

ADB FSD CoP International Insurance Seminar

# Responding to the Demographic Transition and Managing Longevity Risks

## Aging and longevity: *Implications for life insurers*

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Demographic and social changes

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Market environment -Low interest rates and share prices

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Aging and longevity – implications for life insurers in Japan and elsewhere

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

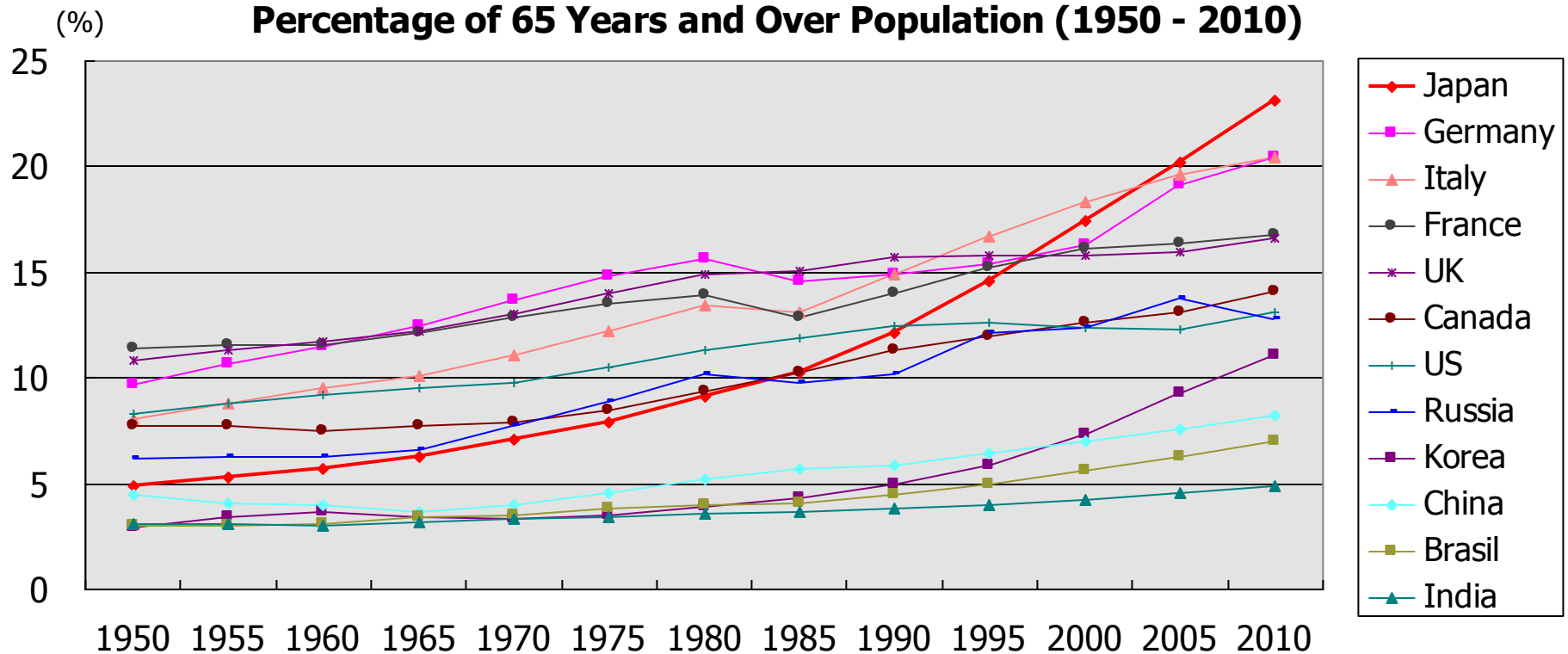
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Conclusion – Yin and Yang

# Rapid aging

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- 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

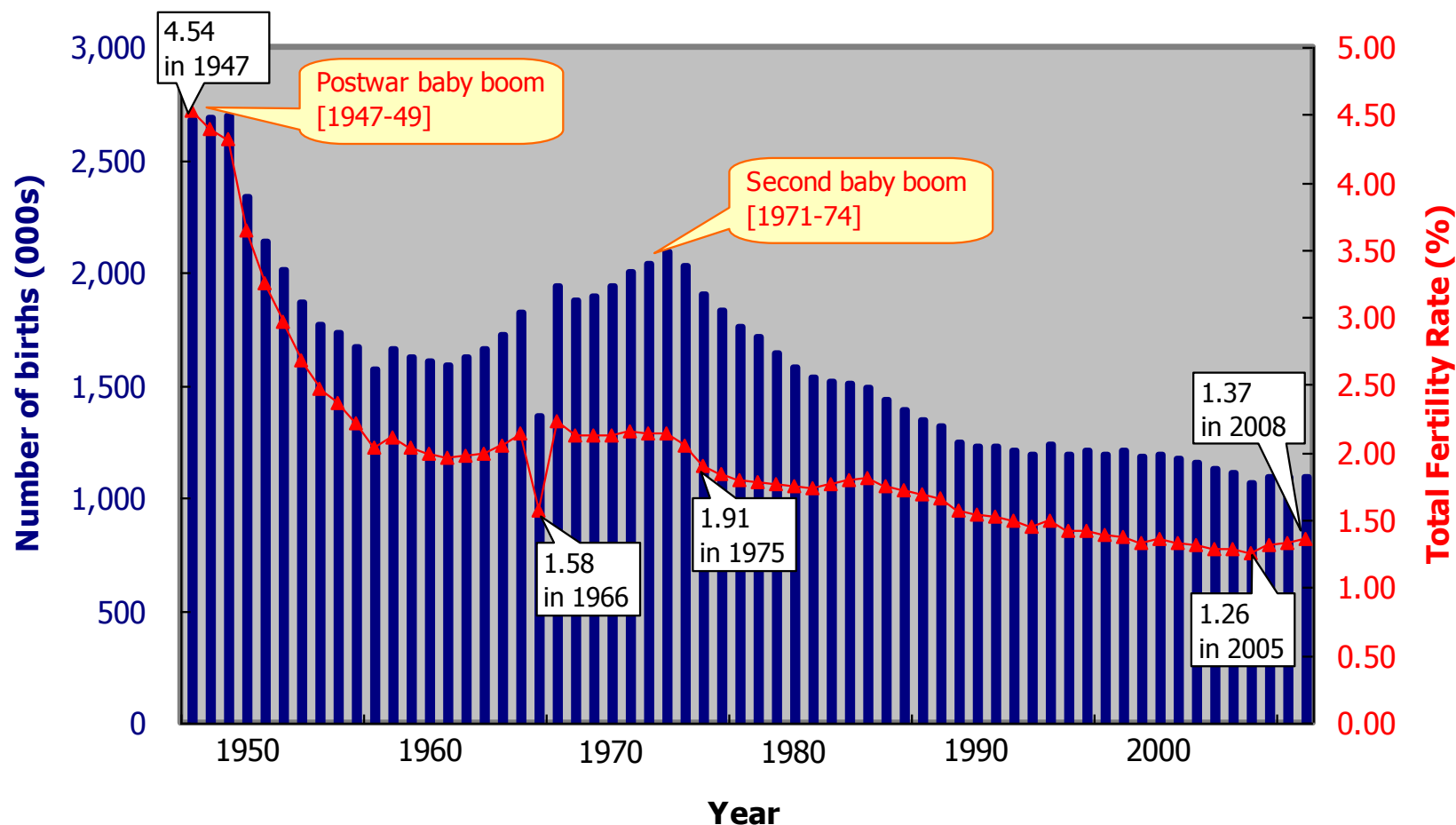


(Source: Statistic Bureau, Data is based on United Nations, "World Population Prospects," The 2010 Revision  
Note: Data for Japan is based on "Population Census of Japan")

# Lower fertility rate - Trends in number of births

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

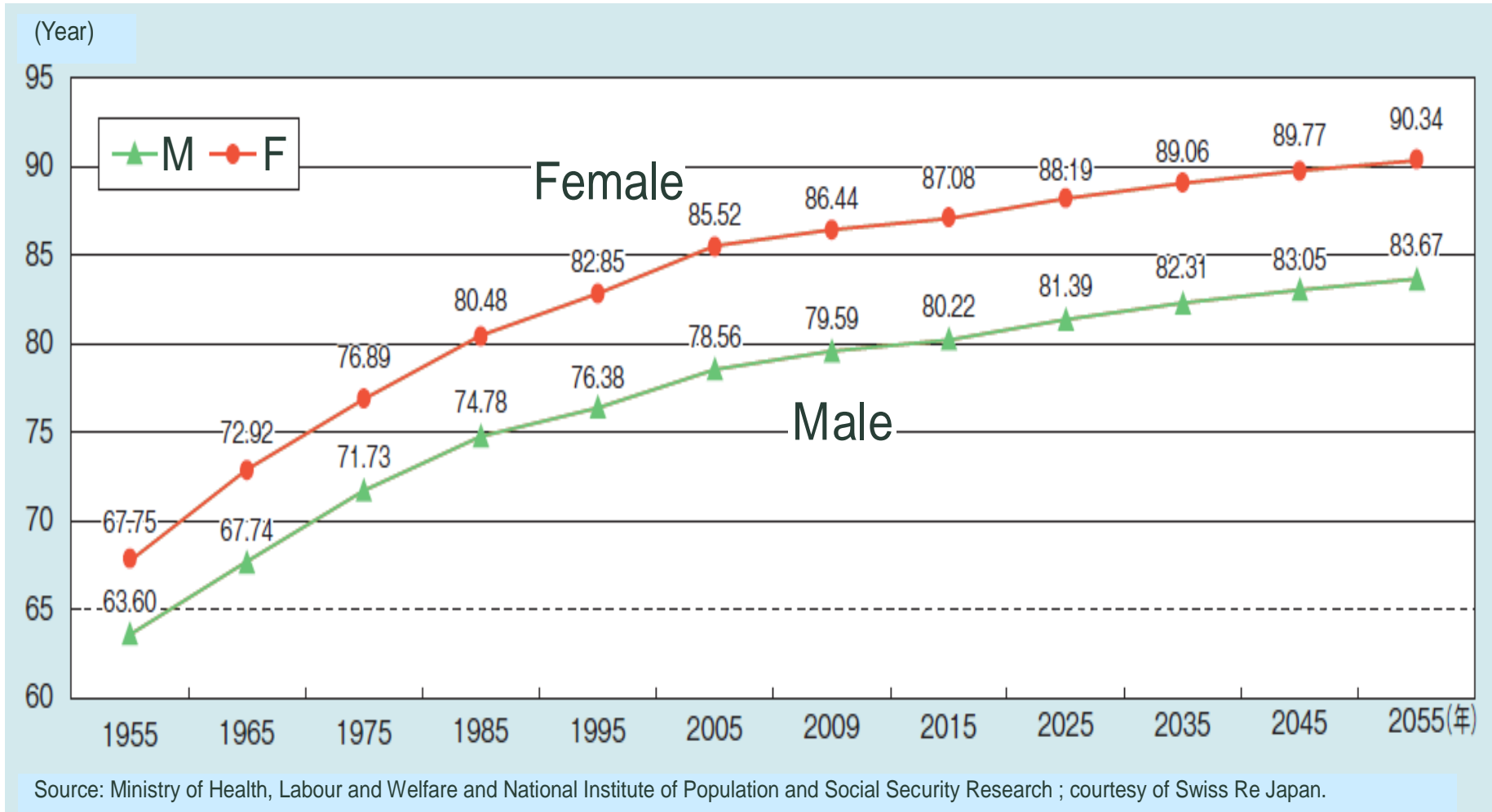


(Source: Ministry of Health, Labor and Welfare, Vital Statistics )

# Longer lifespan

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



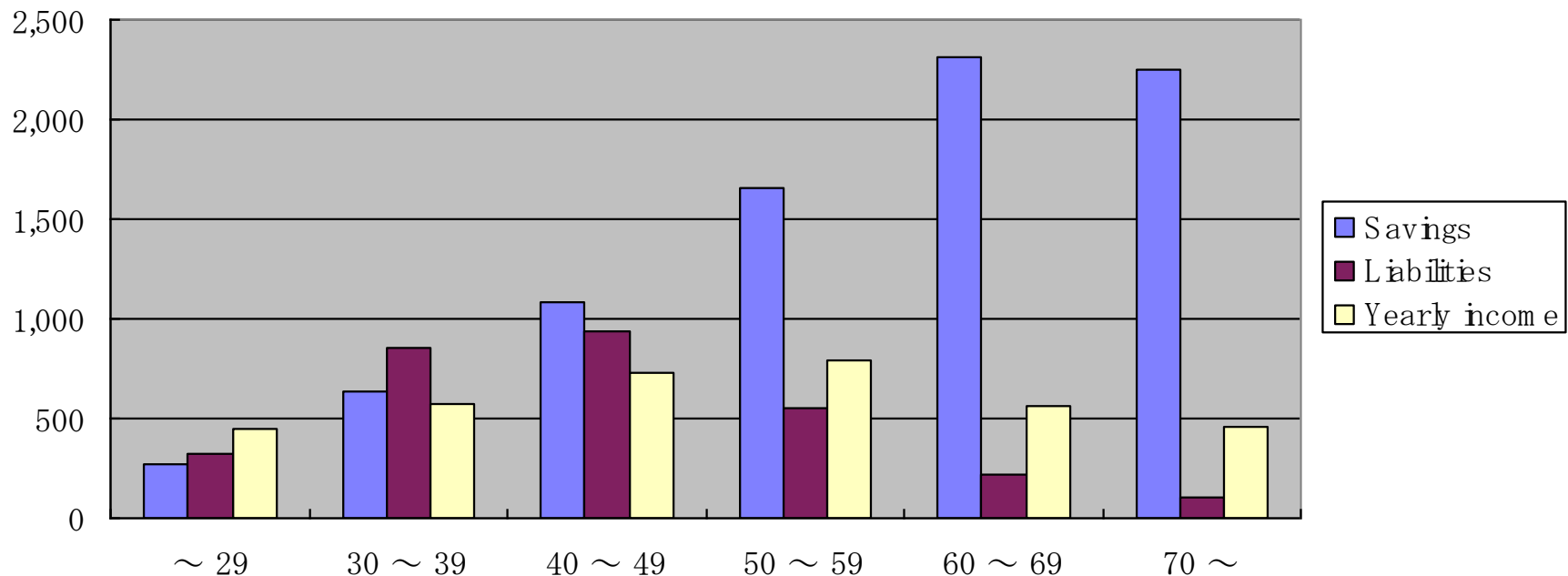
# Savings higher as age increases

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## ■ 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)



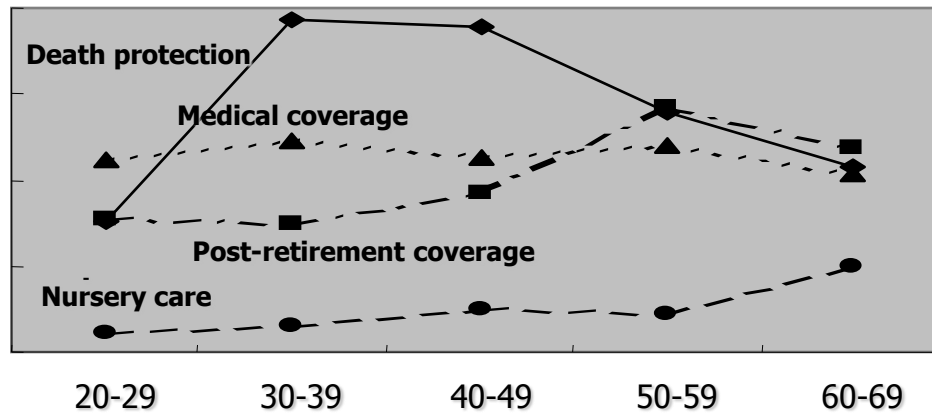
(Source: Annual report on the family income and expenditure survey. Income and expenditure, Statistics Bureau, Ministry of Internal Affairs and communications 2010 )

# Changing life insurance needs

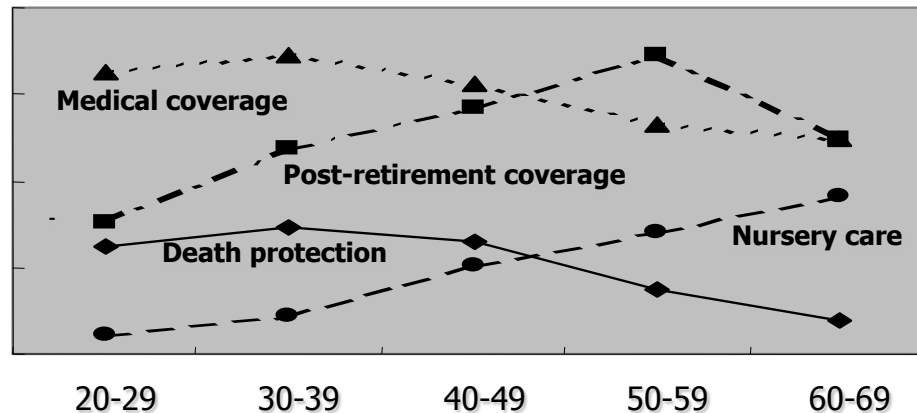
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- In recent years, the baby boomers became aged over 50 with independent children, and needs are shifting from death protection to medical and post-retirement coverage

**(Men)**



**(Women)**



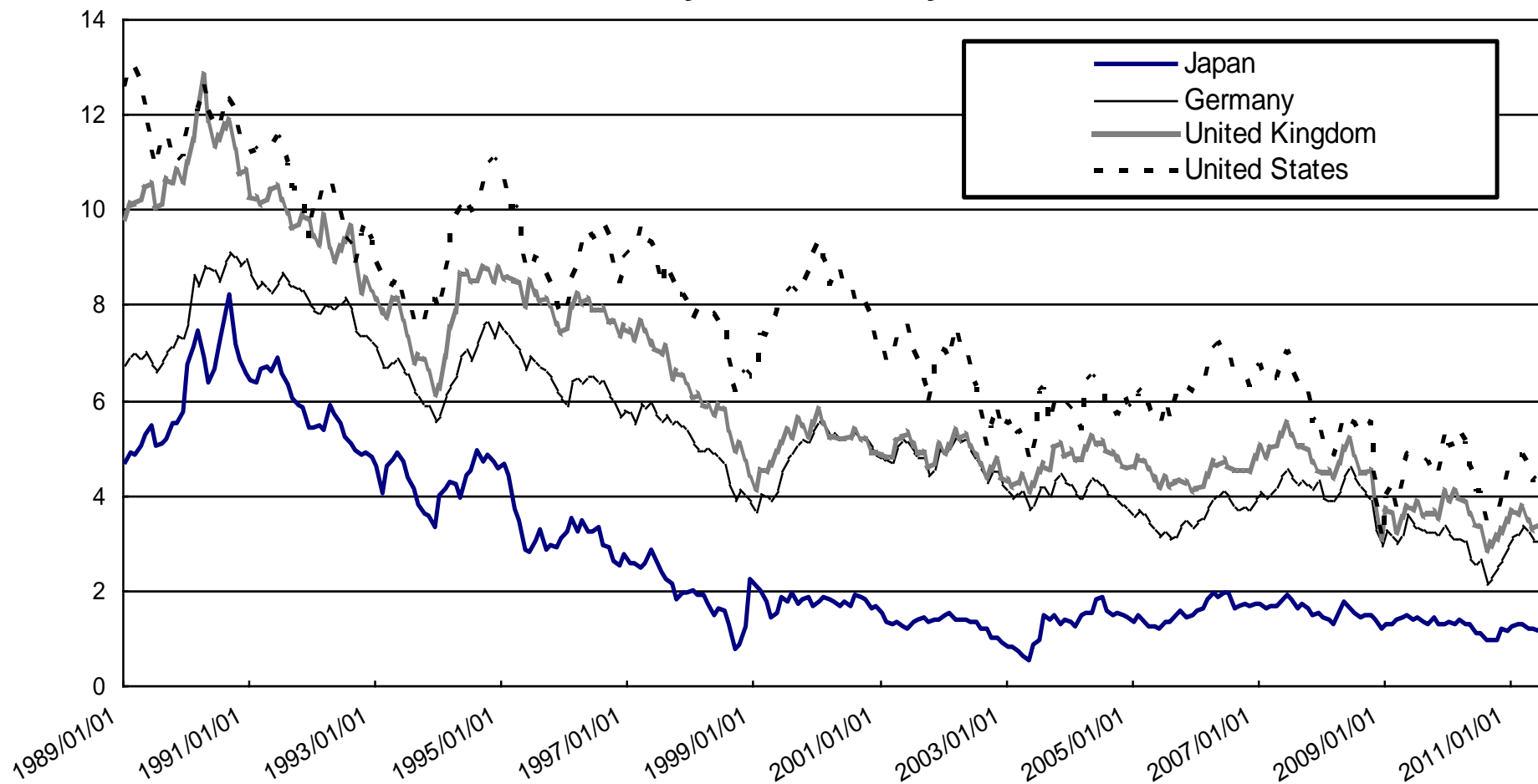
(Source: Japan Institute of Life Insurance "Survey on coverage")

# Japan experienced a low interest rate environment

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- Low interest rates becoming a worldwide trend

## Government / Treasury Bonds (10 year) Interest Rate





# Stock market has been also disappointing

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- Low interest rate coincided with poorly-performing stock prices



# 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 <b>whole life annuities</b> with a guaranteed term
④ Self-Private Pension	fixed-term annuity	options for <b>whole life annuity</b> with guaranteed term and lump-sum are available

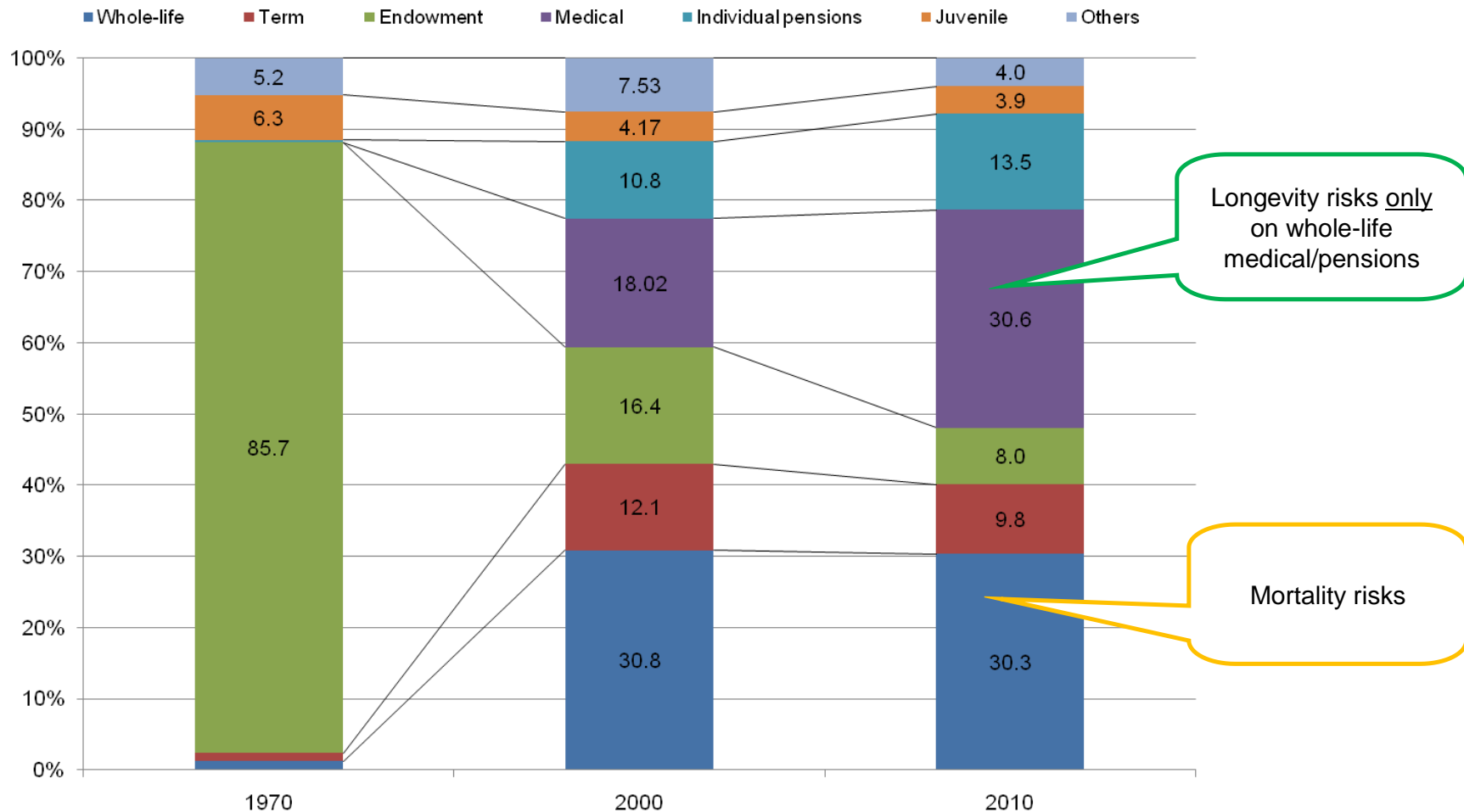
- Longevity risk is mainly borne by government, employers, and individuals.
- Life insurers are subject to longevity risk, in case where the option for whole life annuity is chosen by policyholders for self-private pension.

# Offsetting between longevity risk and mortality risk

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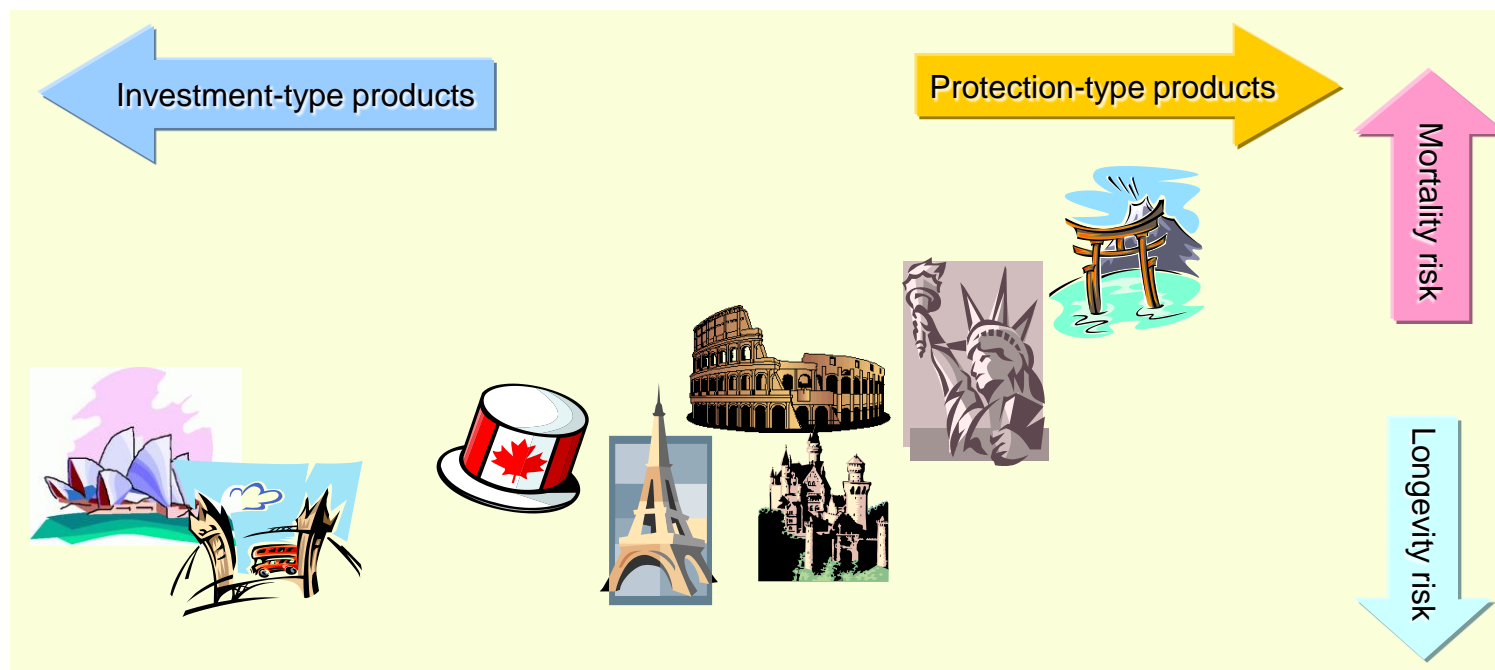
- Japanese life insurers' exposure to longevity risk is limited but gradually increasing

## Changes in Product Portfolio (Number of Policies in Force)



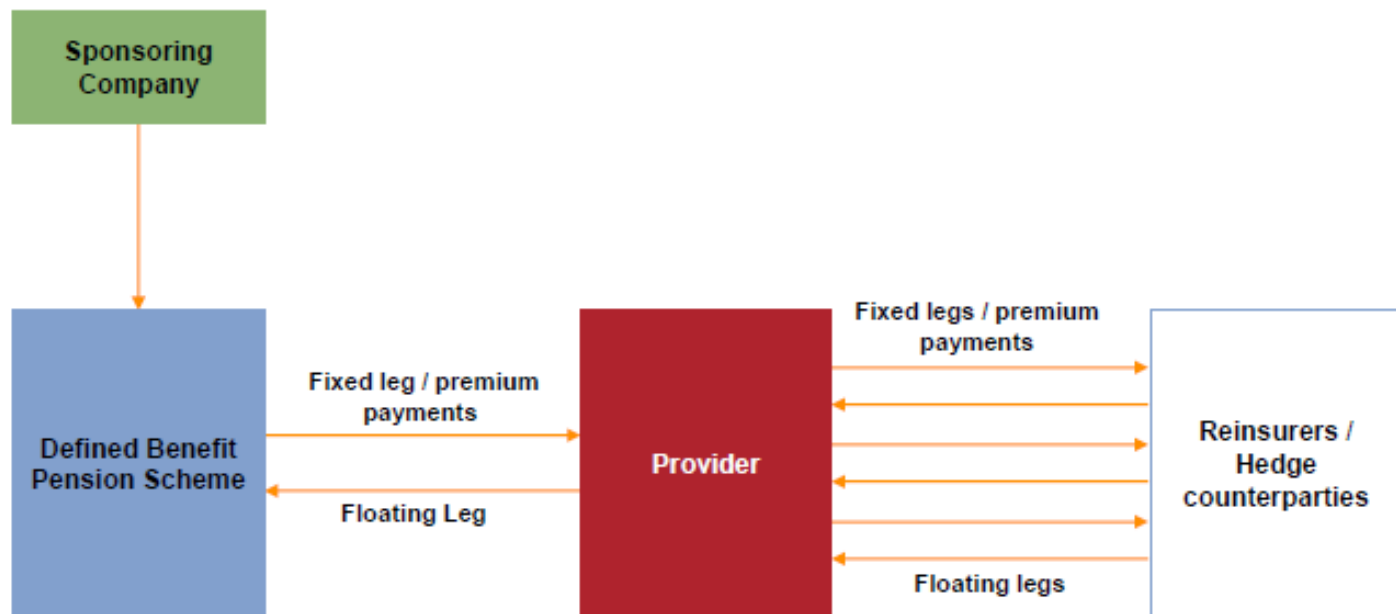
(Source: Life Insurance Association of Japan)

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



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

## Longevity Hedge Transaction Structure



(Source: Deutsche Bank AG)

- 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



## **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)

# APFF: Focus on insurance & Retirement Income



Asia-Pacific  
Economic Cooperation

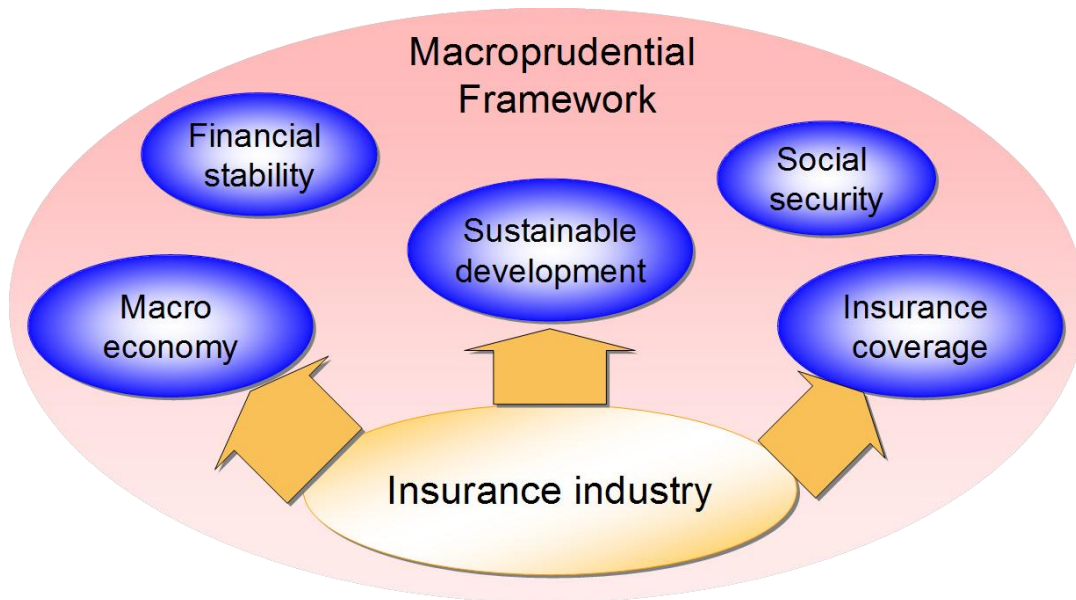


- Helping to develop policy and regulatory frameworks that will enable insurers and pension funds to:
  - effectively provide long-term funding;
  - support financial stability and economic and infrastructure development and;
  - serve the needs of aging society.
- Seeking to help in identifying and 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

# Conclusion: yin and yang

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- Tao of macro-prudential supervision and risk management with a holistic framework



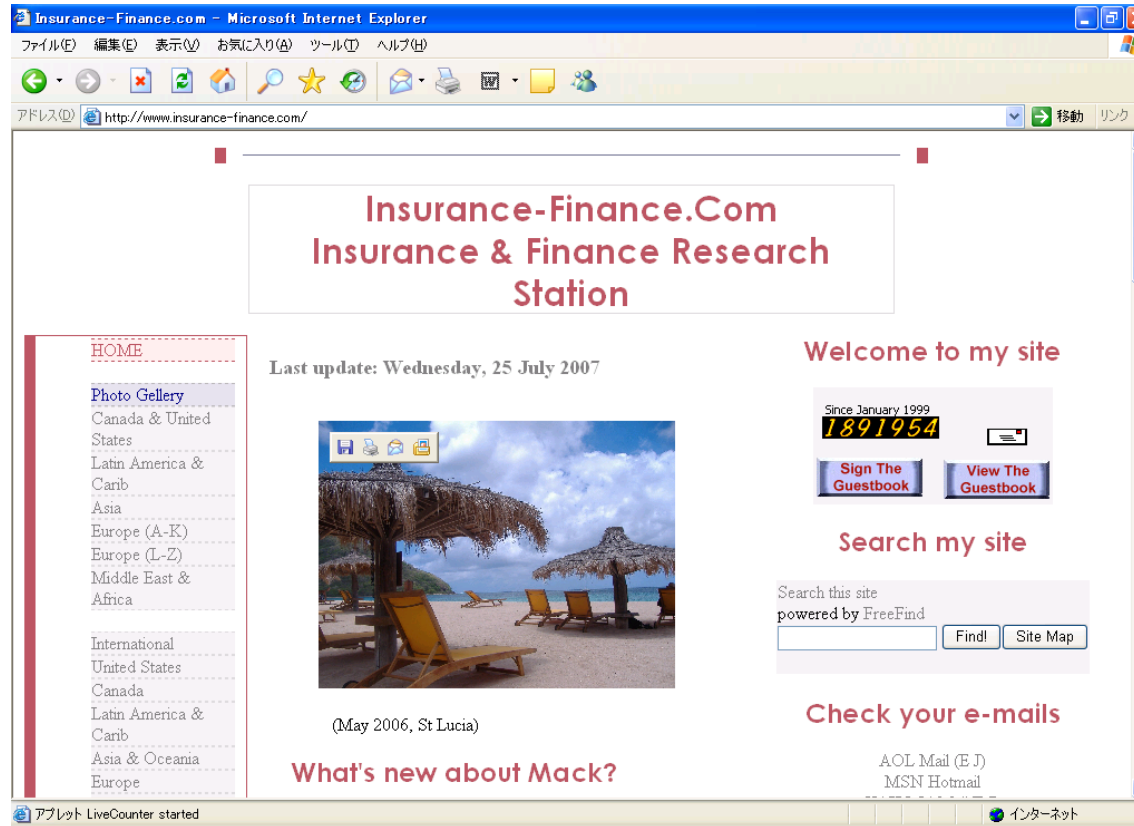
( Photo – Tao Garden, Chang Mai, Thailand)

- 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, control yourself
  - In order to implement international standards, you should first know your own country



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*Any questions? email to **m-okubo@nliinter.com**  
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