

# **The Future Role of Australian General Insurance Actuaries in Asia**

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**IAAust BIENNIAL CONVENTION 2003**



# Agenda

- **Currently in Asia**
- **Key Trends – an actuarial perspective**
- **Actuarial Education & Bodies in Asia**
- **Australia – an Exporter of Actuaries ?**



# Introduction

- **Bring the perspective of an employer of GI actuaries with the need to operate in multiple Asian markets**
- **Currently have on the team FIAA, FIA, FCAS & FIAJ**
- **From our perspective in Hong Kong there has been a substantial increase in actuarial students trained in Australia wanting to work in GI in Asia but particularly Hong Kong & China**
- **This made us curious about the current state of actuarial skills in Asia in the GI sector**



# Currently in Asia

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# **Current Events Asia GI Sector**

- **Growth**
- **Access by foreigners**
- **Solvency Standards**
- **Deregulation of pricing**
- **Actuarial Involvement**



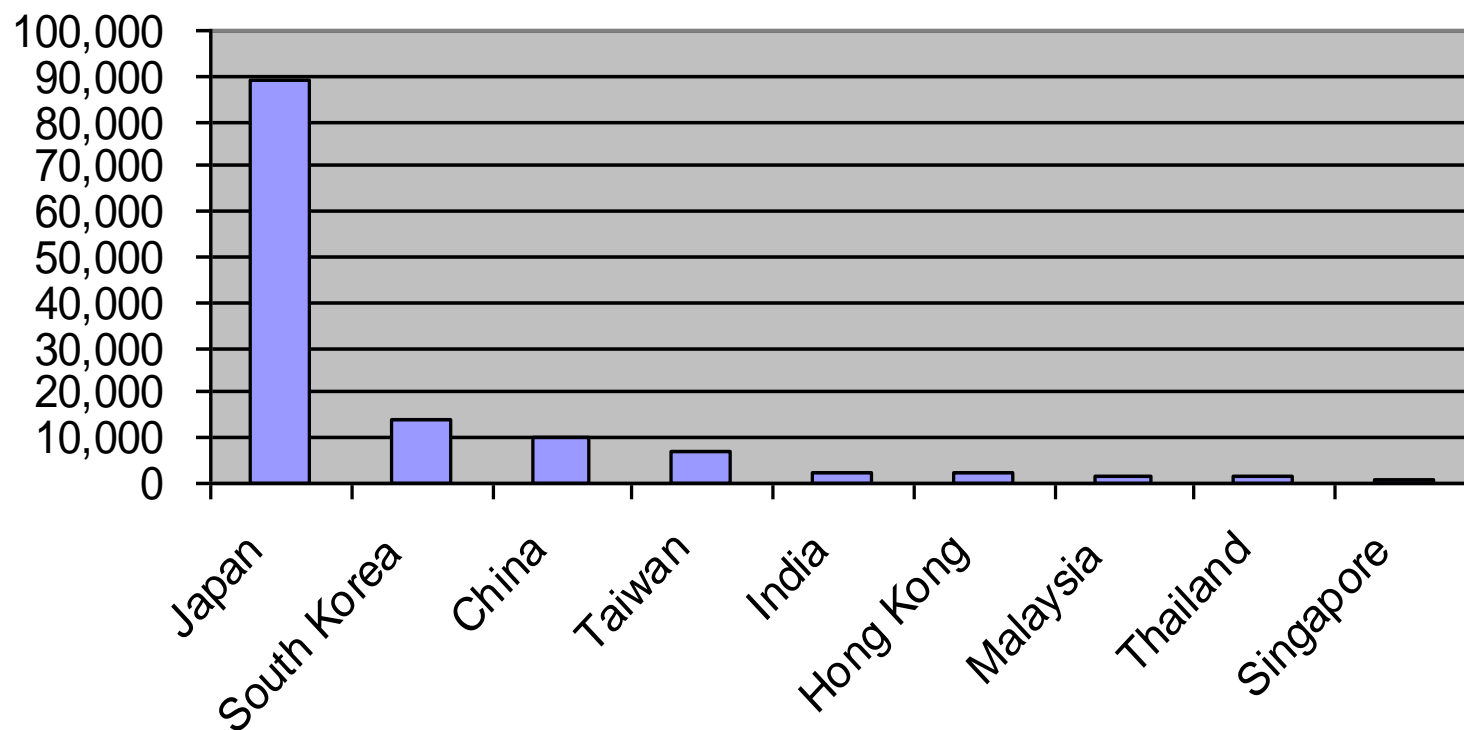
# Growth

- **Newsflash: “China achieves 50% growth in Premium Income ...”**
- **Global insurers looking to China for future growth**
- **... but is it profitable ?**
- **What about the rest of Asia ?**
  - **India**
  - **Korea / Japan**



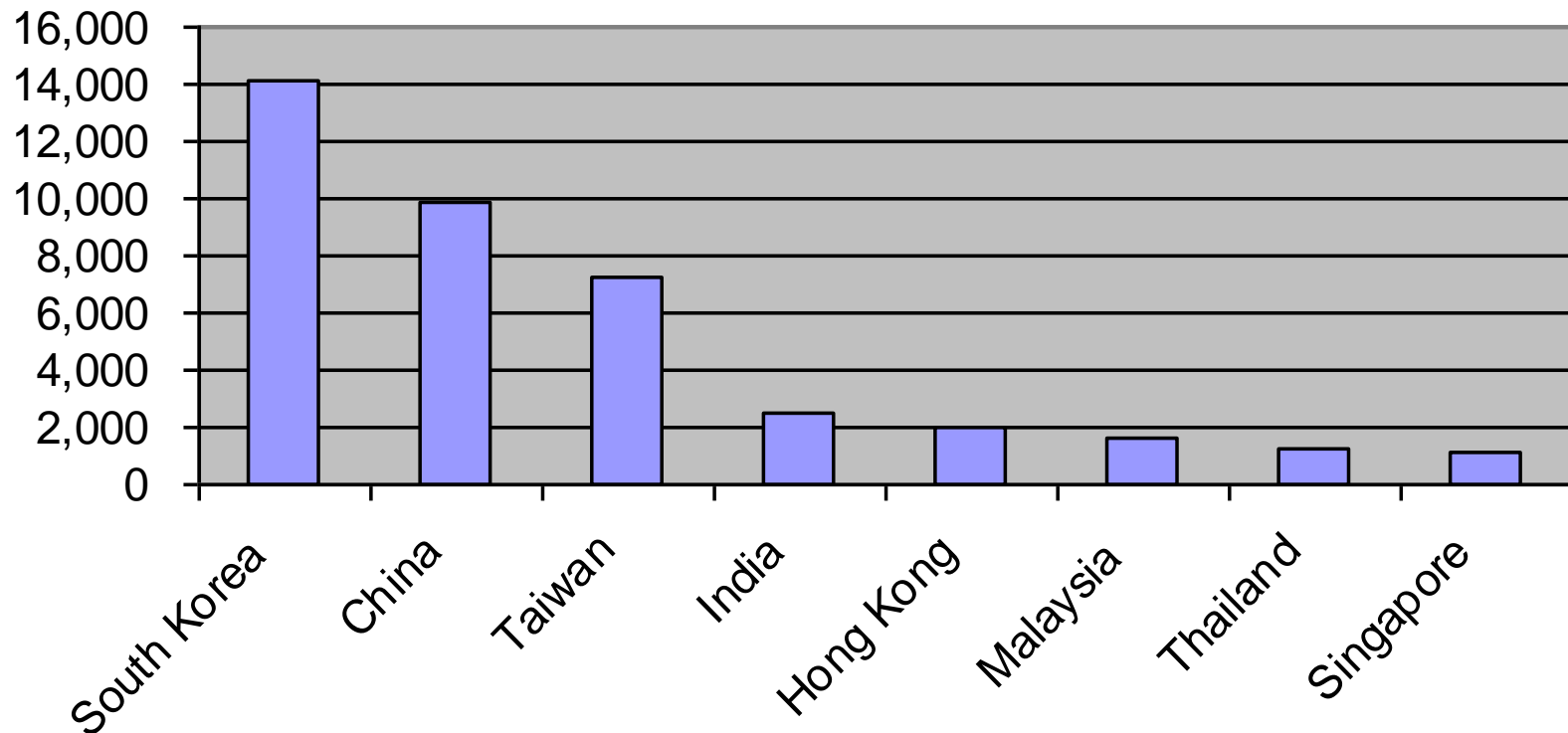
# Growth

Non-Life Premiums 2001



# Growth

**Non-life Premiums 2001 (ex-Japan)**





# Growth

Non-Life: Growth	=(current yr - past yr) / past yr	
	99-00	00-01
Japan	-0.71%	-13.24%
South Korea	14.32%	0.23%
China	40.60%	12.17%
Taiwan	18.16%	2.80%
India	2.34%	4.28%
Hong Kong	7.07%	8.46%
Malaysia	8.23%	3.68%
Thailand	0.33%	2.23%
Singapore	8.47%	6.54%
<b>Total (weighted by premium)</b>	<b>3.73%</b>	<b>-8.44%</b>
<b>Total (simple avg)</b>	<b>10.98%</b>	<b>3.02%</b>



# Access by Foreign Insurers

- All Asian markets are opening to foreign insurers to a lesser or greater extent
- **China** most recognisably due to entry to WTO and many global insurers have seen it as an opportunity too big to ignore
- Limits to foreign ownership that will gradually relax
- But foreign interest in all the other markets:
- **Japan:** several foreigners, AIG, Zurich, Axa, R&SA have entered in last 10 years.
- Sector not in any real trouble unlike the Life sector, foreigners finding it tough to carve out market share



# Access by Foreign Insurers

- **Korea:** Smaller GI companies have been in substantial trouble. About 50% of the balance sheet devoted to savings products in most GI companies.
- A few foreign insurers still there (Allianz) but some have already exited (R&SA)
- Still significant restructuring of the industry under way, especially at the small company end



# Access by Foreign Insurers

- **Taiwan:** Access for foreigners has existed for some time.
- There is still restructuring to occur among the smaller domestically owned insurers as Taiwan regulator imposed higher solvency requirements in 2001
- **India:** Again a gradual opening on the basis of local joint venture partners, similar to China
- This covers the major markets of interest in Asia. Other markets such as Malaysia, Thailand, Philippines, Indonesia, Vietnam are quite small or nascent.
- **Hong Kong & Singapore** are somewhat unique – very similar to Western markets, quite open, over-competitive, & home to most of the regional offices of foreign GI companies in Asia (some in Sydney).



# **Key Trends in Asia – an Actuarial Perspective**

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# **KEY TRENDS – an actuarial perspective**

- **Actuarial Certification of Reserves**
- **Appointed Actuary role in Taiwan**
- **Price deregulation: China, Japan, Korea, India**
- **Solvency Standards, Capital Management & Risk Based Capital**



# Certification of Reserves

- Both Hong Kong & Singapore have introduced actuarial certification of reserves for General Insurance liabilities
- MAS guidelines in Singapore are somewhat more detailed than GN9 in Hong Kong
- Both allow choice of methodology by the actuary, Singapore requires a margin to raise probability of adequacy to 75%, Hong Kong leaves the requirement of a margin above the best estimate to the judgement of the Actuary.
- FIAA plus suitable experience is recognised as are all major actuarial bodies. Actuary can be employed by company or be a consultant.
- Certification not required by regulators in other Asian countries



# Appointed Actuary Role- Taiwan

- **Appointed Actuary role for General Insurance companies in being introduced in Taiwan from end of 2003**
- **Scope of role is still not entirely clear despite legislation being passed**
  - **MOF currently requires all product submissions for benefit or price changes to be certified by an Actuary**
  - **Appears to require certification of reserves for year ending 2003,**
  - **Do not know about ongoing solvency position**





# **Appointed Actuary Role- Taiwan**

- **Again Actuary can either be employed or be a consultant**
- **Acceptance by the MOF for this role is on an individual basis**
- **One of the issues MOF faces is the lack of GI actuaries to do the work and there are few foreign actuaries working in Taiwan.**



# Deregulation of Pricing

- **Wednesday, April 30, 2003**
- **Nonlife Insurers Launching Risk-Segmented Products**
- TOKYO (Nikkei)--Top Japanese nonlife insurance companies are introducing auto insurance products that differentiate premiums according to risk factors such as age and gender.
- Such risk-segmented insurance products are widespread in Europe and the U.S., but up to now in Japan they have mainly been offered by market newcomers like Sony Assurance Inc.
- Tokio Marine & Fire Insurance Co. and Nichido Fire & Marine Insurance Co., which are slated to merge in fall 2004, have jointly developed a new product that they will begin marketing in August. The product will be geared toward individuals aged 35 or older, and premiums will be lowered by an average of 2% for main vehicle types. They will also discount the premiums on new vehicles by 5%.
- Ace Insurance will begin selling a new insurance product that classifies premiums according to six items including age, gender, type of vehicle use, and miles driven. The age category alone is divided into 10 tiers.
- Sompo Japan Insurance Inc. (8755) and Mitsui Sumitomo Insurance Co. (8752) are also introducing products that differentiate premiums according to factors like age and how a vehicle is used.

(The Nikkei Financial Daily Wednesday edition)



# Deregulation of Pricing

- A mixed picture
- Hong Kong & Singapore: open competition for many years
- North Asia – Japan & Korea: Convoy system, leaders set prices & product design, rest of industry followed
- China completely regulated prices until quite recently. Experimented with price competition in Shenzhen, now going nation wide
- India: industry guidance through the Tariff Advisory Committee.



# Deregulation of Pricing

- Tariffs being removed in most of Asia
- Actuaries involved to a limited extent
  - Pricing sign-off in Taiwan
  - Industry ‘reform’ for Employer’s Compensation in Hong Kong
  - Some companies with the resources for more ‘sophisticated’ approach to pricing but as the Japanese example shows segmentation is still ‘new’ and certainly not taken to extremes



# Solvency Standards

- Numerous countries are doing something
- Singapore: introducing a RBC standard
- Malaysia, Thailand & Taiwan have significantly raised minimum capital requirements in recent years,
- Korea: regulator pressure on smaller companies to get larger & stronger, including forced bankruptcy & reconstruction
- Japan: FSA has taken 'informal' action to ensure solvency of industry via inspection activity, especially following Fortress Re.



# Capital Management

- **Korea, Singapore, Taiwan & to a lesser extent Japan showing strong interest in Risk Based Capital**
- **Dynamic Financial Analysis is a hot topic in several places**
- **Strong desire for education on the tools and their implementation**
- **Australia's expertise in this area is widely understood**



# Actuarial Involvement

- Reserving
  - Hong Kong, Singapore, Taiwan, Korea, Japan
- Levy funding requirements for guarantee funds, industry bodies, terrorism pools
- Pricing
  - Relatively simple so far
  - Statistical monitoring services, mainly HK
  - Some GLM's for Industry Tariffs
- DFA models implemented by some larger companies
- Health – something of a cross-over area between Life & GI actuaries



# **Actuarial Education & Bodies in Asia**

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# Actuarial Bodies in Asia

- **Asian Actuarial Bodies**
  - HK, Singapore, Malaysia, Japan, Korea, Taiwan, China, India
- **Korean Actuarial Society**

Category	Life & Friendly Society	GI	Govern-ment	Banks	Other
<b>Fellows</b>	<b>130</b>	<b>77</b>	<b>31</b>	<b>4</b>	<b>85</b>
<b>Associates</b>	<b>144</b>	<b>23</b>			<b>10</b>

- **Estimated about 15% of local actuaries don't register with KAS**
- **9 foreign Fellows registered with KAS**



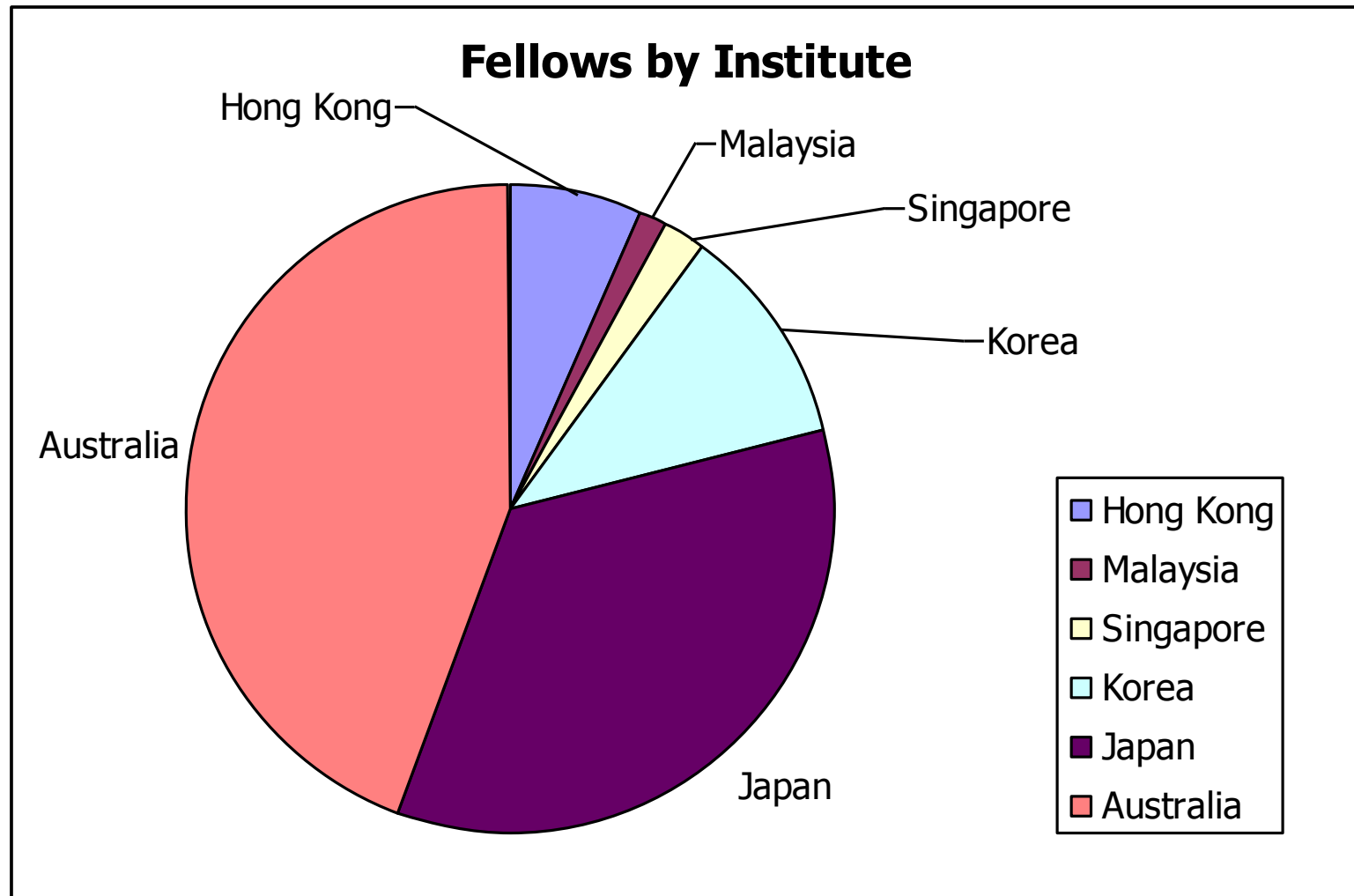
# Actuarial Bodies in Asia: Japan

- Institute of Actuaries Japan March 2003

Category	Fellow	Associate	Student	Total
Life	431	341	633	1,405
Non-life	151	118	233	502
Trust Bank (Pensions)	164	93	119	376
Bank	10	16	23	49
Public	17	13	29	59
Taiwan	13	50	19	82
China	0	0	6	6
Individual	149	127	299	575
Others	85	61	216	362
Total	1,020	819	1,577	3,416



# Fellows by Institute



# Location of FIAA's

	FIAA		
	2001	2003	% incr.
Location			
Australia	79%	77%	-2%
UK	7%	6%	-7%
US	2%	2%	-3%
Asia	5.5%	8.0%	44%
other	7%	6%	-2%
Total #	1228	1315	

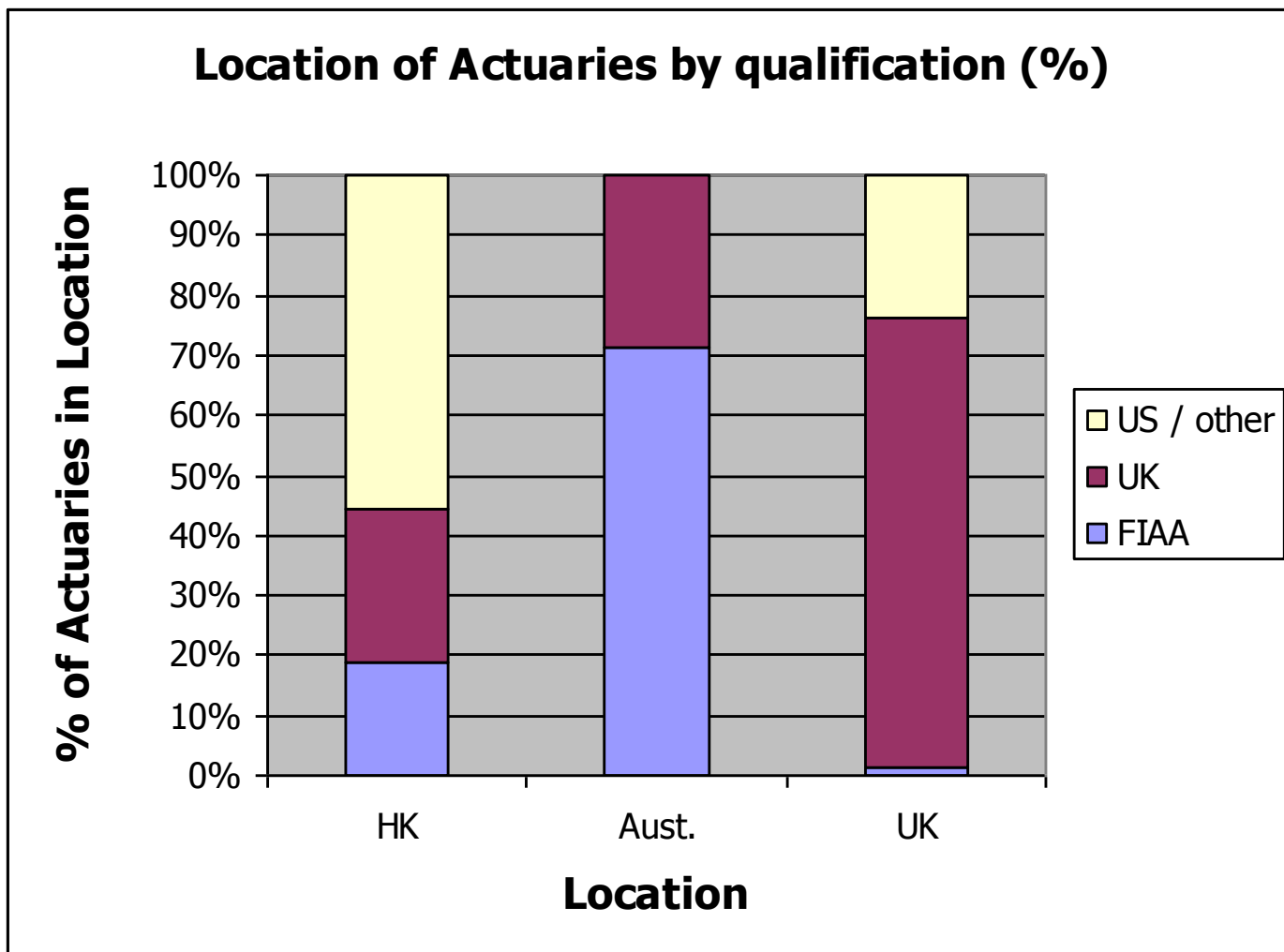


# Location of FIA's (UK)

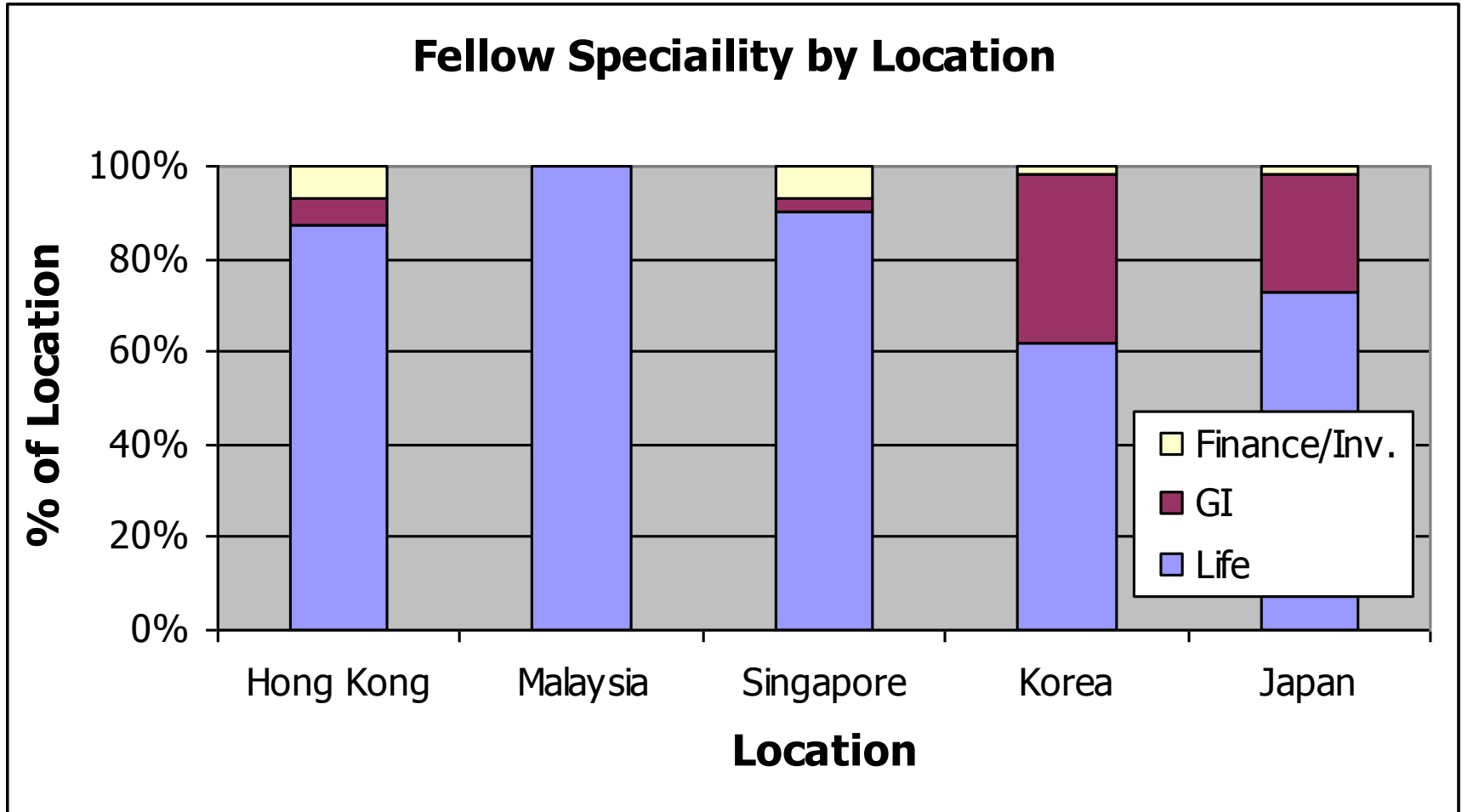
Location	FIA		% incr.
	2001	2003	
Australia	6%	6%	1%
UK	72%	75%	4%
US	2%	3%	18%
Asia	3%	3%	4%
other	17%	13%	-21%
Total #	6471	7112	



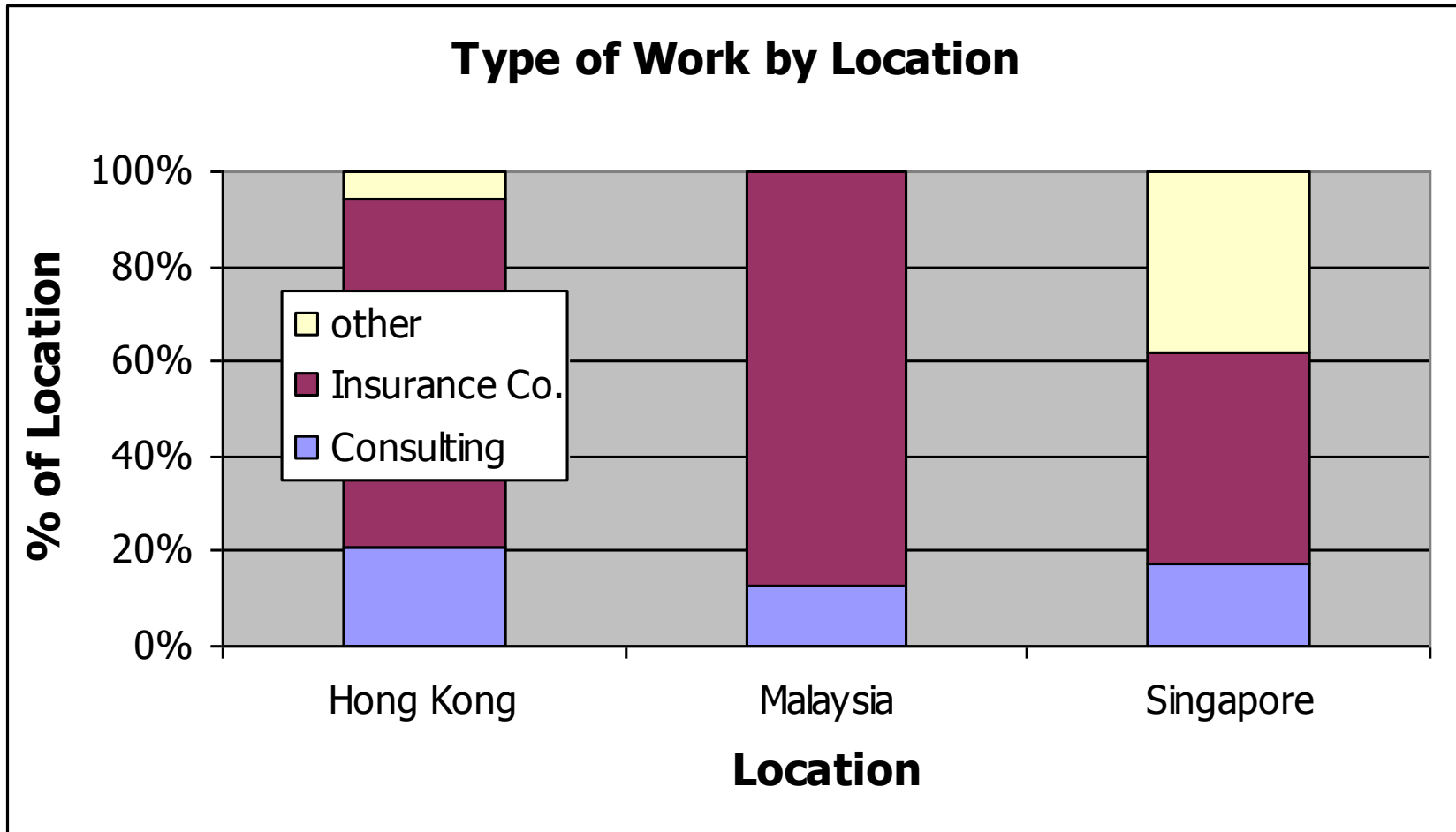
# Fellows by Location



# Fellow Speciality by Location



# Type of Work by Location





# Why Australian Actuaries ?

- **Why Not ?**
- **Quality & reputation**
  - Australia has a strong reputation for quality education, even as far North as Korea and China
  - US has greater influence in Japan & Taiwan
  - UK has greater influence in HK, Singapore & India
- **Culture & language**
  - Sizeable Asian participation in our university programs
  - Institute should not lose contact when they return to Asia



# Why Australian Actuaries ?

- Australian university programs
- Overseas students
- Students intentions r.e. international career
- IAA now has members in 38 countries compared to 32 in 2001. 8.0% of FIAs are now based in Asia (5.5% in 2001). Further, 11.4% of students plus associates are based in Asia (8.4% in 2001).



# Australia – an Exporter of Actuaries ?

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# Trends in Execs moving to Asia

- Demand & supply
- Country specific
- Practice Areas
- Experience



# Trends: Demand & Supply

- **Developing Markets**
- **Middle class**
- **Foreign ownership**
- **Corporate governance, legislation**
- **Language skills**



# Trends: Countries

- India
- Hong Kong / Singapore
- Japan
- China
- Vietnam
- Thailand, Indonesia, Taiwan



# Trends: Expatriate Packages

- Build up model / Tax equalisation
- International salary (with extras ?)
- Hybrids



# Trends: Expatriate Packages

- **Build up model**
  - Taxed at home country rates
  - Build up to local gross
  - COL, LAFA, FSA, Hardship
  - Utilities, home visits, schooling





# Trends: Expatriate Packages

- **Factors relating to which model chosen ?**
  - Level of local salaries
  - Home country of expat ?
  - Hardship component / security
  - Maturity of market
  - Family situation
  - Company policy
  - Regionalisation
  - Level of experience / seniority
  - Value of qualification
  - Demand & Supply



# Acknowledgements

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However, the opinions expressed remain ours and we look forward to the continued relevance of the actuarial profession to the sound operation of the General Insurance industry in Asia.

