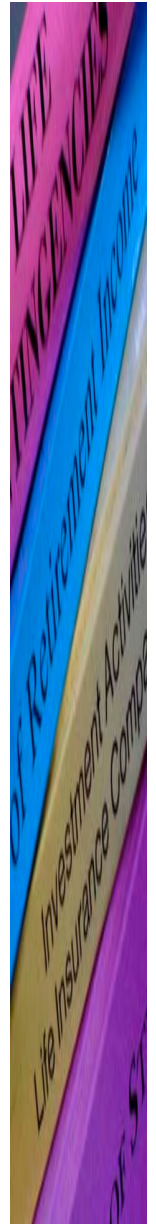


Strategic and Entrepreneurial Actuary:

*A Solution for Development of Actuarial
Profession and Actuaries' Roles in Indonesia?*

By Iene Muliati, FSAI

14th East Asian Actuarial Conference
Tokyo, 12 October 2007



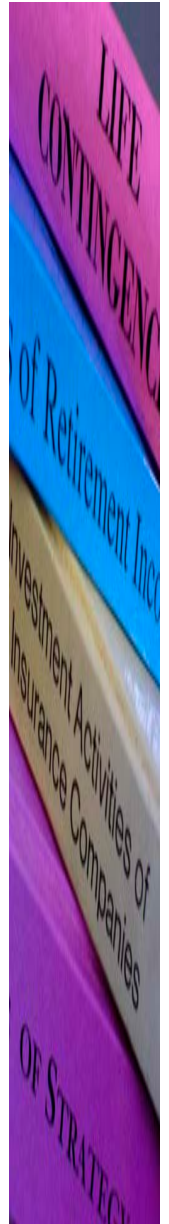
Agenda

- Background
- Actuaries in Indonesia
- Quick Peek to Insurance and Pension Industry
- Opportunity
- Challenges and Strategic Actions



About Indonesia

- Situated in Southeast Asia
- Archipelago of **17,508 islands**
- Got its independence in 1945
- Capital is Jakarta, situated in the island of Java
- Various ethnics and religions
- Natural resources: **petroleum, tin, natural gas, nickel, timber, bauxite, copper, fertile soils, coal, gold, silver**
- Natural hazards: **occasional floods, severe droughts, tsunamis, earthquakes, volcanoes, forest fires**
- Current environment issues: deforestation; water pollution from industrial wastes, sewage; air pollution in urban areas; smoke and haze from forest fires



Economy

- GDP (purchasing power parity): \$948.3 billion (2006 est.)
- GDP - real growth rate: 5.5% (2006 est.)
- GDP - per capita (PPP): \$3,900 (2006 est.)
- Inflation rate (consumer prices): 13.2% (2006 est.)
- Investment (gross fixed): 20.3% of GDP (2006 est.)
- Industrial production growth rate: 2.6% (2006 est.)
- Labor force: 108.2 million (2006 est.)
 - agriculture: 43.3%
 - industry: 18%
 - services: 38.7% (2004 est.)

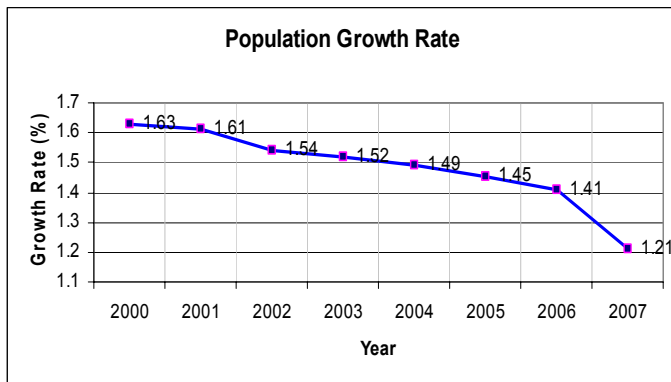


Socio-Demography

As of July 2007*

Rank	Country	Population (million)
1	China	1,321.9
2	India	1,129.9
3	United States	301.1
4	Indonesia	234.7
5	Brazil	190.0

- Mortality rate overall: 6.25 deaths / 1,000 population
- Crude birth rate: 19.65 births / 1,000 population
- Life expectancy: 70.16 years
 - Female: 72.76 years
 - Male: 67.69 years
- Literacy: 90.4%
 - Male: 94%
 - Female: 86.8% (2004 est.)

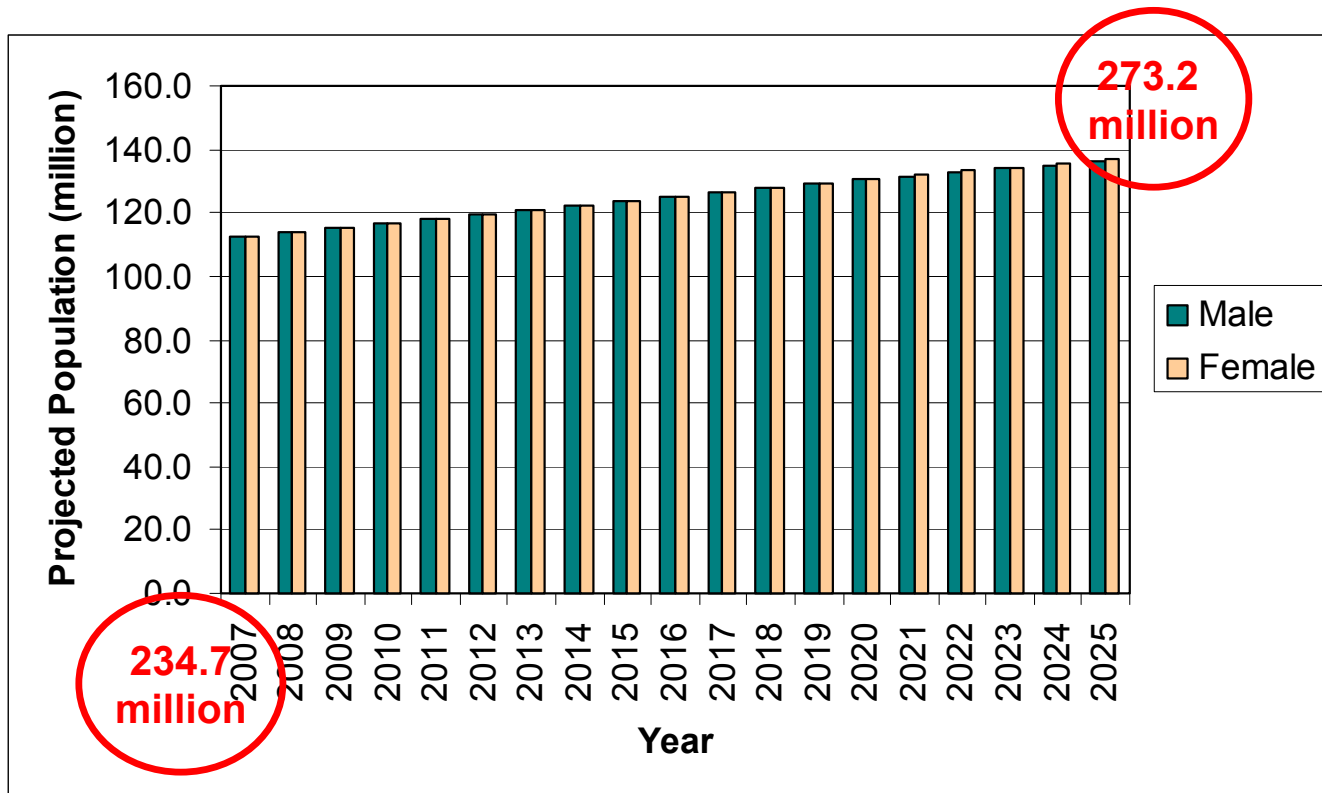


Source: CIA World Factbook

* Source: CIA website downloaded on 7 October 2007



Projected Population, 2007-2025



Source:

-Data Statistik Indonesia downloaded in September 2007

-CIA website downloaded on 7 October 2007



Business Environment

- Banking industry and real sector are open to international players
- Capital Market, Insurance and Pension Fund industries are open to international players and supervised by the Ministry of Finance (of the Government)



Society of Actuaries of Indonesia

- Persatuan Aktuaris Indonesia (PAI)
- Founded in 1964
- Full member of the International Actuarial Association in 2006
- Board of Governors:
 - President
 - Vice President and Secretary General
 - Vice President II
 - Treasurer
 - Six Working Commissions on areas of Code of Ethics, Standard of Practice, Curriculum and Examination, Continuing Professional Development, Insurance, and Employee Benefits

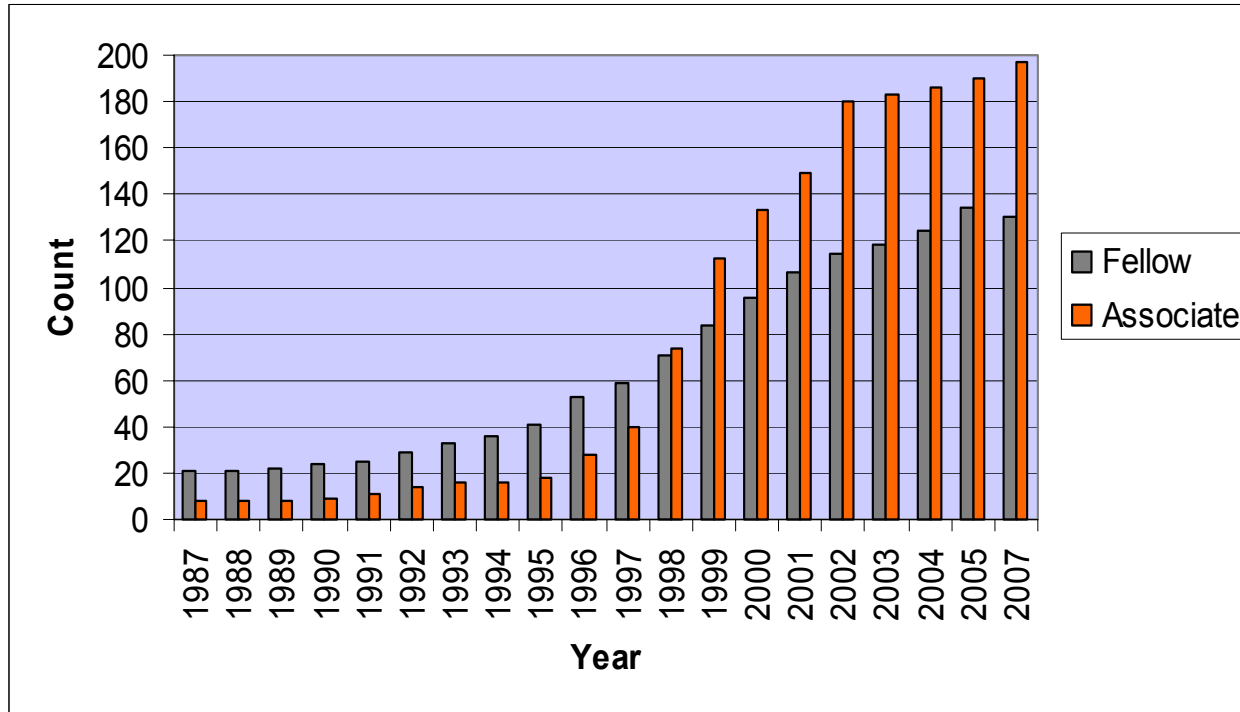


Roles of PAI

- Represents and regulates its members for the benefit of the profession and in the public interest
- Runs own curriculum and examinations for new entrants
- Conduct seminars and workshops for member continuing education and professional development
- Create and maintain cooperative relationship with Government, business community, other professions and related stakeholders



Profile of Actuary*

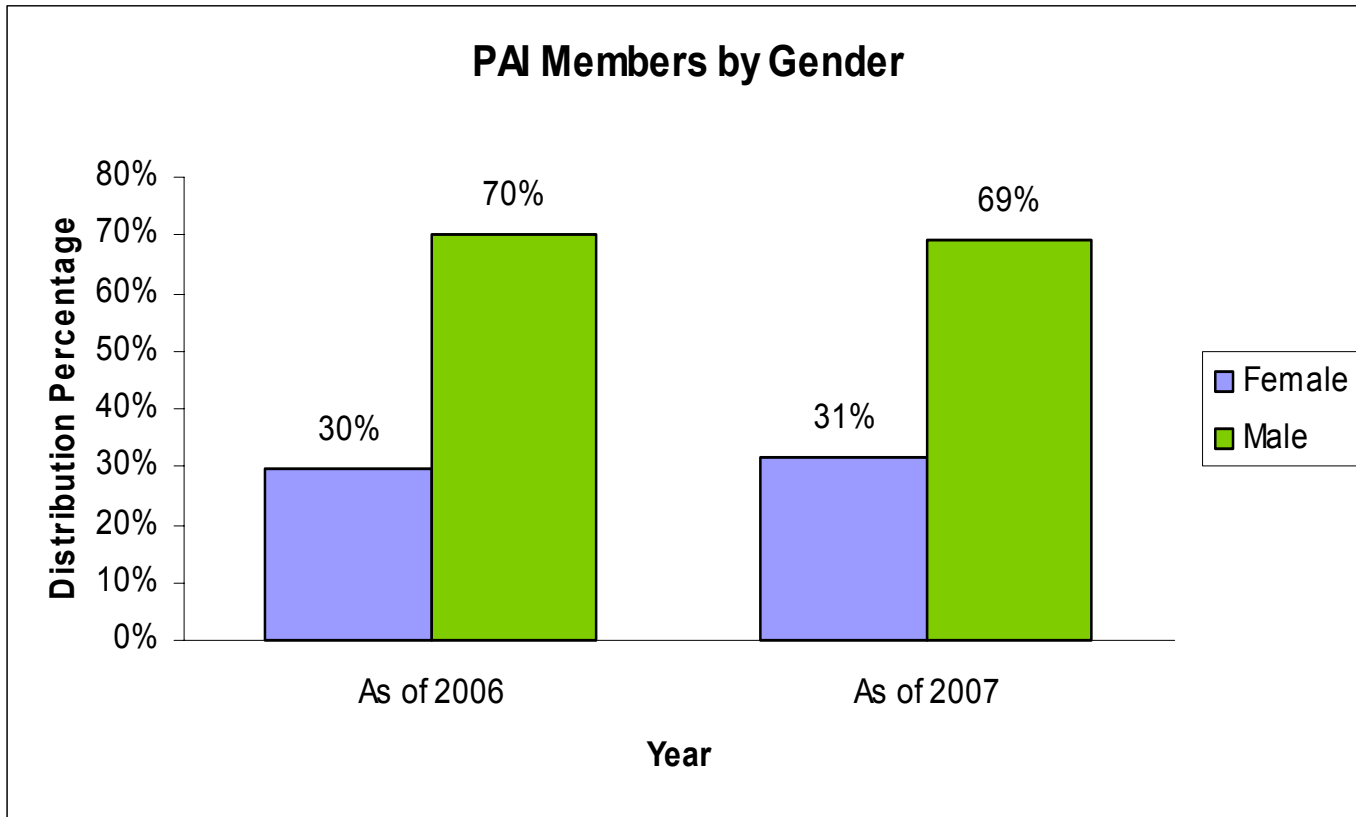


The profession growth is relatively small !

* Source: PAI database, updated on 28 September 2007



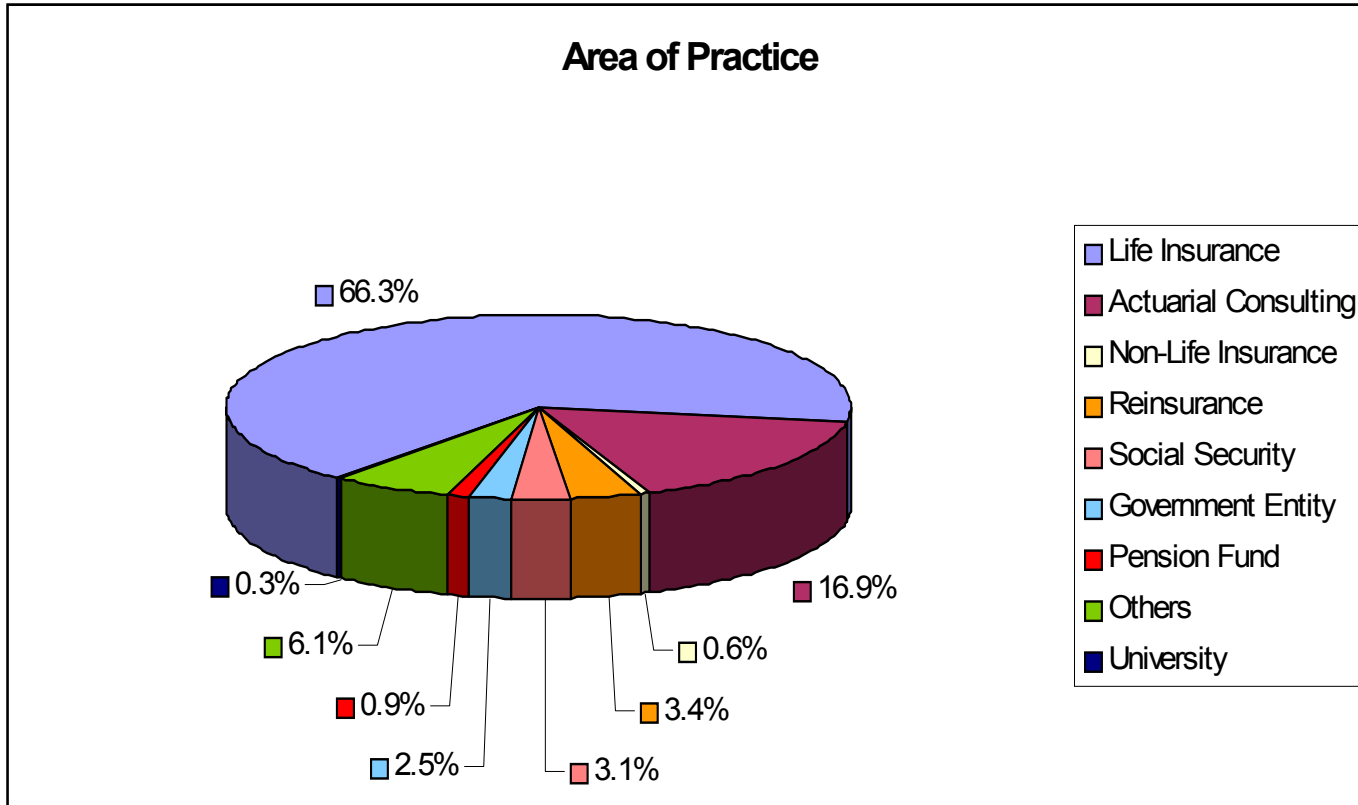
Profile of Actuary



Source: PAI database, updated on 28 September 2007



Where do Actuary work?*



* Source: PAI database, updated in October 2007



Common Tasks

■ Pension actuaries

- Statutory valuations
- Plan design and funding
- Plan administration
- Training
- Expense calculations for accounting purpose
- Fund manager selection (only few)

■ Life Insurance actuaries

- Risk management
- Financial reporting and other statutory requirements
- Product development
- Pricing
- Market conduct

■ Government entity / State Owned

- Regulation and supervision
- Public policy
- Public programs, including long-term health services



Quick Peek to Insurance Industry

- 51 life insurance, 97 non life insurance companies, 2 social insurance and 3 insurance for civil servants**
- Life insurance penetration accounted for 15% of the population
 - 2% individual life insurance
- Life insurance penetration: 1.4% of GDP

Country	Total assets of industry (% of GDP)*
Indonesia	4%
Malaysia	21%
Singapore	38%

**Opportunity:
Develop the industry
and increase client
base !**

* Source: Indonesia: Economic and Financial Highlights, April 2005

** Source: 2006 Bapepam-LK Annual Report



Life Insurance Business

Life Business Growth

Year	Gross Premium (in IDR trillion)	Growth (%)
2001	9.1	
2002	11.2	23%
2003	13.7	22%
2004	18.3	34%
2005	21.6	18%



Life Insurance Business

Life New Business Growth

Year	Gross Premium (in IDR trillion)	Growth (%)	Number of Insured (in million)	Growth (%)
2001	4.3		9.2	
2002	5.3	23%	8.7	-5%
2003	6.5	23%	6.8	-22%
2004	9.6	48%	10.6	57%
2005	9.8	2%	13.0	23%



Non-Life Insurance Business

Non-Life and Reinsurance Business Growth

Year	Gross Premium (in IDR trillion)	Growth (%)
2001	10.0	
2002	11.9	19%
2003	12.7	7%
2004	14.3	13%
2005	15.9	11%



Quick Peek to Pension Industry*

Country	Total assets of industry (% of GDP)*
Indonesia	2.5%
Thailand	8.8%
Hong Kong	17.1%
OECD	39.8%
Singapore	63.7%

* Source: Indonesia: Economic and Financial Highlights, April 2005



Quick Peek to Pension Industry

■ Profile of industry*

Type of Program	2002	2003	2004	2005	2006
DB-EPF	277	271	262	250	235
DC-EPF	37	36	32	36	37
FIPF	29	29	27	26	25
Total	343	336	321	312	297

■ Asset*

	2002	2003	2004	2005	2006 ¹
Asset (in IDR trillion)	41.2	49.6	57.8	63.5	77.5

¹ unaudited

Opportunity: Asset management & Investment Actuary!

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* Source: 2006 Bapepam-LK Annual Report



Pension Fund Administration

■ Certification of Pension Fund Administrator*

	EPF	FIPF
Certified	802	34
Uncertified	94	5
Total	896	39

■ Continuing Professional Development*

	EPF	FIPF
Fulfill credit point	242	0
Not meeting credit point	654	39
Total	896	39

Opportunity: Training!

* Source: 2006 Bapepam-LK Annual Report



Actuarial Consulting

Year	Actuarial Consulting Companies*
2002	19
2003	20
2004	23
2005	28
2006	34

* Source: 2006 Bapepam-LK Annual Report



Opportunity

■ Life Insurance

- Appointed actuary
- Asset liability modeling
- Other actuarial related works

■ Non-Life Actuary

- Regulator Statutory Requirement on in-house Actuary in Non-Life Insurance industry
- Asset Liability Modeling



Opportunity

■ Pension Actuary

- Development of the Indonesian statement of financial accounting standards on employee benefits
- Labor Law
- Employee Benefits
- Social Security

■ Investment actuary

- Regulator statutory requirement on better actuarial input to identify, measure and control investment risks
- Asset Liability Modeling

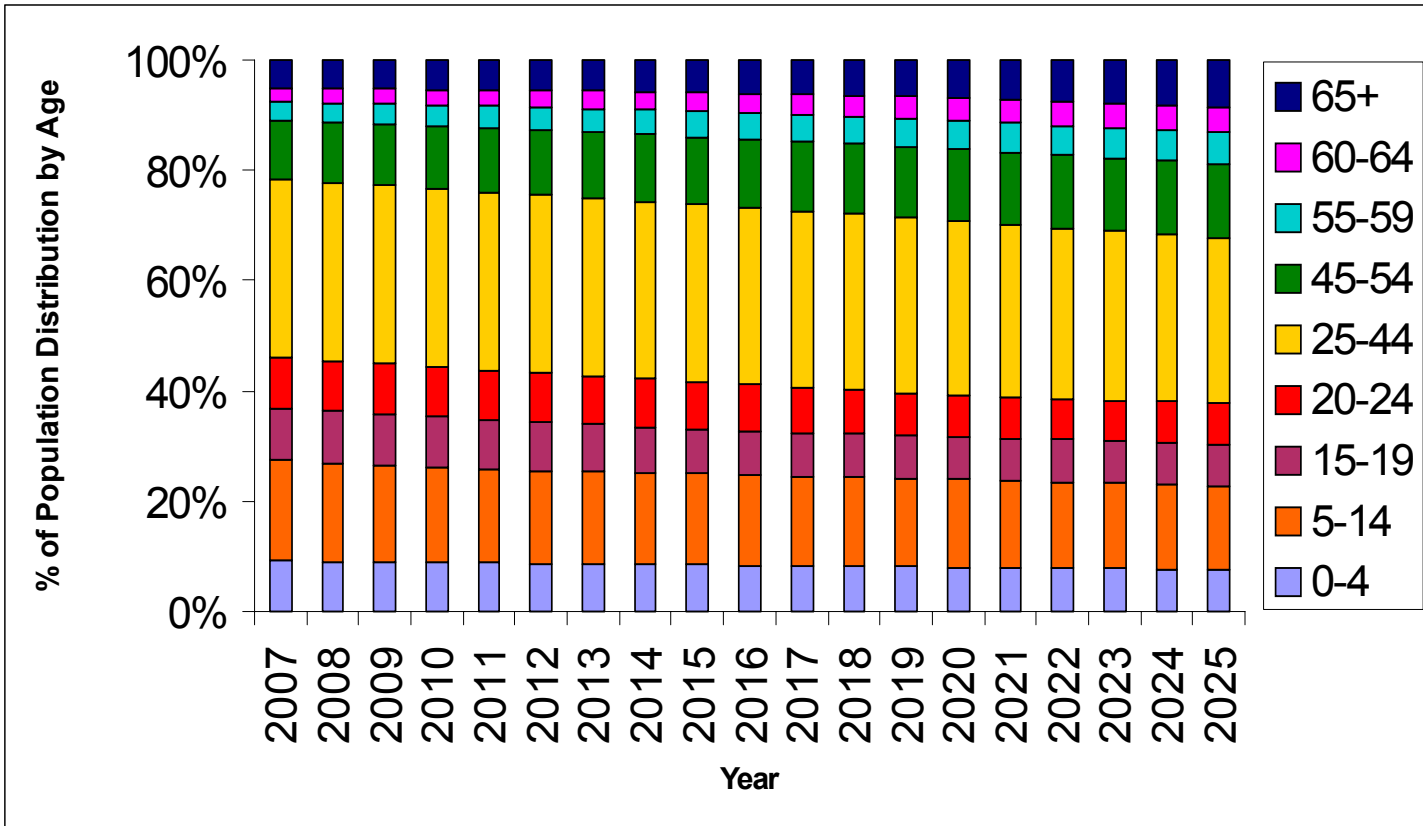


Opportunity

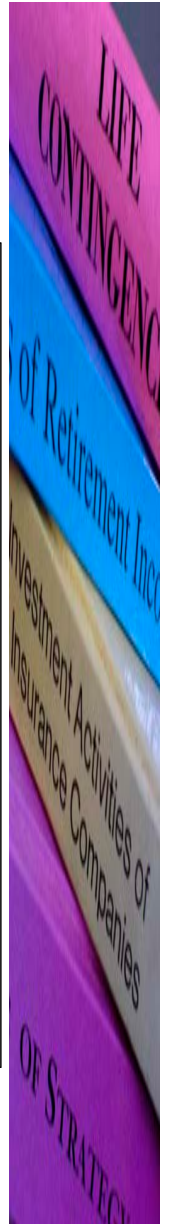
- Risk Management
- Product Development / Innovation
 - Growing needs for Islamic insurance called Takaful – a Shariah-compliant insurance
 - Needs for Supplementary Retirement Plan
 - Innovative Insurance Product to cater future financial need



Opportunity by Age



Source: Data Statistik Indonesia downloaded on 7 October 2007



Challenges

- Open Market
 - Tighten competition
 - Compete with international actuary with broader experience and expertise
- Lack of expertise and experience in other areas than life insurance and pension

World competitiveness rankings			
Country	2001	2003	2006
People's Rep. of China	26	29	19
India	42	50	29
Malaysia	28	21	23
Philippines	39	49	49
Indonesia	46	57	60
Number of countries/regions ranked	49	59	61

Source: World Competitiveness Yearbook, 2006, published by IMD, Switzerland.



Challenges

- Unknown profession
 - low public awareness toward roles of actuaries
 - Low appreciation toward the profession
- Limited Network Capital
- Lack of individual involvement/contribution to the profession / industry / regulatory body
- Better and more productive education system



Strategic Actions

- Create more extensive education infrastructure (synergy with universities)
- Increase quality of work and professionalism
- Increase knowledge and skills
- Business Intelligence, Planning and Strategy
- Brand Image - Promote the profession
- Increase PAI Involvement
- Individual Contribution



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Thank You

