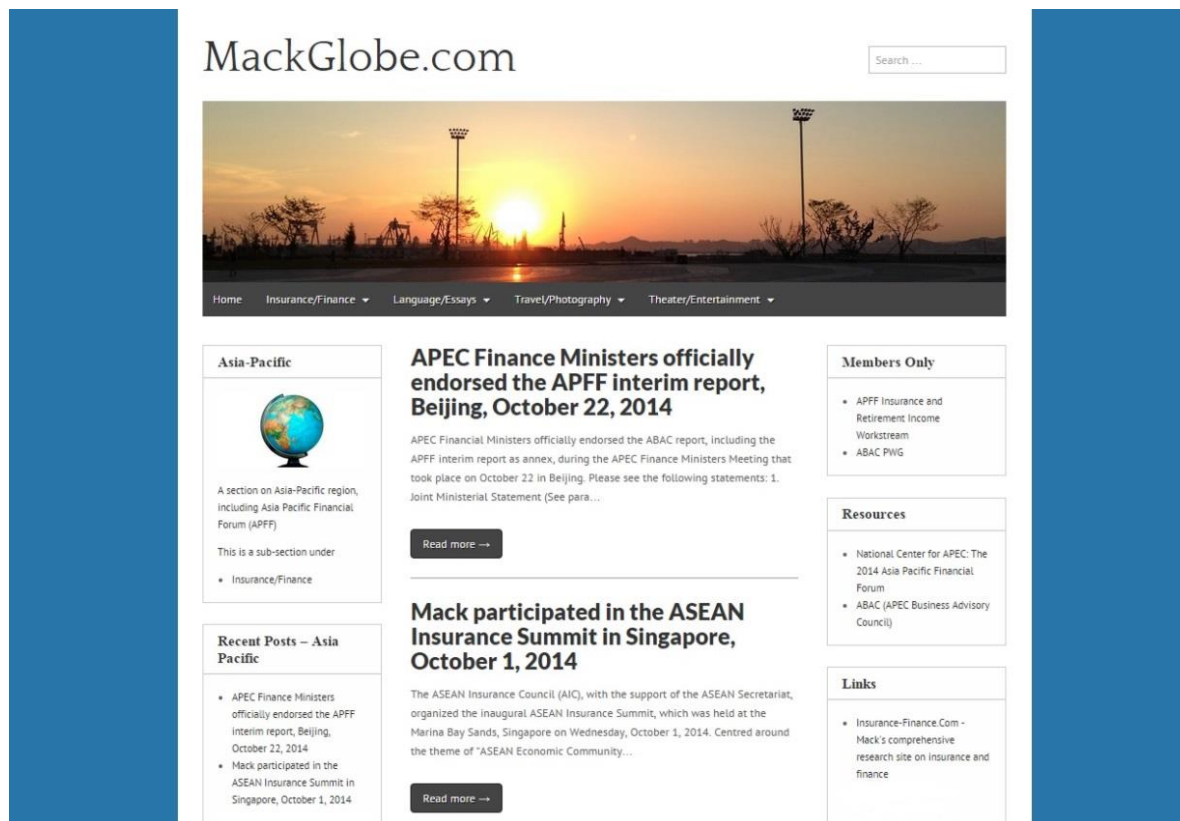


(Photo – Tao Garden, Chang Mai, Thailand)

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Makoto Okubo, General Manager, Nippon Life Insurance Company




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- Mack participated in the ASEAN Insurance Summit in Singapore, October 1, 2014

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APEC Financial Ministers officially endorsed the ABAC report, including the APFF interim report as annex, during the APEC Finance Ministers Meeting that took place on October 22 in Beijing. Please see the following statements: 1. Joint Ministerial Statement (See para...

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Mack participated in the ASEAN Insurance Summit in Singapore, October 1, 2014

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- National Center for APEC: The 2014 Asia Pacific Financial Forum
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