

OLIS 2013

Challenges of life insurance industries – from a global point of view

About Japanese experience and Asian perspective

23 October 2013

Tokyo, Japan

Makoto (Mack) Okubo

大久保 亮

*General Manager, International Affairs
New York Representative Office
Nippon Life Insurance Company*



1

Fighting against low interest rates and negative spread problems

2

Demographic challenges and opportunities of life insurers

3

APFF(Asia Pacific Financial Forum) work on insurance and retirement income

4

Proposed IFRS and implications in Asia

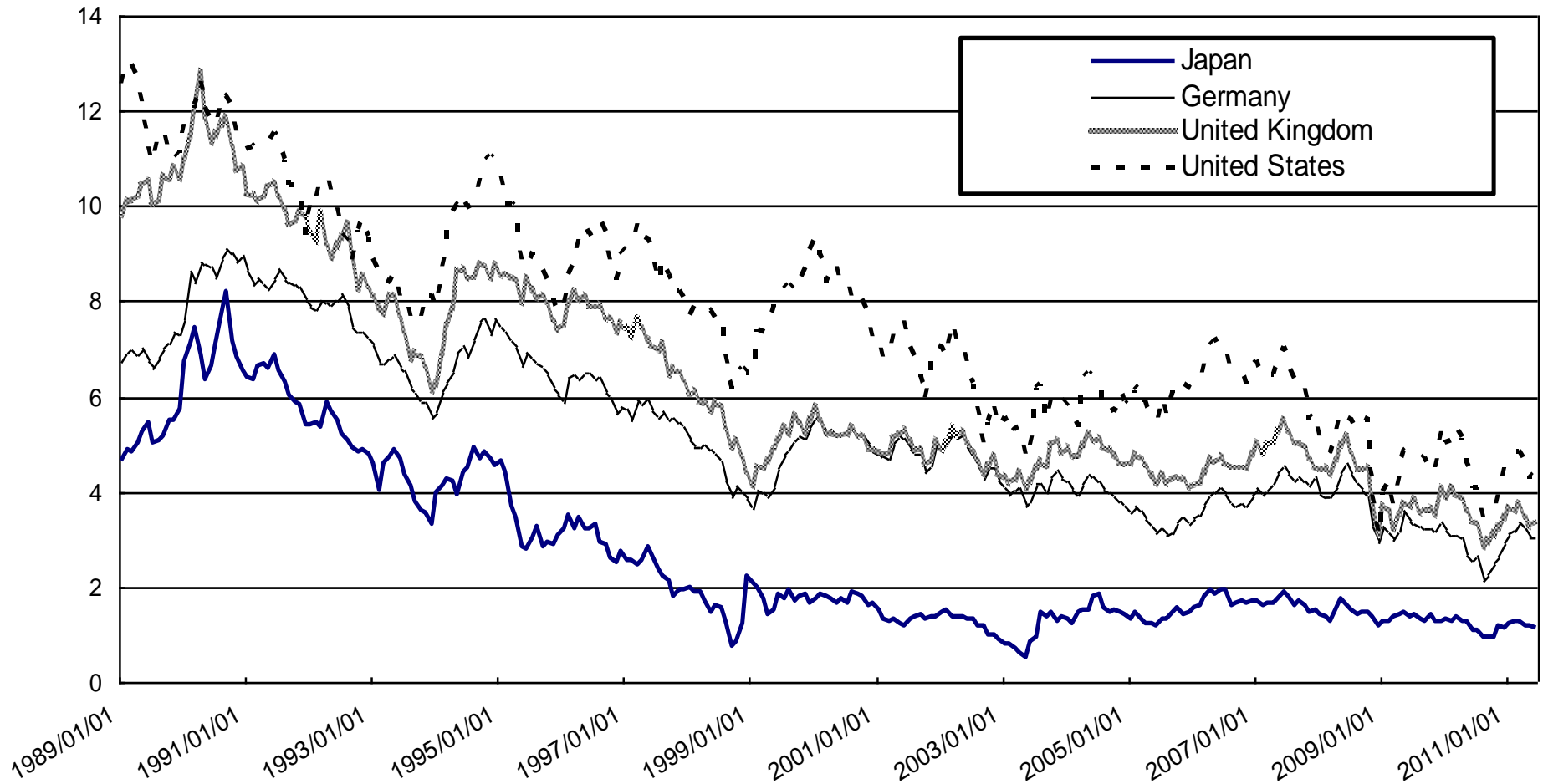
5

Tao of supervision and risk management – 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

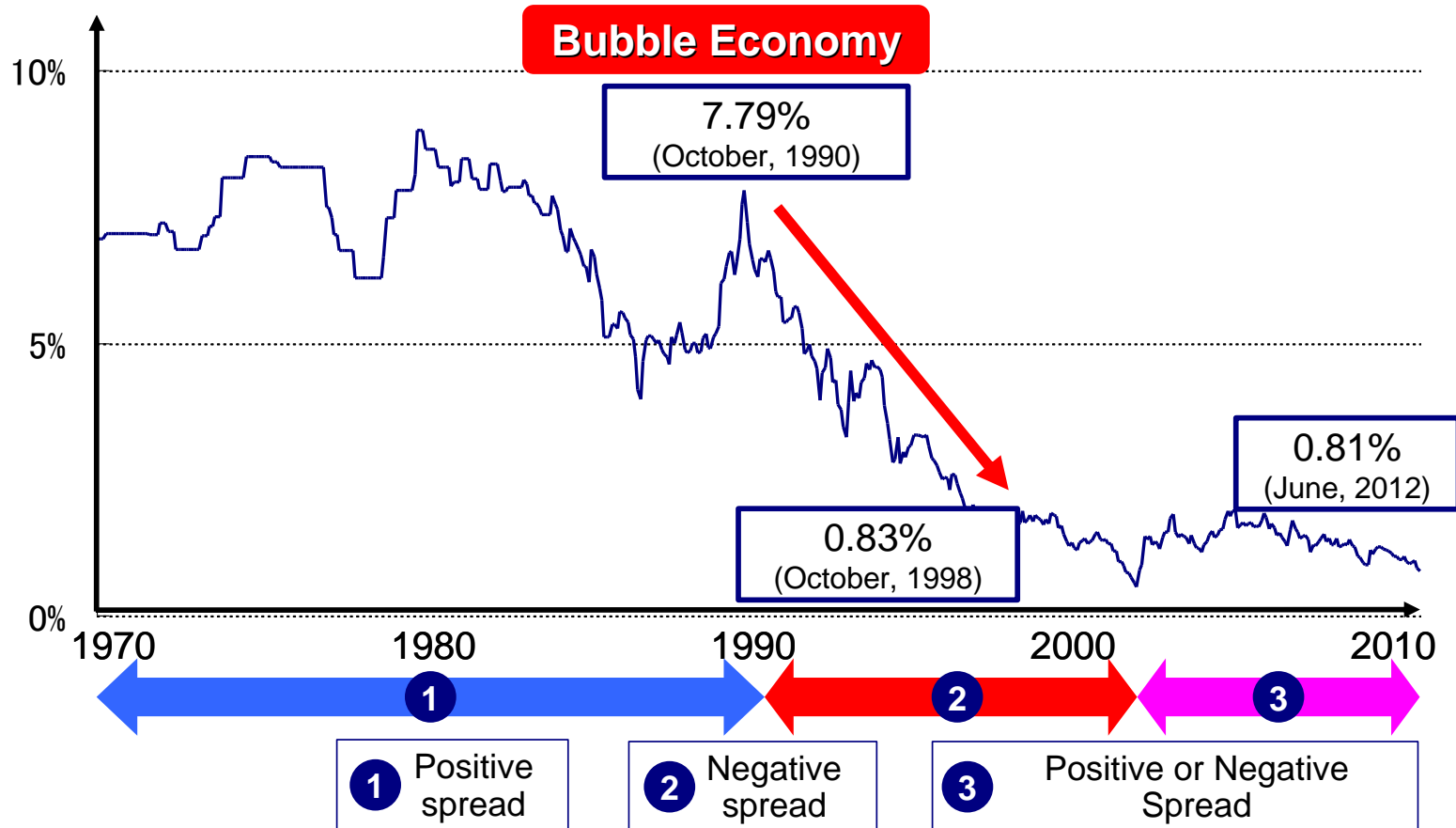
- Low interest rate coincided with poorly-performing stock prices



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



Measures to reduce negative spreads

■ The following are some examples of the measures taken by our company to reduce negative spreads during the difficult time.

■ **Reduce guaranteed interest rate**

■ **Secure mortality profit by enhancing protection-oriented products**

■ **Reduce operating expenses and personnel expenses**

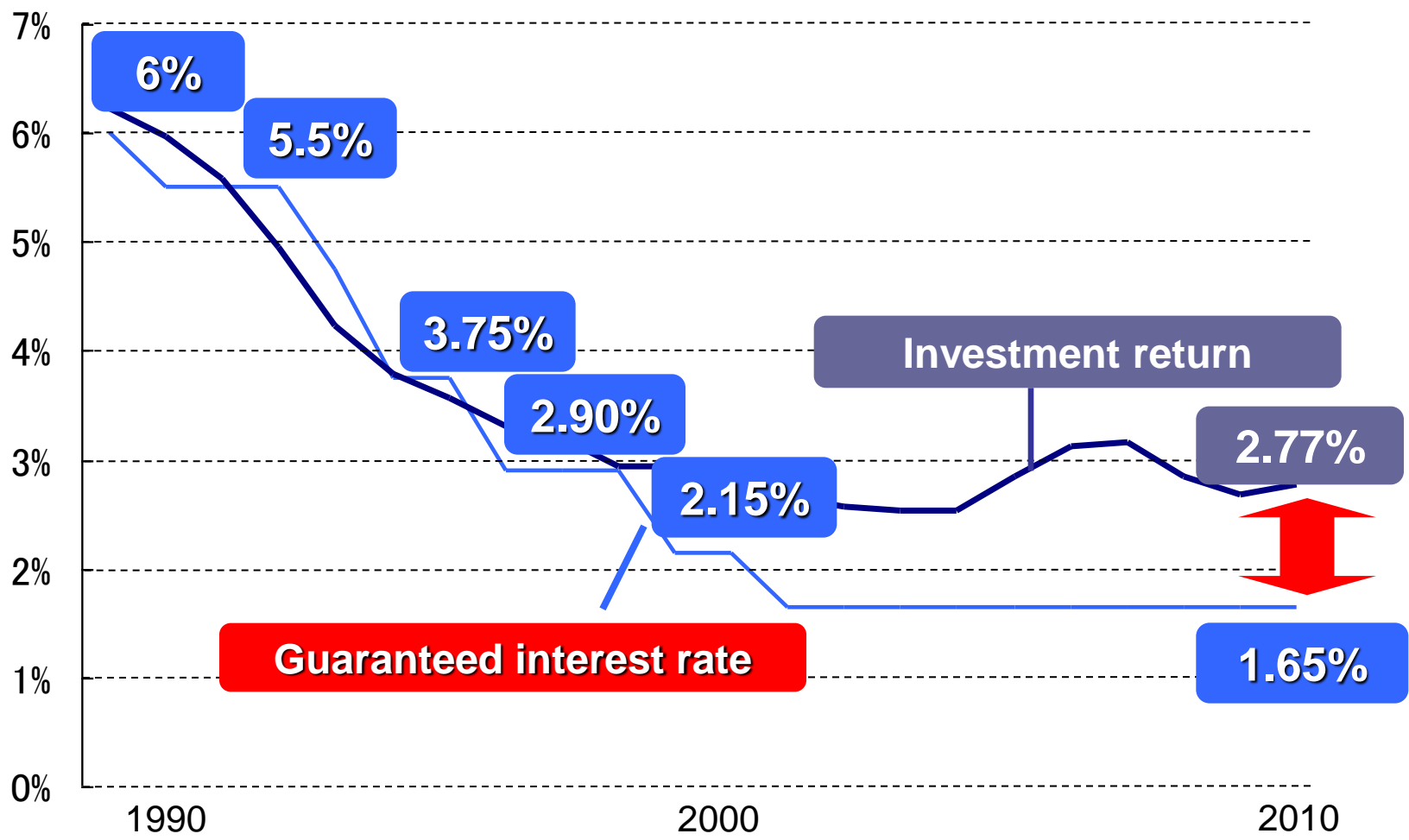
■ **Change investment strategies to match the characteristics of insurance liabilities, and sophisticate risk management**

■ **Accumulate additional policy reserves and enhance capital**

Measure I: Lowering guaranteed interest rate

■ Reduced the guaranteed interest rate gradually for new policies

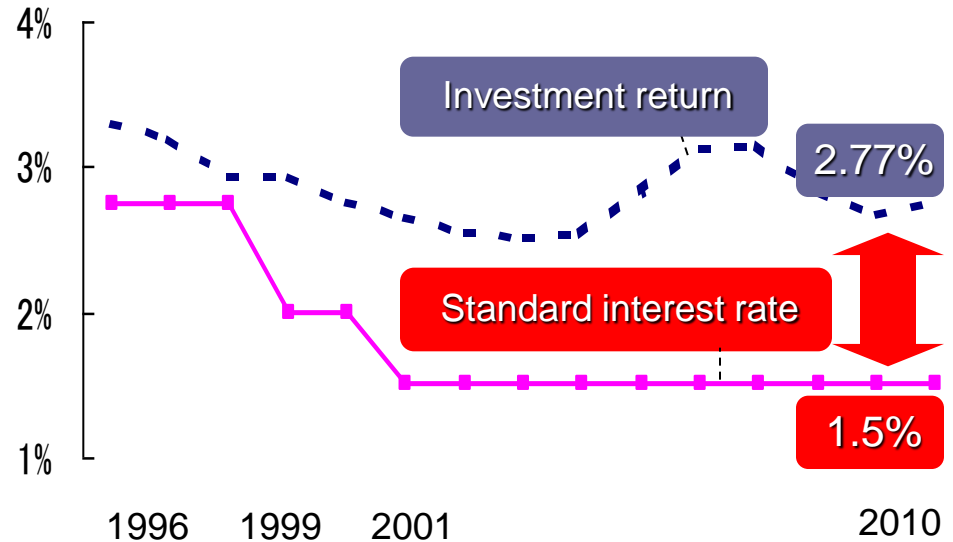
Lowered guaranteed interest rate



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
------------------------	-------	-------

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

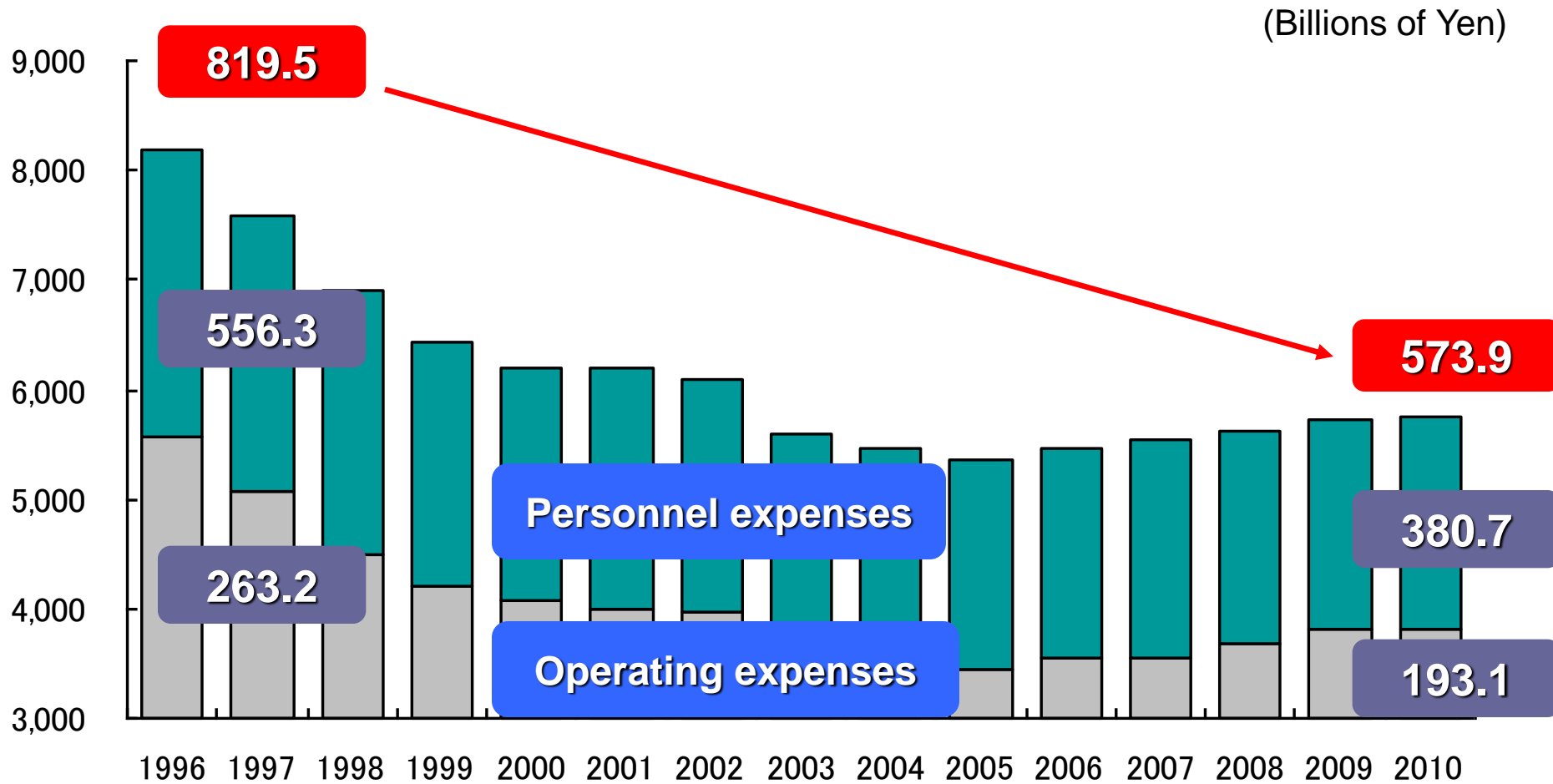
Endowment

Annuity

Measure III: Reducing expenses

■ Reduced operating expenses and personnel expenses

Trends of expenses



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.

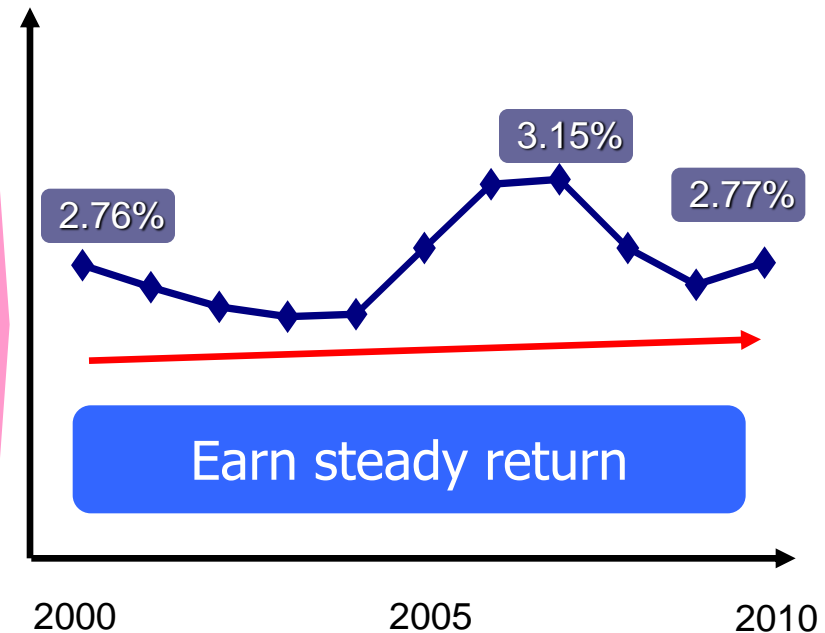
(Market Conditions)

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

Investment return

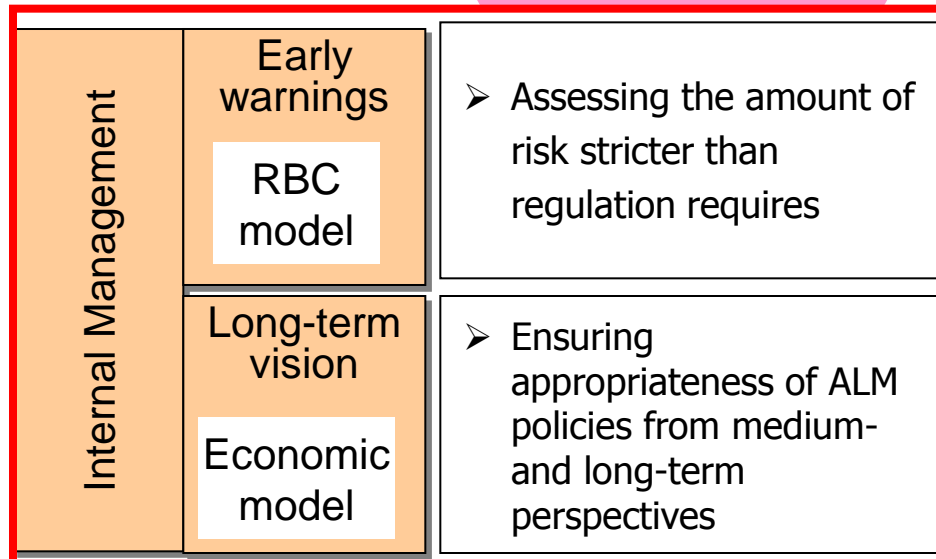
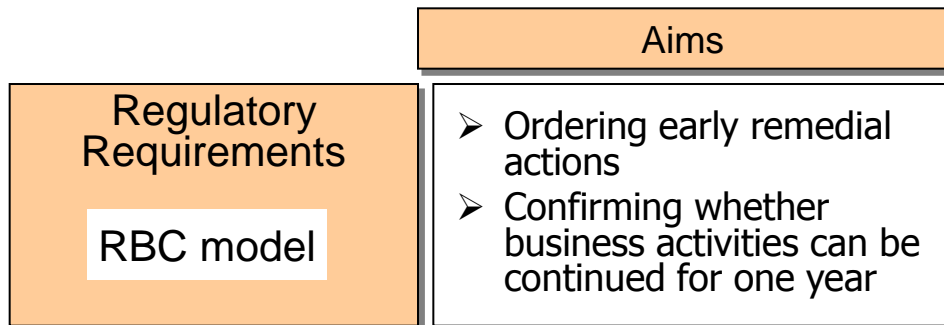


Earn steady return

Measure V: Enhancing risk management

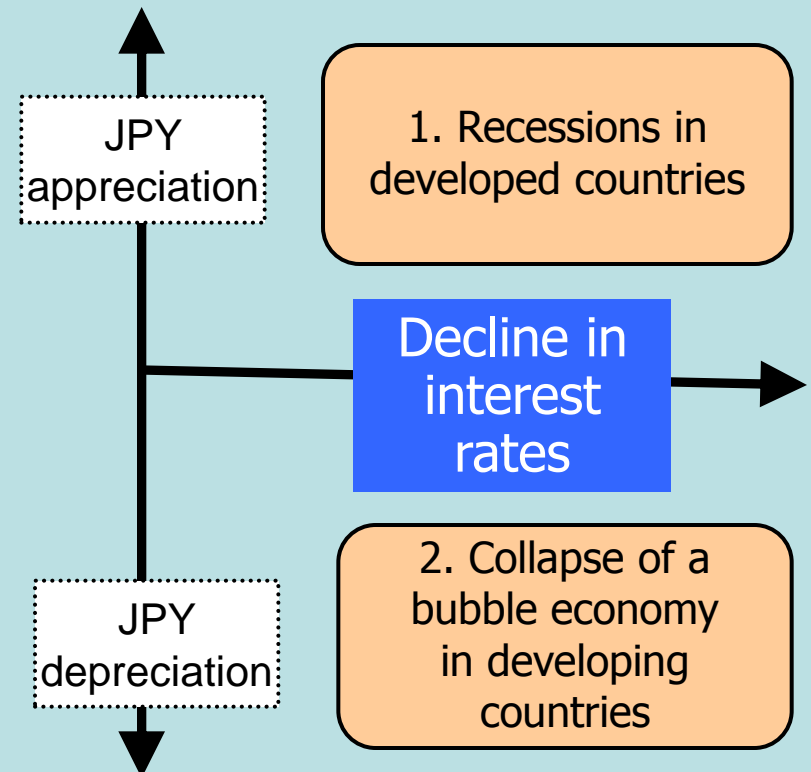
- For the purpose of internal management, developed and used both an RBC model (**early warnings**) and an economic model (**long-term vision**)

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

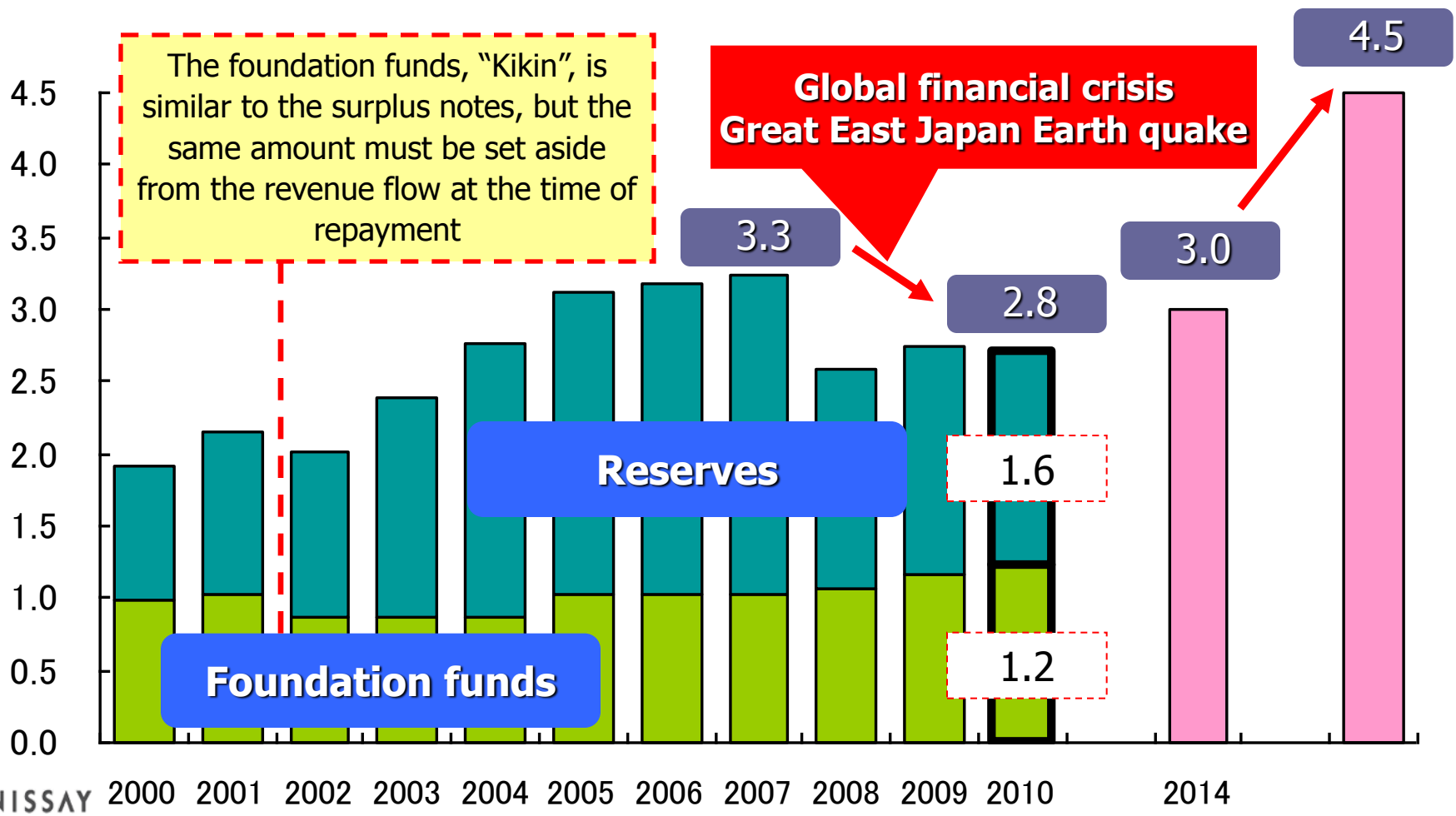
In terms of	2010
Amount	¥60 billion
Average guaranteed interest rate	24BP

Measure VII: Enhancing capital

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

Enhancement of capital

(Trillions of Yen)



Recovery from negative spread problems

- After more than a decade struggle, negative spread problems have been almost overcome: **Investment return > Average guaranteed interest rate**

Measures to
reduce
Negative
Spread

Reduce
guaranteed
interest rate

Secure
mortality
profit, and
reduce
expenses

Change
investment
strategies, and
sophisticate risk
management

Accumulate
additional policy
reserves and
enhance capital

Trends of investment gains

(Billions of Yen)

	2000	2005	2006	2007	2008	2009	2010
Difference between investment return and average guaranteed interest rate	(1.01%)	(0.44%)	(0.09%)	+0.08%	(0.10%)	(0.14%)	+0.07%
Impact of Negative Spread	(340)	(150)	(30)	+30	(▲40)	(▲60)	+30
Undistributed earnings	249	237	293	281	185	255	231



1

Fighting against low interest rates and negative spread problems

2

Demographic challenges and opportunities of life insurers

3

APFF(Asia Pacific Financial Forum) work on insurance and retirement income

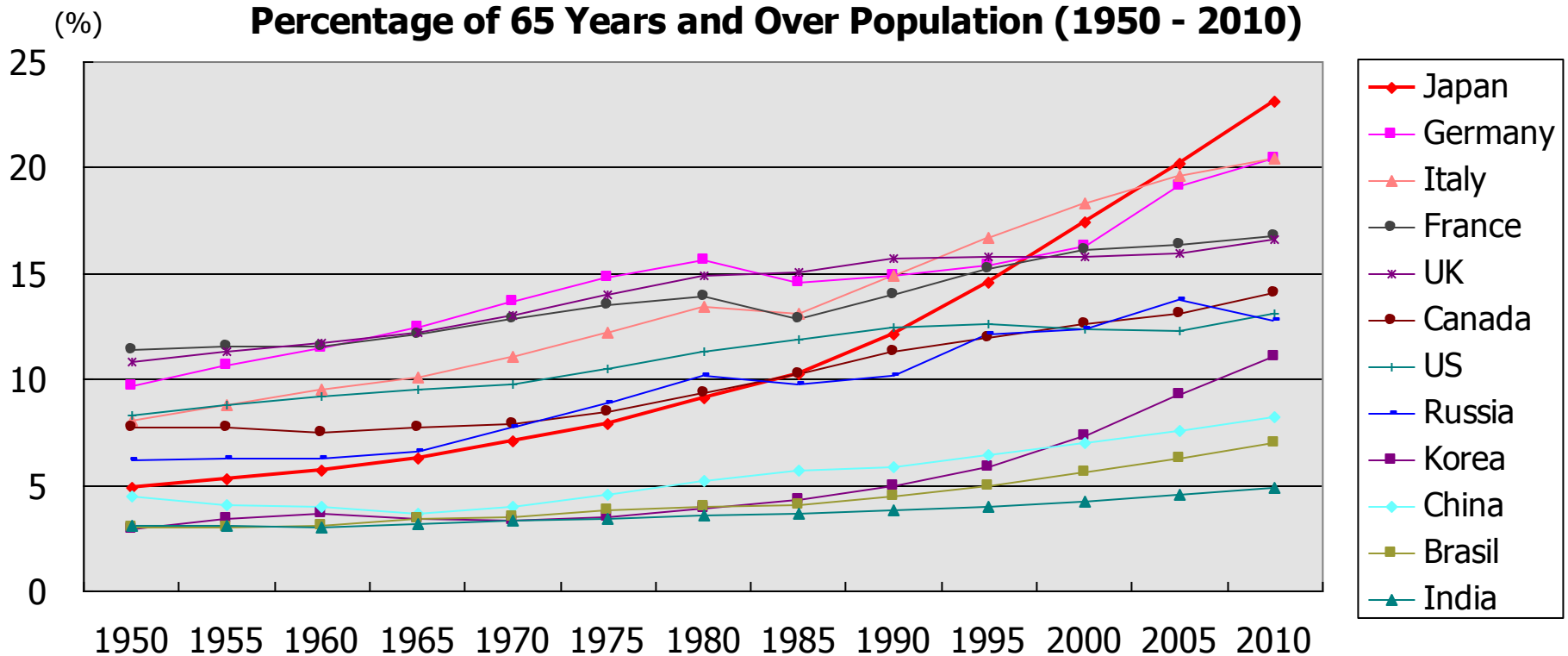
4

Proposed IFRS and implications in Asia

5

Tao of supervision and risk management – Yin and Yang

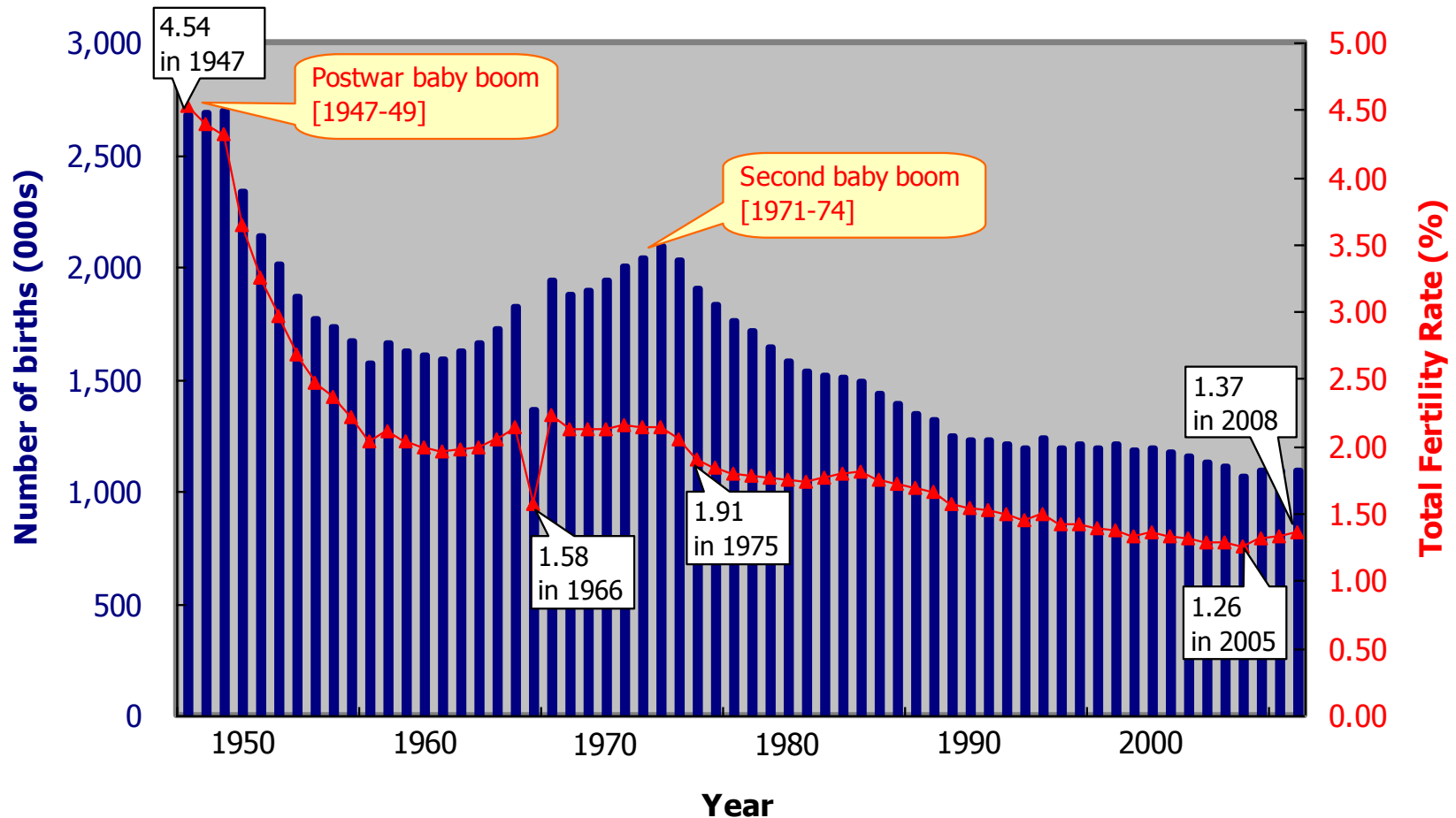
- Japan was in the lower-rankings until the 1980s, in the middle in the 1990s, and is already the highest in the early 21st century



(Source: Statistic Bureau, Data is based on United Nations, "World Population Prospects," The 2010 Revision
Note: Data for Japan is based on "Population Census of Japan")

Lower fertility rate - Trends in number of births

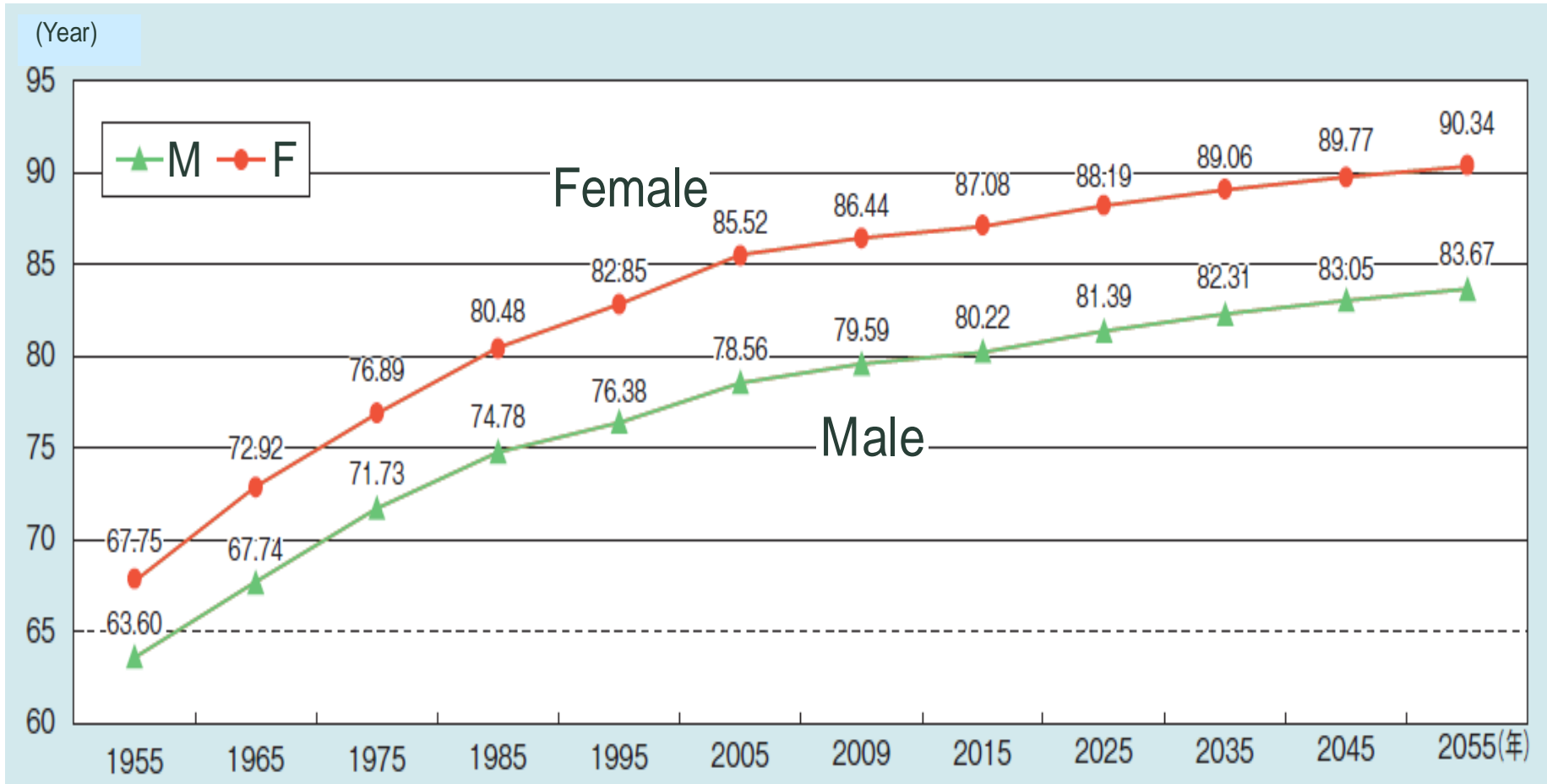
- Total fertility rate has dropped from 4.54 in 1947, to 1.91 in 1975, and to 1.26 in 2005



(Source: Ministry of Health, Labor and Welfare, Vital Statistics)

Longer lifespan

- Japanese life expectancy is among the highest in the world.
- Many Japanese women live alone for around 10 years after their husbands pass away.

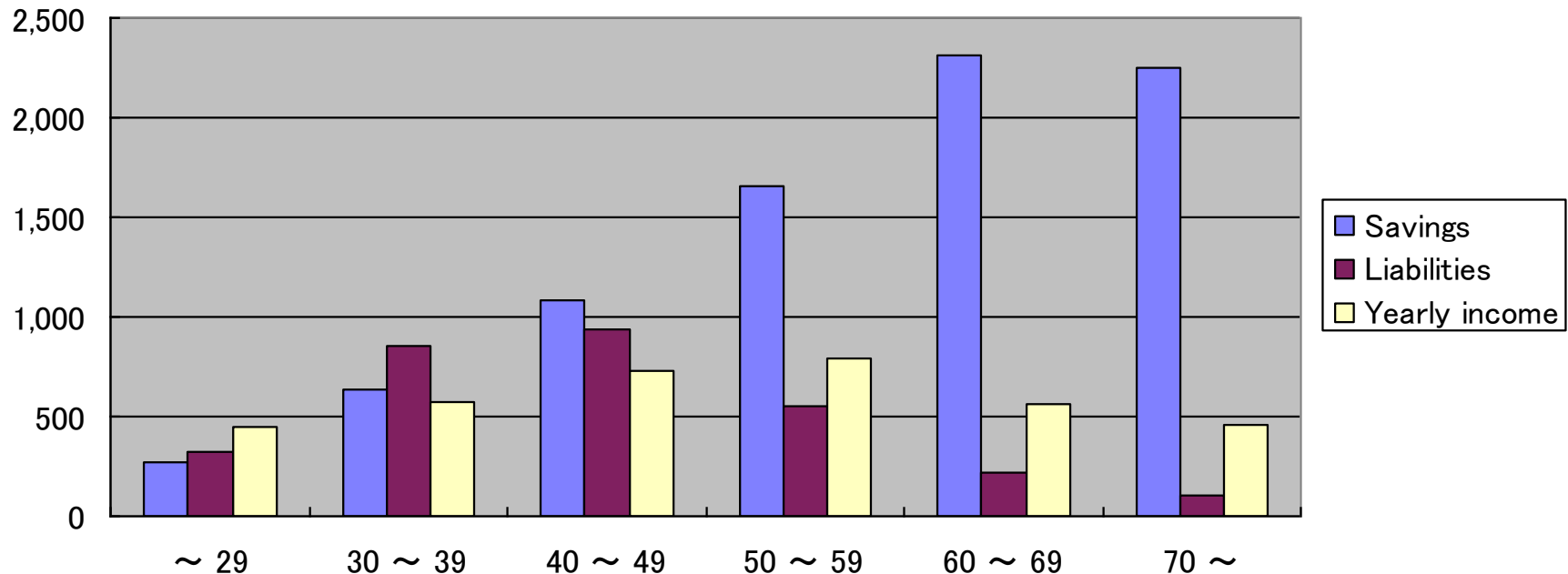


Source: Ministry of Health, Labour and Welfare and National Institute of Population and Social Security Research ; courtesy of Swiss Re Japan.

Savings higher as age increases

- Savings per household by age in 2010
 - Savings are 2.7 million yen for a householder under age 30
 - 8.5 times larger at 23.14 million yen for a householder age 60 or older
 - Liabilities to be higher as age increases up to the ages 40 to 49, at which age they peak and begin to decrease

(million yen)

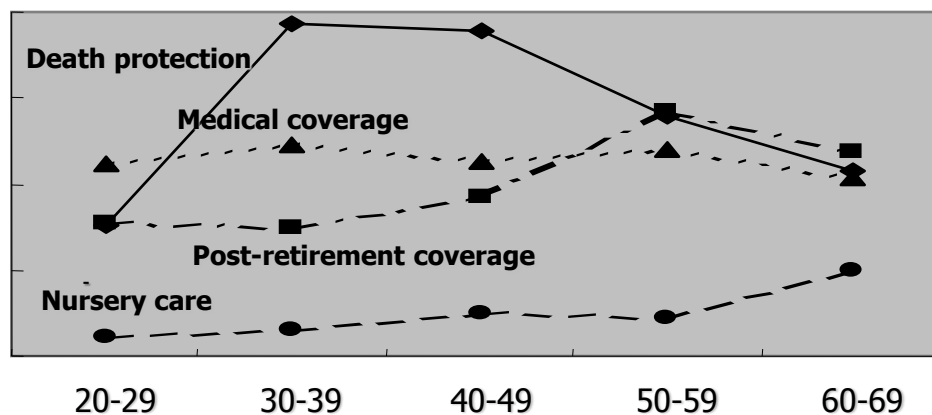


(Source: Annual report on the family income and expenditure survey. Income and expenditure, Statistics Bureau, Ministry of Internal Affairs and communications 2010)

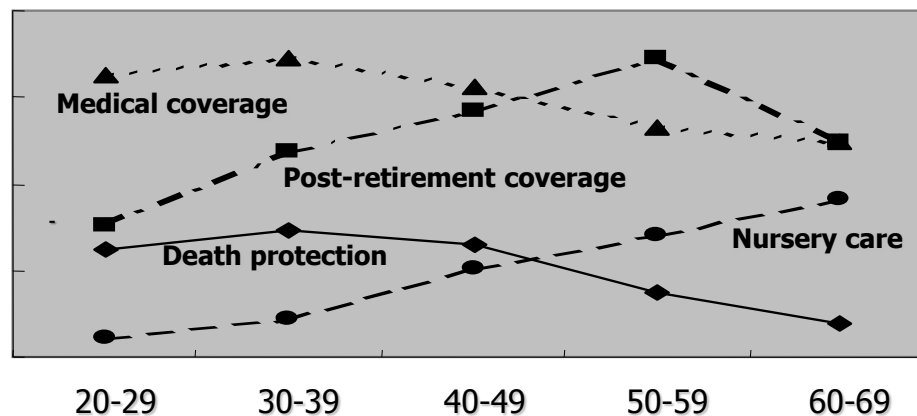
Changing life insurance needs

- In recent years, the baby boomers became aged over 50 with independent children, and needs are shifting from death protection to medical and post-retirement coverage

[Men]



[Women]



(Source: Japan Institute of Life Insurance "Survey on coverage")

The pension system in Japan and longevity risk

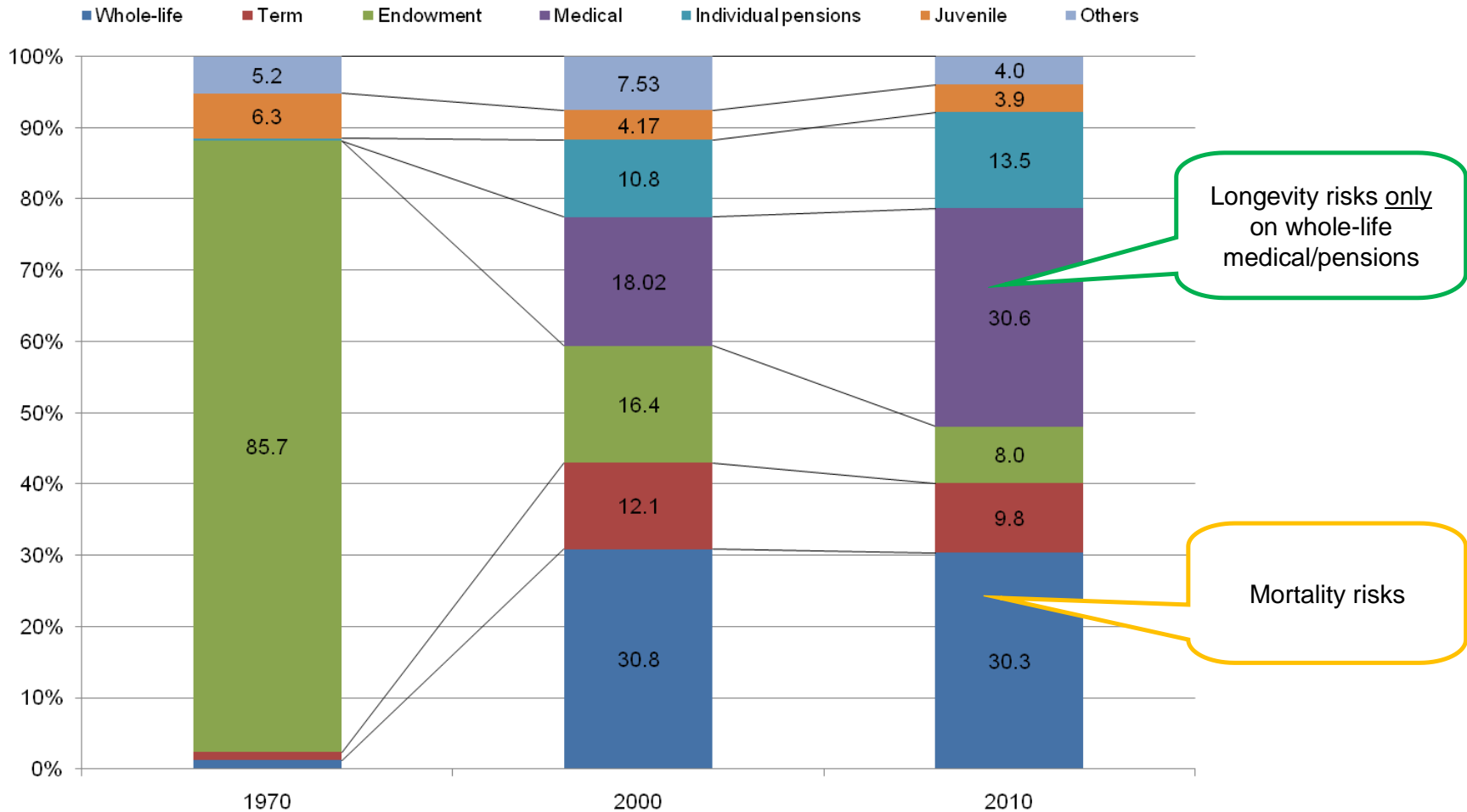
- The public pension provides a whole life annuity and the corporate pension provides a supplement in the form of a lump sum retirement payment or fixed-term annuity

Pension system	Typical form of payment	Other features
① National Pension	whole life annuity	-
② Employees' Pension Insurance	whole life annuity	survivor's pension
③ Corporate Pension	lump-sum retirement allowance or fixed-term annuity	some companies provide whole life annuities with a guaranteed term
④ Self-Private Pension	fixed-term annuity	options for whole life annuity with guaranteed term and lump-sum are available

- Longevity risk is mainly borne by government, employers, and individuals.
- Life insurers are subject to longevity risk, in case where the option for whole life annuity is chosen by policyholders for self-private pension.

- Japanese life insurers' exposure to longevity risk is limited but gradually increasing

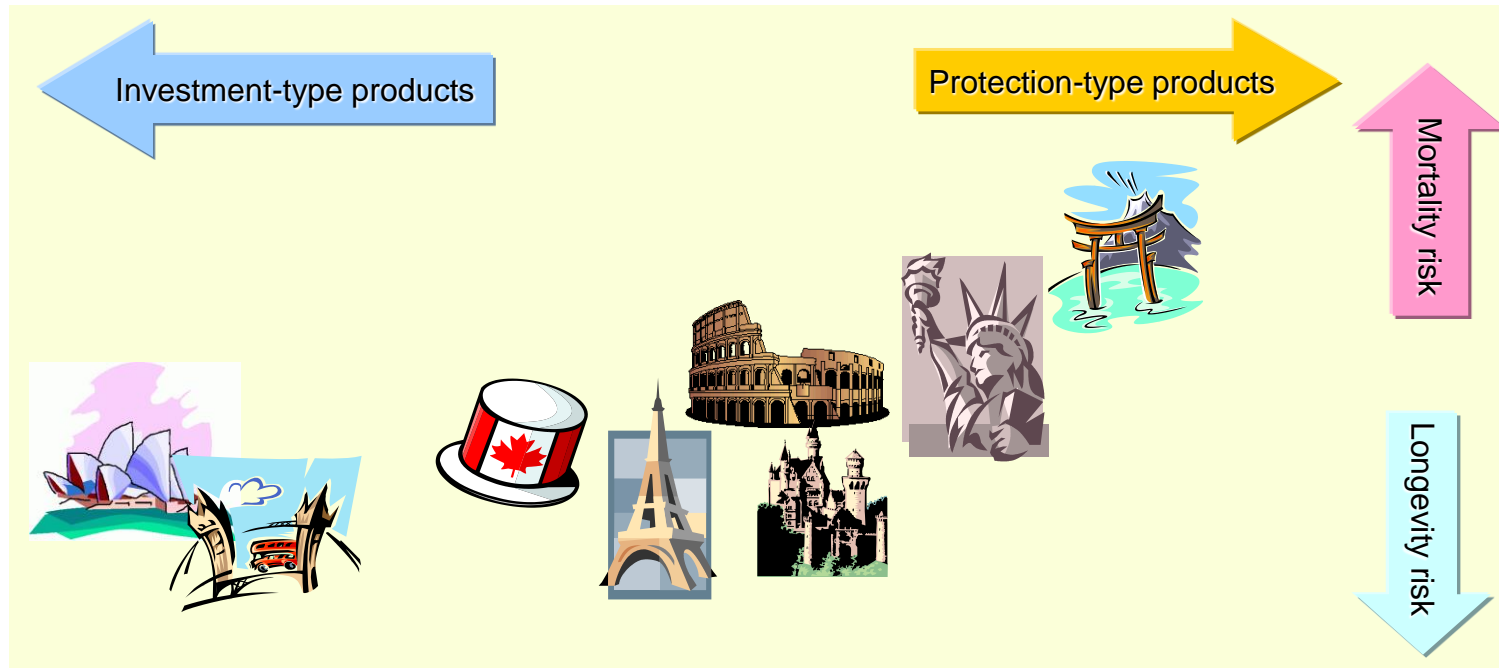
Changes in Product Portfolio (Number of Policies in Force)



(Source: Life Insurance Association of Japan)

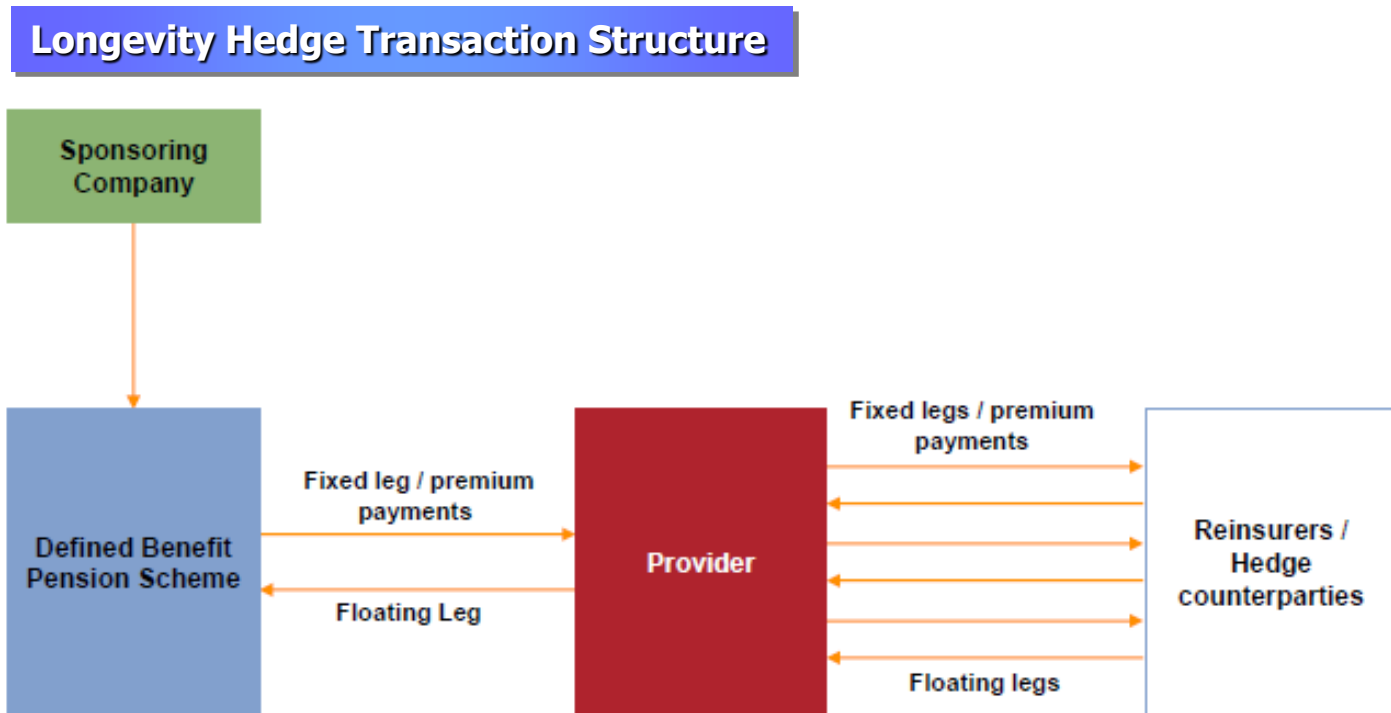
Insurance business models and consumers

- Different business models by jurisdiction that reflect:
 - Different risk preference
 - Expected roles of the insurers
 - State of development of financial markets



Other measures to mitigate longevity risk

- Longevity Risk Transfer
 - Buy-out & Buy-in
 - Longevity Swaps
- Longevity as asset class for investors?



(Source: Deutsche Bank AG)

Joint Forum Paper on longevity risk transfers

- Joint Forum consultation paper “Longevity risk transfer markets: market structure, growth drivers and impediments, and potential risks (issued for comments by 18 October 2013)
 - Supervisory communication and cooperation
 - Appropriate knowledge, skills, expertise and information
 - Review policies (taking into account social policies)
 - Review rules and regulations on measurement, management and disclosure of longevity risk
 - Expected and unexpected increases in life expectancy
 - Monitoring the LRT between corporates, banks, (re)insurers and the financial markets
 - Bank Exposure to longevity tail risk
 - Longevity and mortality data

1

Fighting against low interest rates and negative spread problems

2

Demographic challenges and opportunities of life insurers

3

APFF(Asia Pacific Financial Forum) work on insurance and retirement income

4

Proposed IFRS and implications in Asia

5

Tao of supervision and risk management – Yin and Yang





APFF: Public-private collaboration in developing financial systems

- Importance of regional public-private collaboration:
 - Legal and regulatory frameworks
 - Financial market infrastructure
 - Financial market integration
- APFF: informal, inclusive and advisory public-private platform for collaboration in the development of common strategies for developing sound, efficient and integrated Asia-Pacific financial markets
 - Governments and regulatory bodies
 - Private sector
 - International organizations (IFIs, SSBs, others)



APFF WORK STREAMS:

- **Insurance and retirement income**
 - Trade finance
 - Lending infrastructure
 - Financial market infrastructure
 - Capital Markets
- + *Linkages and structural issues*



APFF: Insurance & Retirement Income Workstream



Asia-Pacific
Economic Cooperation



- To help develop policies/regulations to support **long-term business roles** of insurance and pensions and development of **retirement systems**

- Initial Work Plan:

- Gap analysis: survey on insurance, investment, pensions, accounting, regulations
- Defining proposed list of deliverables, timeframes, benchmarks, action plans
- Collaborate with interested authorities



- **Contributors (initial list):** Nippon Life (sherpa), ADB, AIA Group, Australian APEC Study Centre, ASEAN Secretariat, AustralianSuper, Australian Treasury (tbc) Barnert Global, Cathay Life, IAG, International Insurance Society, Jardine Matheson, Manulife, OECD, PIMCO, Prudential Asia, Samsung Life (tbc), OJK Indonesia (tbc), ASIFMA (observer)

Issues identified during the Symposium in Sydney



Asia-Pacific
Economic Cooperation



- Application of regulatory requirements derived from bank-oriented regulations that are not appropriate to the insurance industry and negatively impact insurers' stabilizing role in financial systems
- Short-term oriented economic accounting and solvency regimes that incentivize insurers to transfer risks to consumers, shift away from long-term protection business and investments and discourage them from investing in assets other than fixed income
- Adoption of regulatory requirements based on "on-size-fits-all" models that do not sufficiently take into account variation of insurance products and insurers' roles, needs and consumer behavior and development stage across markets and produce unexpected negative consequences for insurance markets



APFF: Focus on insurance & Retirement Income



Asia-Pacific
Economic Cooperation



- Helping to develop policy and regulatory frameworks that will enable insurers and pension funds to:
 - effectively provide long-term funding;
 - support financial stability and economic and infrastructure development and;
 - serve the needs of aging society.
- Seeking to help in identifying and addressing regulatory, accounting and other issues that constrain insurers and pension funds from playing these roles
- Aiming to provide advice on the development and funding of retirement systems to foster sustainable institutions, as well as on economic incentives and financial literacy initiatives



IAIS working on global capital standards

Date	Activity
October through December 2013	<ul style="list-style-type: none"> Public consultation on 2013 Draft ComFrame
Early-2014	<ul style="list-style-type: none"> ComFrame Field Testing Phase begins Testing of BCR(Backstop Capital Requirements) s begins Development begins on ICS (Insurance Capital Standards)
November 2014	<ul style="list-style-type: none"> BCRs finalised and ready for implementation by G-SIIs (Globally Systemically Important Insurers)
2015	<ul style="list-style-type: none"> HLA (Higher Loss Absorbency) requirements for G-SIIs developed using BCRs as a base; to be finalised by end-20
2015 - 2016	<ul style="list-style-type: none"> Testing of ICS
End-2016	<ul style="list-style-type: none"> Development of ICS completed by IAIS
2017-18	<ul style="list-style-type: none"> Testing and refinement of ICS
End-2018	<ul style="list-style-type: none"> ComFrame, including final ICS, adopted by IAIS
2019	<ul style="list-style-type: none"> Implementation begins on ComFrame, including ICS HLA requirements for G-SIIs become effective

(Source –IAIS)



Singapore

Capital requirements

- ✓ RBC Framework with minimum CAR (capital adequacy ratio) of 120%
- ✓ Recently, MAS sent notices on company specific minimum CAR
- ✓ A consultation paper on RBC2 in 2012 (may be implemented in 2014)

Reserving

- ✓ Liabilities measured w/t GPV (best estimates plus a provision for adverse deviation, discounted at risk-free for non-participating and best-estimate investment return for participating)

Risk management

- ✓ New ERM guidelines/requirements introduced effective April 2013, MAS Notice 126
- ✓ Development of ORSA before the end of 2014 for larger insurers and the end of 2015 for smaller insurers



Malaysia

Capital requirements

- ✓ RBC framework with minimum supervisory target capital level of 130%
- ✓ Also minimum internal level of capital ratio (ICAR) agreed with Bank Negara. ICAAP (Internal Capital Adequacy Assessment Process) requires insurers to set up internal process.

Reserving

- ✓ Liabilities measured w/t GPV (realistic assumptions plus provision of risk margin for adverse deviation, discounted at risk-free for non-participating and best-estimate investment return for participating)

Risk management

- ✓ Under the Corporate Governance framework, insurers are required to establish a Risk Management Committee, chaired by an independent director
- ✓ Insurers should report to the board the major risks faced by insurers and the approach taken in dealing with these risks.
- ✓ Single risk acceptance limits should be established



(Source –Milliman)

Some regulatory developments in Asia

Indonesia

Capital requirements

- ✓ RBC framework since 1999, enhanced effective first quarter ending 31 March 2013
- ✓ Own target level of capital with minimum CAR of 120%



Reserving

- ✓ Previously NPV, but moved to GPV from 2013
- ✓ TP based on best-estimate assumption plus margin for adverse deviation for products with maturity longer than one year with non-yearly renewable feature

Hong Kong

Capital requirements

- ✓ Solvency margin as a fixed percentage of reserves held
- ✓ Consultative study on introducing RBC framework (may not before 2016)



Reserving

- ✓ Modified net premium method capped at gross premium. Appropriate provisions plus margins for adverse deviations on relevant factors

Thailand

Capital requirements

- ✓ RBC framework since Sep 2012
- ✓ Prescribed minimum capital adequacy ratio of 140% from 2013

Reserving

- ✓ Statutory reserves based on NPV (GPV for RBC purpose), discounted at the rate similar to pricing stage

Risk Management

- ✓ Requirement for a risk management committee to be put in place, reporting to the Board



1

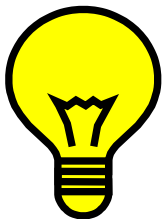
Fighting against low interest rates and negative spread problems

2

Demographic challenges and opportunities of life insurers

3

APFF(Asia Pacific Financial Forum) work on insurance and retirement income



4

Proposed IFRS and implications in Asia

5

Tao of supervision and risk management – Yin and Yang

Background

- ABAC submitted a comment letter to IASB and FASB on August 25, 2011 on insurance contracts
- ABAC submitted a comment letter in September 2013 on leasing
- APFF insurance and retirement income workstream has a mandate to identify and address accounting standards that may constrain insurers from playing expected roles in long-term funding and aging society
- ABAC plans to submit a comment letter to IASB and FASB by 25 October 2013 on insurance contracts

Main issues : Scope

- The scope of consistent measurement of assets and liabilities could be expanded:
 - The “mirroring approach” would limit the scope to contracts which require an entity to hold underlying items and specify a link between the payments to the policyholder and the returns on those underlying items
 - It would not capture a wide range of participating policies and products with discretionary participation feature that are sold in the Asia Pacific region
 - It would result in inconsistent treatment among products and non-economic volatility, which may produce unintended consequences on long-term business

Main issues : Complexity

- The model should be as simple as possible, and complexities should be minimized:
 - The current proposal is highly complex and would impose excessive practical burdens and costs on insurers. Lack of understandability would reduce transparency
 - the proposed requirement for bifurcation of cash flows is difficult to implement and inconsistent with how contracts are designed and managed
 - the retrospective measurement for existing and past long-duration contracts would be extremely costly and often practically impossible due to lack of data. One solution might be to take a full prospective approach

Main issues : Consistency

- The measurement model should be consistent with how insurance contracts are designed, priced, and managed:
 - Proposed measurement is not consistent between treatment of changes in estimated cash flows and that of discount rates
 - For example, the present value of future profits are partly reported in OCI and partly reported in CSM
 - It would not be consistent with the economic reality faced by insurers and therefore does not provide relevant and useful information to users
 - It might cause adverse consequences in those jurisdictions where interest rates may decline

Main issues : Consistency (*cont.*)

- The valuation method, including the choice of discount rate, should be reflective of the business model of the issuer of the contract
 - The use of OCI for presenting changes in discount rates is potentially a significant improvement but not in isolation
 - The proposals would be enhanced if either the OCI treatment were optional, or if the population of assets qualifying for OCI treatment were to be expanded, in order to avoid accounting mismatch with the treatment of corresponding assets

Main issues : Presentation

- Premium received is the most essential and reliable information for users and preparers:
 - We support the IASB's decision to reject the summarised margin approach
 - The proposed earned premium volume metric is unhelpful and incomparable with revenues reported by insurers not using IFRS. Neither the insurance industry nor investors/analysts/policyholders use or understand the proposed metric
 - Separation of investment components from revenues and claims payment would be practically difficult and would not reflect the business reality

Main issues : Field testing

- Proposed standards should be properly tested before they are finalized
 - Early comments from companies doing field testing express concerns regarding the complexity and lack of understandability of the Exposure Draft
 - Planned testing is selective and does not consider the interaction with the proposed financial instruments standards
 - Another series of full “real world” field testing is needed.
 - It is preferable to have a set of high quality of standards that have been adequately tested rather than have quality compromised by a compressed completion process

1

Fighting against low interest rates and negative spread problems

2

Demographic challenges and opportunities of life insurers

3

APFF(Asia Pacific Financial Forum) work on insurance and retirement income

4

Proposed IFRS and implications in Asia

5

Tao of supervision and risk management – Yin and Yang



Conclusion: yin and yang

- **Tao of supervision and risk management with a holistic framework**
- **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



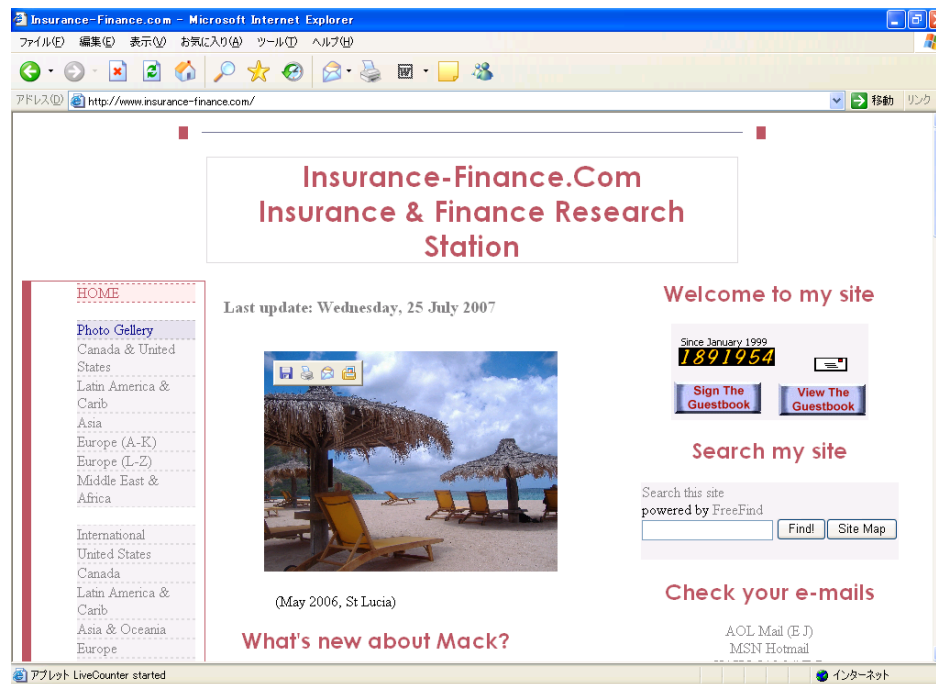
(Photo – Tao Garden, Chang Mai, Thailand)

Challenges of life insurance industries

– from a global point of view

About Japanese experience and Asian perspective

*Makoto Okubo, General Manager, International Affairs,
New York Representative Office, Nippon Life Insurance Company*



*Any questions? email to m-okubo@nliinter.com
or visit www.insurance-finance.com*