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What's Up in Asia

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WHAT'S UP IN ASIA?

Andrew Linfoot

Abstract

The economies of Asia continue to apparently roar along, helping to provide a soft landing for many of their trading partners around the world.

How sustainable is this growth, and what is the current and likely future impact on the insurance sector in that region?

And what is the implication for Australian actuaries - whether currently practising there or hoping to in the future?

1. This paper will start with a macro look across the major economies of the region,
    a. considering how past and forecast future economic,
    b. demographic and
    c. regulatory trends influence the industry.

2. Several resulting market development themes are then identified.

3. An overview of changes in product and distribution mix follows, paying particular attention to the life insurance sector.

4. Finally, some thoughts on the implications for actuaries, both individually and as a profession will be shared.

This is a broad topic to cover in one session, and it is expected that the macro level factors will be of interest to a broad range of practitioners. Consideration of these factors in one particular segment is intended to illustrate their significance rather than alienate the growing number of 'other than' life insurance actuaries in the region. Hopefully the collective wisdom of the crowd will provide a crystal clear vision of the future ahead..

Key words: Asia, future, economic, insurance sector

1 Introduction

The Asian economies are booming, or so we frequently read. What does this mean in practice, and have we seen this movie before? Why might it be different this time? I wish I knew all the answers – actually no, then life would be too predictable!

Many factors are at play and I have neither the knowledge nor the ability to weave together a coherent analysis of all the relevant information. I will, however, examine a few in particular which may be of most interest to actuaries and other insurance business practitioners.

This paper continues with the following sections:

2. Macroeconomic trends
   - 2.1. Asia Pacific Growth – Past and projected
   - 2.2. Japan's Economic Imbalances
   - 2.3. Other Low Interest Rate Environments
   - 2.4. The Infertility Tsunami
   - 2.5. The Social Democracy
   - 2.6. Regulatory Evolution
   - 2.7. Geopolitics
3. Insurance Market Development
4. Implications for Product and Channel
5. What Does this Mean for Actuaries

The section on macroeconomic trends forms the bulk of the paper. The 'time challenged' reader might prefer to skip to section 3, which starts with a summary of the key trends that are then considered further in the following sections.

2 Macro trends

In this post GFC world, a semblance of calm, and even optimism has returned to the global economy. This is despite occasional outbreaks of uncertainty (or "risk-off" in the modern parlance). At the time of writing, uncertainty about the Cypriot financial services sector and the country's continued participation in the Euro seems to be weighing on global investors' minds. This is apparently one of the reasons for strength in the Japanese Yen this week[i], although the ability of financial commentators to attribute intra-day market movements to world events does sometimes seem remarkable.

While short term volatility in financial markets is unlikely to be of interest to most practitioners who deal with long term liabilities, some of the financial market moves and trends portend greater dramas ahead. Much like the accumulation of tensions within political parties and tectonic plates, various forces acting in financial markets act to promote stability or other political objectives, while storing up tension that may be released in an uncontrolled manner.

Demographic trends can serve to exacerbate accumulations of financial stress, particularly if there exists some degree of causation between the two. Ageing populations exert economic influences that differ from stable populations. Asia is home to one already very old, and several rapidly ageing populations and these cannot fail to have an impact on consumer trends in the next 50 years.

We are fortunate to have lived in a period of relative calm – unmarked by any global hostilities, the likes of which defined the first half of last century. There are, however, a number of bilateral tensions that ebb and flow within the Asian sphere. Many of these are triggered by the rise of a newly assertive global power and most have at their core the ownership of energy assets.

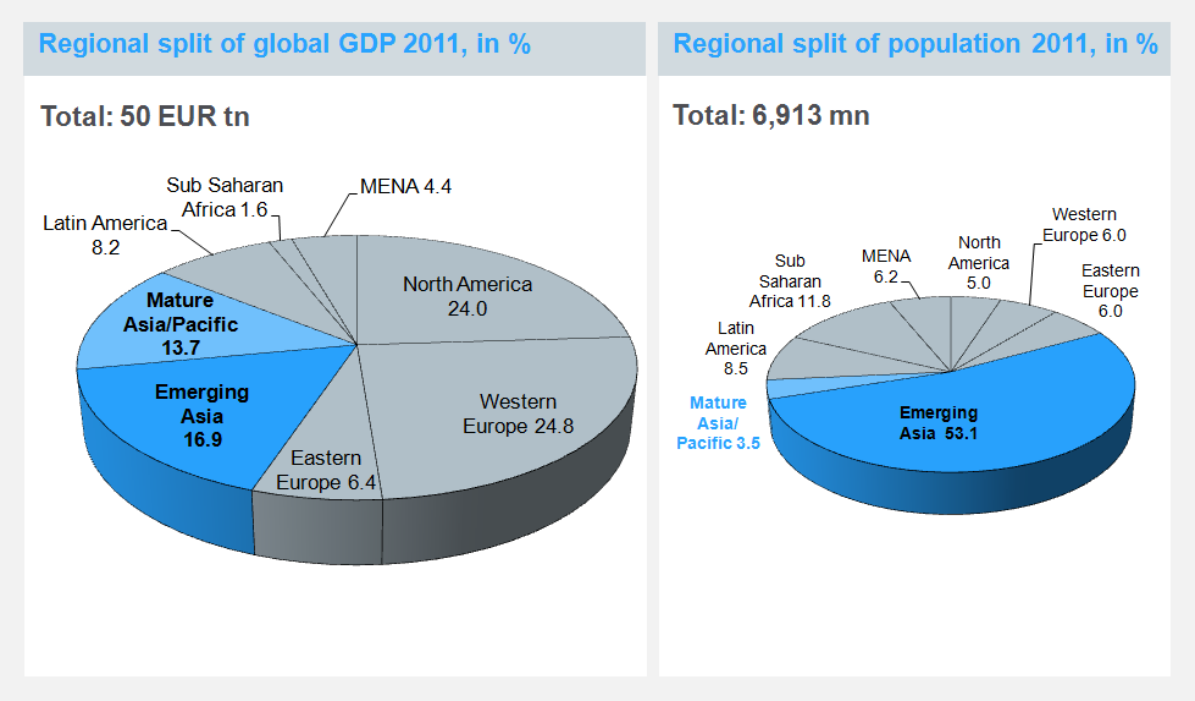
Related to these geopolitical tensions is the increasing hostility of populations to their political leadership. Many examples of this exist, and most are aided by the unprecedented speed of communication and sharing of knowledge that is made possible by the internet. Another driver, though, is changes in population mix, particularly when these changes are not accompanied by, or are indeed the result of, changes in public policy.

Closer to *our* industries, regulatory standards in Asia are also evolving, with several jurisdictions moving towards a principles-based based rather than rules-based environment. Drivers here are economic development and growth, together with greater communication and knowledge transfer. The former pushes Asian markets into the big-time, with global investors taking a strong interest. The latter both increases the downside if the environment does not keep up, while giving it the means to do so.

2.1 Asia-Pacific Growth – Past and Future

Asia-Pacific is big. Really really big. According to Munich Re Economic Research[ii] (see chart below), in 2011 the economies of the Asia Pacific comprised 30% of global GDP, which is a similar level to Europe. The population of this region is more than 55%

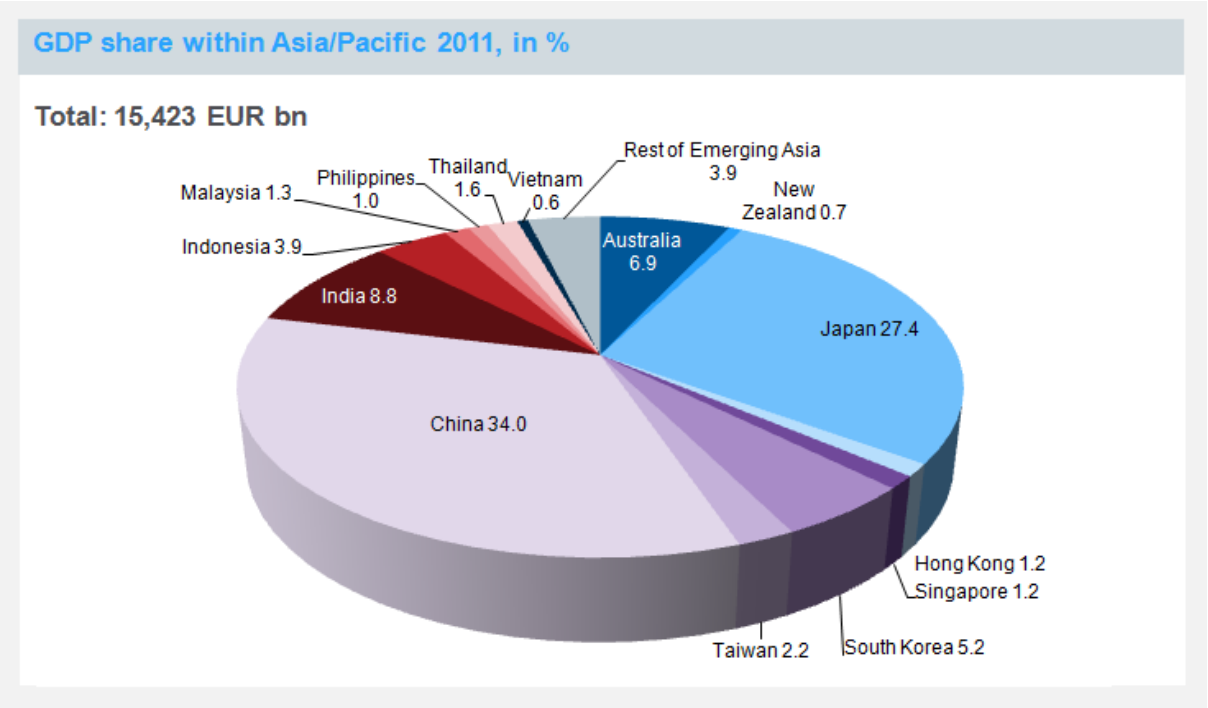
of the world's population, which suggests further growth in the share of global GDP lies ahead.



Source: Munich Re Economic Research

When these figures are broken down further into Mature Asia/Pacific and Emerging Asia[iii], the figures are even more stark. The latter grouping already produces 17% of global GDP yet is home to more than half the world's population. The planet's future is going to be heavily influenced by what happens next in this region!

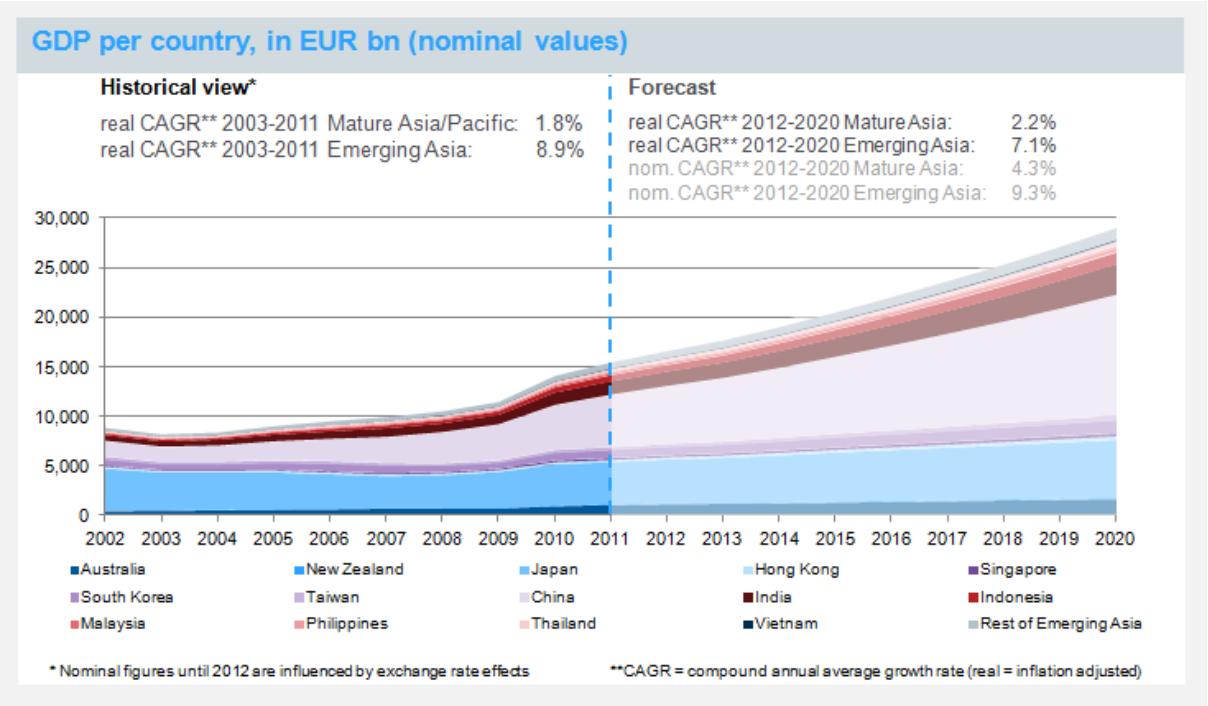
We must, however, be careful not to assume homogeneity among all of Asia's economies, even given the split mentioned above. The following chart from Munich Re Economic Research[iv] highlights the major contributors to GDP in Asia Pacific, namely China, Japan, India, Australia and Korea (together comprising more than 80% of the regional total).



Source: Munich Re Economic Research

While Australia will have some bearing on global growth, clearly the countries to take note of are China (and to a lesser extent India) and Japan. These economies are at very different stages in their economic cycles, yet have some issues in common, for example the rapid ageing of the population (again, to a lesser extent in India).

It's also instructive to consider the trajectory of these economies over past years, and those forecast into the near future. Fortunately Munich Re's Economic Research[v] assists again with the following chart.



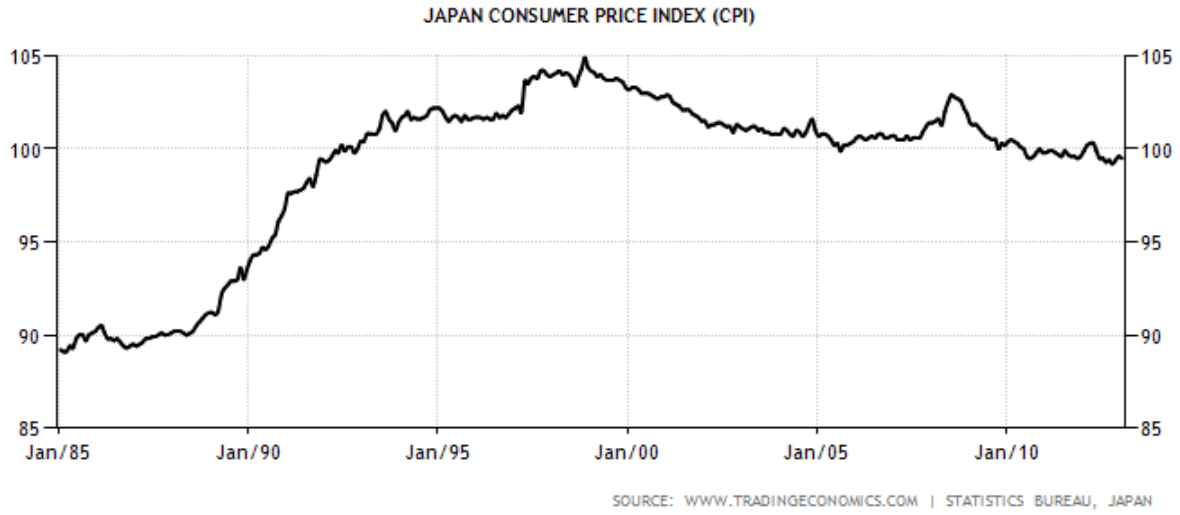
Source: Munich Re Economic Research

The growth in the relative weight of China, and of the Emerging Asia economies as a block is clear. This is highlighted in the historical and forecast real average growth rates over the period.

We shall explore how these economic trends are expected to influence development in the insurance markets, but first we look at several other influences in selected markets.

2.2 Japan's Economic Imbalances

As many readers will already know, Japan is a country that's been fighting deflationary forces for decades now, as the CPI chart below illustrates[vi]. The index peaked in November 1998, after which prices have mainly declined. The present value of the index is even below that of the early 1990s.



The impact of this on the national economy is quite severe – becoming a vicious cycle of delayed consumption, further deflation, job cuts etc. Domestic savings, on the other hand, increase, and this leads to excess capital and low interest rates.

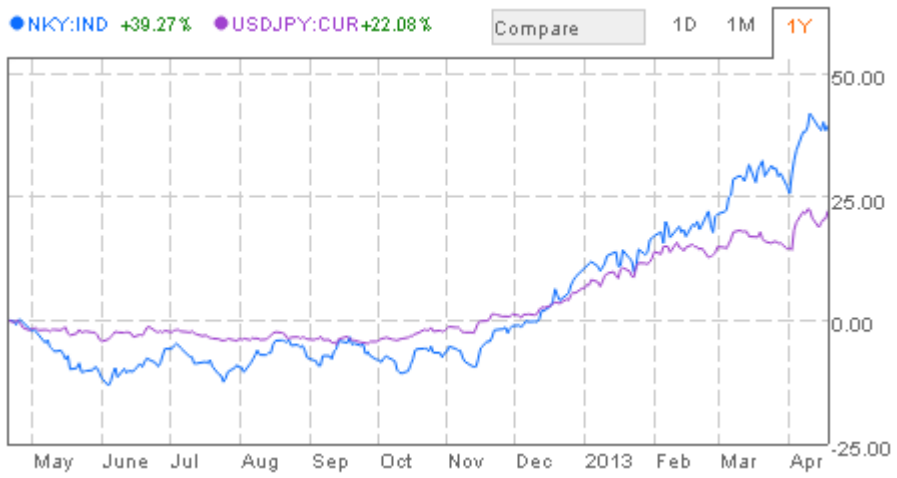
Low interest rates have become a burden in many insurance markets throughout Asia but they are particularly acute in Japan at present. As highlighted in the chart below[vii], the yield on benchmark 10 year Japanese Government Bonds (JGB) has been below 2%pa since the late 1990s, and in on 5 April this year touched 0.315% per annum[viii].

Source: www.tradingeconomics.com

These low interest rates aren't only driven by domestic savings, but central bank (Bank of Japan – BOJ) policy, that has continually tried to kick start the economy

with cheap money. For most of the last decade official interest rates have been at or close to zero.

In December 2012 the voters of Japan returned power to the Liberal Democratic Party (LDP), the party which governed Japan for most of its post war history. Prime Minister Abe had signalled a range of stimulus measures designed to kick start the moribund economy, and his nomination of Haruhiko Kuroda in March 2013 as head of the BOJ further strengthened his commitment to fiscal stimulus. On 4 April, after his first BOJ's policy meeting as Governor, Kuroda announced a doubling of Japan's monetary base through buying government bonds. The effects of these events can be seen in the chart below[ix], which plots the Nikkei 225 stock index against the USD/JPY exchange rate.



Source: Bloomberg

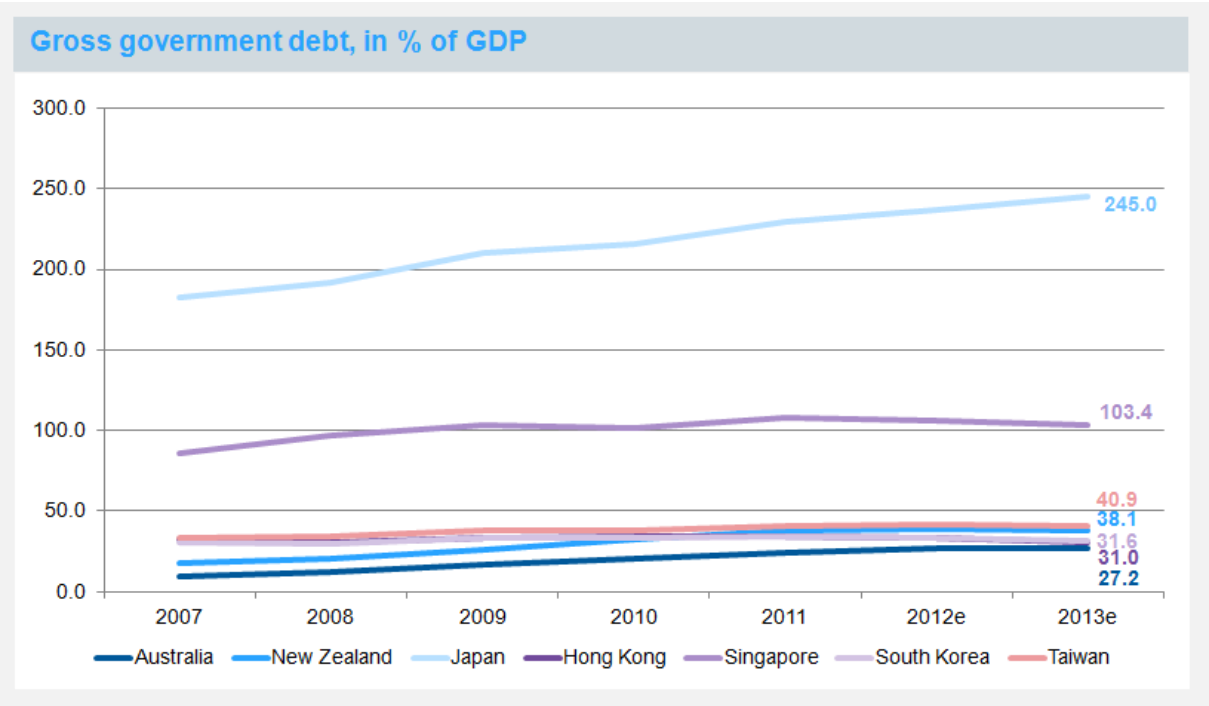
Abe had previously announced an inflation goal of 2%, which this unprecedented fiscal stimulus is designed to achieve. The BOJ continues to flood the market with liquidity, mainly through its asset purchase and debt issuance programmes under which it has committed to supply up to JPY101 trillion by the end of 2013[x]. One must of course ask whether the effects of this stimulus can be maintained.

Put another way, how long can Japan keep buying these bonds? Surely the investment and hedge fund community see an opportunity to short the debt, on the expectation that prices will have to fall at some point (and surely can't go very much higher).

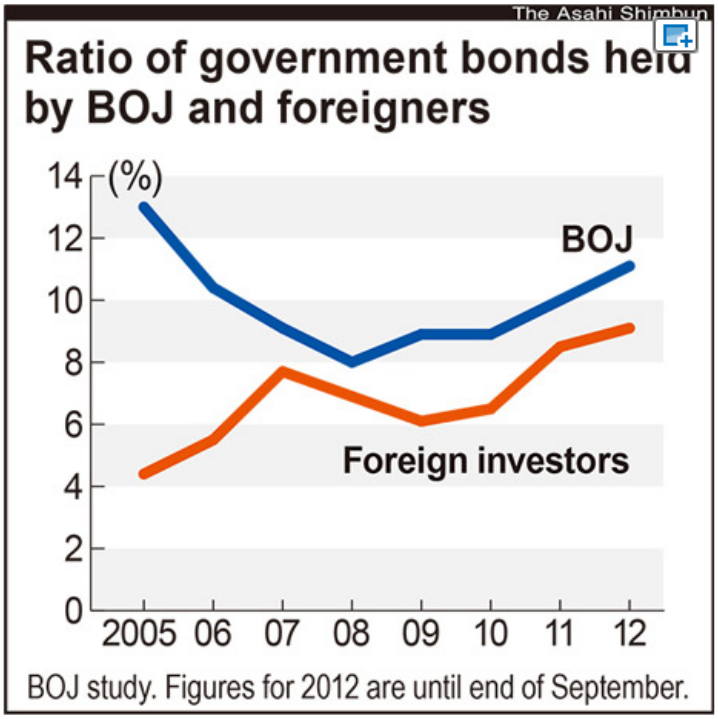
In fact, this strategy, also known as the 'widow maker trade' has been in play for more than 15 years – however there's a reason for its name. As noted by the FT's Peter Tasker, '...3 per cent in 1996, 2 per cent in 2002, 1 per cent in 2011...'[xi] the trade

was spruiked as a sure thing, but yields kept on falling. Have we seen the bottom now at 0.5% ?

One cause for concern must be Japan's gross government debt to GDP ratio. Admittedly a coarse measure, it does paint an alarming picture, as shown in the chart below[xii]. Japan's ratio is higher than all mature Asia Pacific markets, indeed all Asia Pacific markets, and all G20 countries.



Source: Munich Re Economic Research

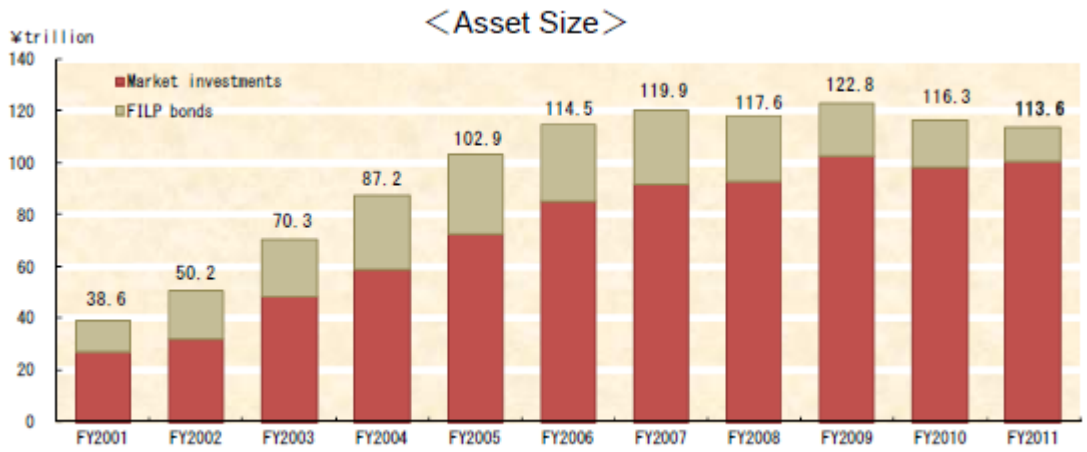


The Asahi Shimbun

So why hasn't the international market simply dumped Japanese debt? The BOJ, for one, will continue to purchase these instruments, and indeed 91% of this debt is currently held by domestic investors, according to recent BOJ statistics. In addition to the BOJ, domestic banks, pension funds, insurers, Japan Post (often described as the largest financial institution in the world) and individuals are all loyal customers, partly due to the absence of any credible

alternative. However, as can be seen in this chart[xiii] above, the ratio has declined in recent years, so maybe a shift is just starting...

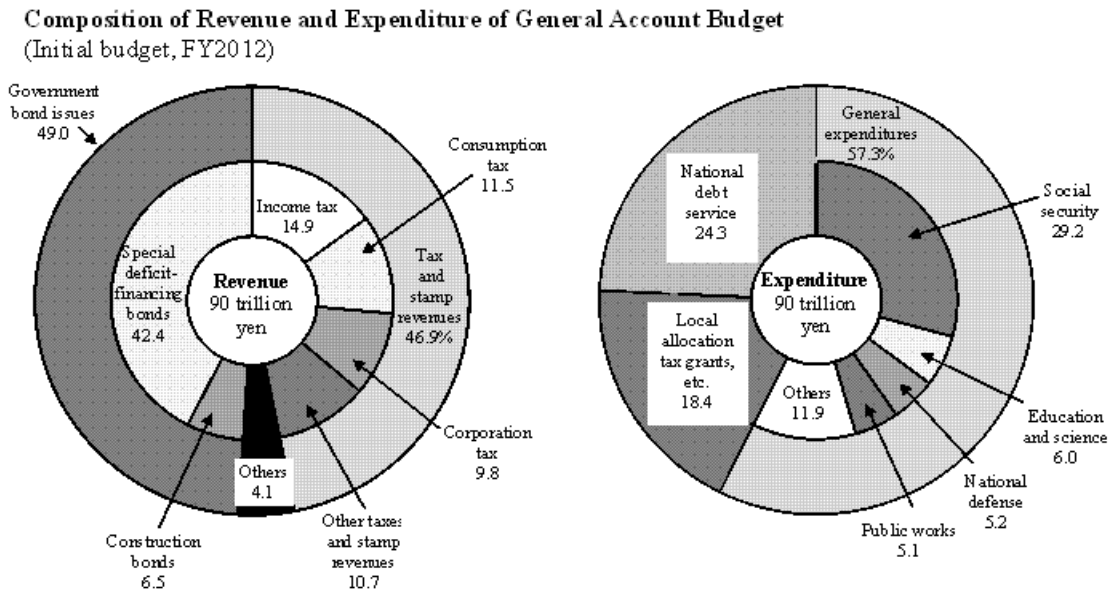
An additional concern might be the declining size of the pension savings pool – the following chart[xiv] shows the decreasing size of the Japan Government Pension Investment Fund – this institution's asset base peaked several years ago, and with approximately 60% of its assets in domestic bonds is a net seller.



Source: Government Pension Investment Fund, Japan

Domestic savers aren't too concerned about the currency impact on their holdings, however, they could be quite concerned about an inflationary environment. The 2% inflation goal must therefore be quite a concern to these individuals, as it will turn their nominal yield of less than 1% into a real negative yield of more than 1%.

A related concern must be the ability of the nation to finance these debt holdings. In the fiscal year 2012, the debt servicing costs were forecast to consume 24% of the national budget[xv].



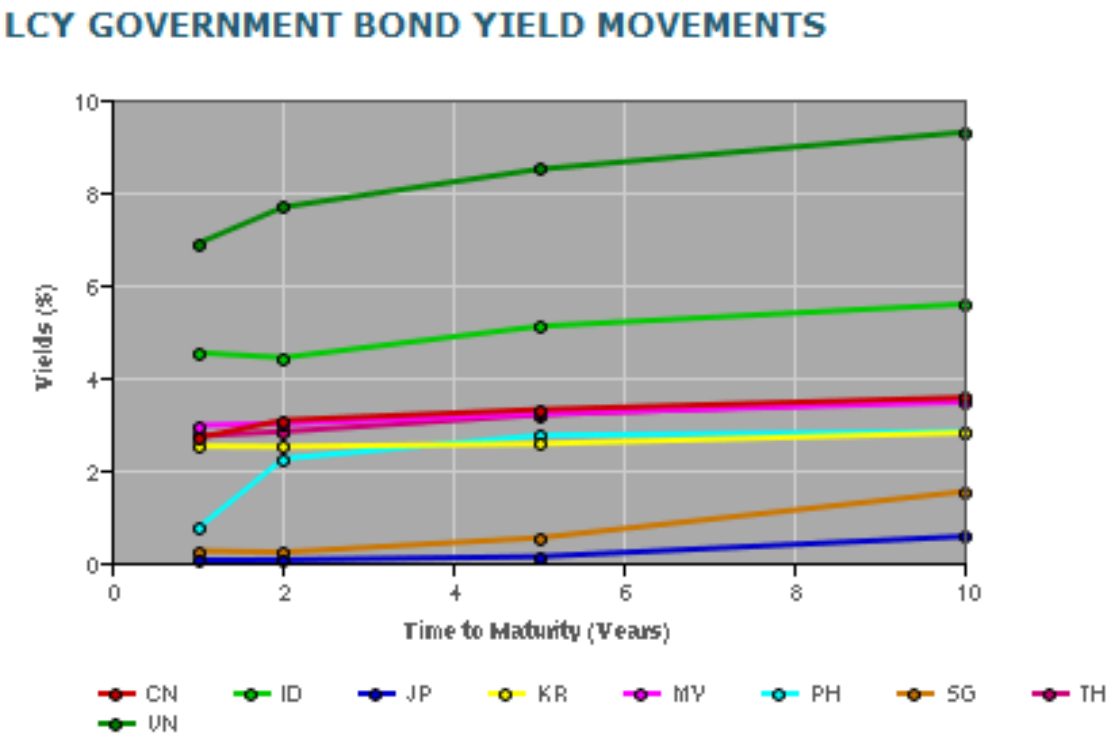
Source: Statistics Bureau, Japan

If interest rates were to increase significantly, this cost would of course increase, and require even more bonds to be issued to finance the cost. As it is, with nearly half of the budget financed by bond issues the picture is not too rosy! Clearly the BOJ has a strong incentive to maintain current bond prices, but one must wonder how long the system can hold together until something 'breaks'.

For the avoidance of any doubt – the above comments do not *in any way* represent advice on a recommended trading strategy!

2.3 Other Low Interest Rate Environments

Japan isn't the only low interest rate environment in Asia, although it is the lowest. The chart below shows yield curves across east Asia as at 2 April 2013, according to AsiaBondsOnline, a website supported by the Asian Development Bank[xvi].



Source: www.asiabondsonline.com

While this chart ignores the detail at the short and very long ends of the yield curve, it's apparent that for most of the economies shown, most yields are well under 4%, and in the case of Japan and Singapore, well below 2%.

Managing in a low interest rate environment has been a challenge for practitioners in several countries for quite some time, although others are only just starting to have to face it. Some of the various responses are outlined below.

Growth in unit linked business: without the cushion of moderate interest rate returns, insurers have been keen to pass investment risk on to consumers via unit-linked products. While customers and distributors have responded positively, insurers have managed to earn very high returns using a range of product charges that are remarkably high compared to the more developed markets.

Growth in protection business: there has been a greater focus on protection sales as well, although this tends to occur more in the non-agency channels. The result is a highly innovative environment, but on the downside, this has led to an explosion in product issues which carries its own difficulties.

Other responses have been to take on more asset market risks. A number of insurers have successfully lobbied their regulators to be allowed to increase the maximum proportion of their investments in equities or in foreign asset classes. Even more questionable have been the valuation practices in some countries which fail to discourage insurers from guaranteeing returns that are above their asset yields.

While some companies have definitely struggled during this period, it's perhaps a time when the healthy and well managed firms survive, and the weak fail. There has certainly been very strong performance from those companies that understand their business well and are able to capitalise on the opportunities that emerge.

2.4 The Infertility Tsunami

The ageing of populations in the mature economies of the Asia Pacific is well documented. The main driver noted in the Actuaries Institute's Longevity Tsunami white paper[xvii] is the relatively recent and quite substantial improvements in mortality. A secondary effect is what might be termed a 'fertility shortfall', ie the amount by which a population fails to replace itself by childbirth. The typically cited ratio of 2.1 is assumed to lead to a stable population, assuming no net migration. Australia does have net migration with mitigates its fertility shortfall.

The table below, extracted from data published by the United Nations Economic and Social Commission for Asia and the Pacific, (UN-ESCAP)[xviii], shows Australia's Total Fertility Ratio (TFR) to be 1.9 during the most recent quinquennium. Other mature economies of Asia Pacific, for example Hong Kong, Japan, Korea and Singapore experienced far lower ratios, from 1.0 to 1.3 for the same period.

Total Fertility Ratio, Selected Asia-Pacific Territories

	90-95	**95-00**	**00-05**	**05-10**
China	2.0	1.8	1.7	1.6
Hong Kong, China	1.2	0.9	0.8	1.0
Japan	1.5	1.4	1.3	1.3
Republic of Korea	1.7	1.5	1.2	1.3
Indonesia	2.9	2.6	2.4	2.2
Malaysia	3.4	3.2	3.0	2.7
Philippines	4.1	3.9	3.7	3.3
Singapore	1.8	1.6	1.3	1.3
Thailand	2.0	1.8	1.7	1.6
India	3.7	3.3	3.0	2.7
Australia	1.9	1.8	1.8	1.9
Asia and the Pacific	**2.8**	**2.5**	**2.3**	**2.2**

Source: United Nations

China's well known one-child policy is often blamed, and is indeed one of the contributing factors for its low fertility rate. However this is not the only driver. The chart above shows a continued decline over the years 1990 to 2010, however the policy was introduced more than 10 years prior to this. China's rapid urbanisation now reinforces the desire for couples to pursue dual incomes, live in smaller apartments, often without extended family, and as a result have fewer children. As reported in the Economist newspaper, Shanghai has one of the world's lowest fertility rates, at just 0.7[xix].

As well as mortality improvements in those counties, two other factors combine to exacerbate the ageing situation. Net migration in the countries mentioned is very low, although Singapore has taken some steps to address this (see section 2.5 below). The chart below shows Net Migration for selected Asia Pacific countries, being the number of migrants per year per 1000 population[xx].

Rank	Country	Net migration rate
6	Singapore	15.62
15	Australia	5.93
23	Hong Kong	3.90
68	Taiwan	0.03
70	Thailand	0.00
95	Japan	0.00
96	Korea, South	0.00
114	India	-0.05
129	China	-0.33
130	Vietnam	-0.34
132	Malaysia	-0.37
150	Indonesia	-1.08
154	Philippines	-1.27

Source: CIA World Factbook

Most disturbingly, however, is the growing gender imbalance in live births in many Asian countries. A typical ratio of 103-105 boys to 100 girls is considered quite natural. However in recent years, the ratio of male births in several countries has increased beyond what could be considered natural. The table below, extracted from UN-ESCAP statistics[xxi] illustrates some of the figures from the Asia Pacific.

Live Male Births per 100 Female Births

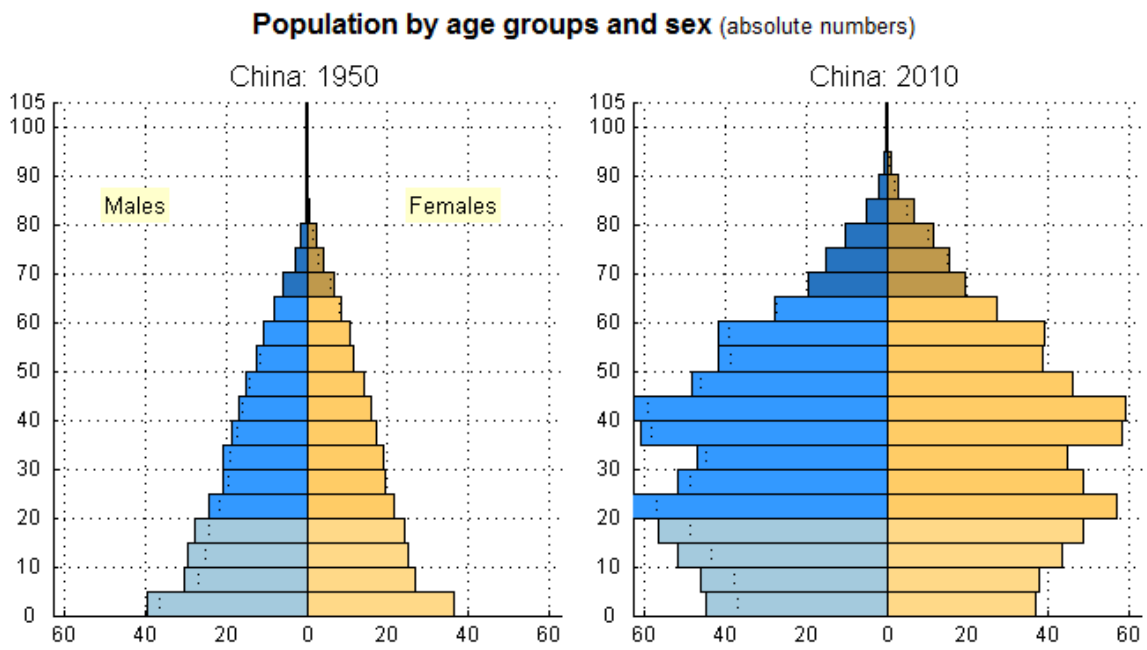
	1990	1995	2000	2005	2010
Australia	105	105	105	105	105
China	108	111	115	119	121
Hong Kong, China	108	106	106	106	111
India	108	108	109	109	109
Japan	105	105	105	105	105
Republic of Korea	109	110	112	110	109
Singapore	108	107	107	107	107
South-East Asia	**103**	**104**	**104**	**104**	**104**

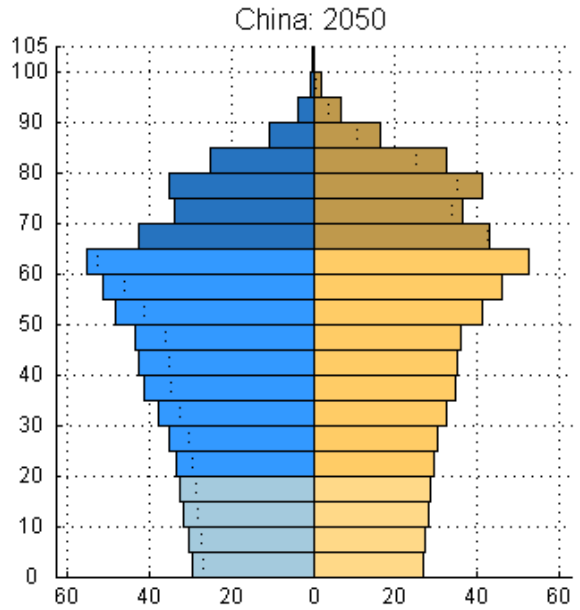
Source: United Nations

Countries such as Australia, Japan and most of South East Asia display results as would be expected. However the other countries listed show evidence of abnormally high male births, with China the highest outlier, at 121 males per 100 females. This is by far the highest across the entire Asia Pacific, and when applied to a population the size of China's, is truly a cause for concern.

When the four factors of improving mortality, low and declining fertility rates, low or negative net migration PLUS an artificially high gender ratio, the population projections and old age dependency ratios are understandably quite dramatic.

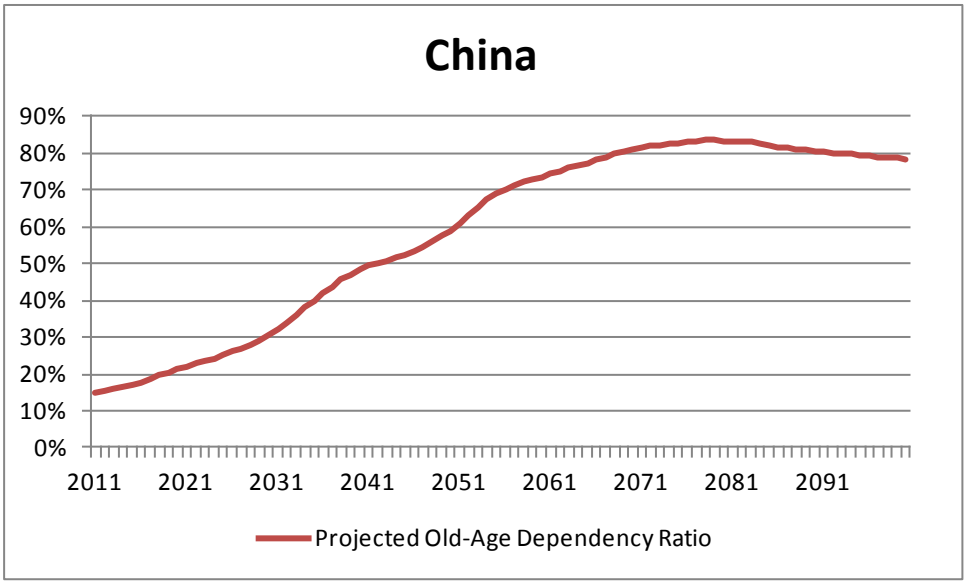
The following population pyramids[xxii] illustrate China's progress from 1950 to now, and then a projection to 2050.





Source: United Nations

If we look a bit deeper, however, we uncover some remarkable features. According to China's National Bureau of Statistics, as reported in the People's Daily Online[xxiii], China has suffered a drop in its labour force aged between 15 and 59, in 2012. The decline was reported as 0.6% from the previous year, and is forecast to continue *until at least 2030*. Furthermore, the old-age dependency ratio[xxiv] is forecast to increase from 15% in 2011 to 73% in 2060 as shown in the chart below.

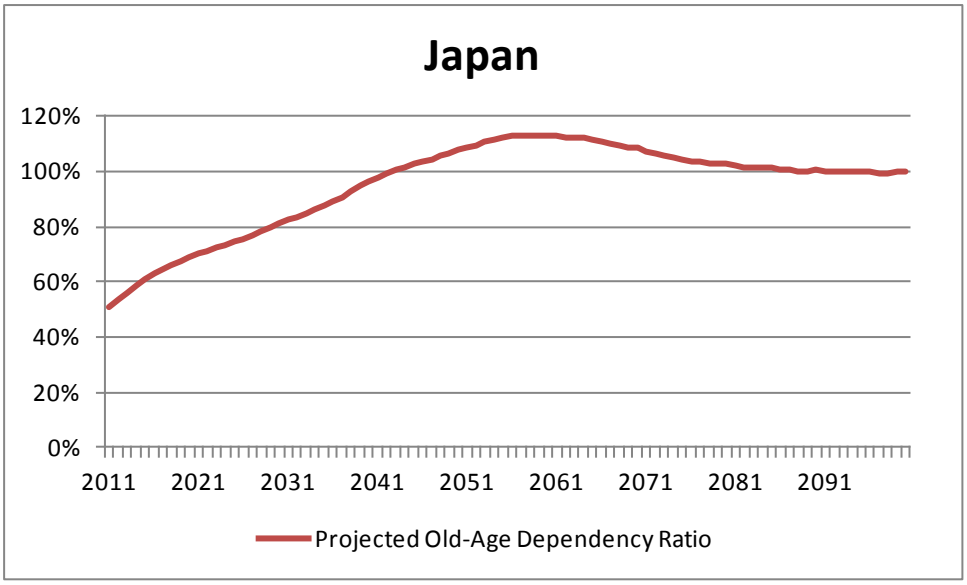


Source: United Nations

Although this percentage demonstrates a large increase, the *inverse* of the old-age dependency ratio looks even more frightening: China currently has 6.6 working aged

adults for each "retiree" at present, but in only 30 years there will only be 2 working adults per retiree!

Inverted commas are used here for good reason – in a society where there is little in the way of social security, no retirement savings scheme and still only modest levels of wealth, it is unlikely that those over 65 will *ever* be able to properly retire. This can be contrasted with the case in Japan, where the old-age dependency ratio[xxv] is even more extreme (see below). Within 30 years Japan is projected to have 1 retiree for *every* working age adult.



Source: United Nations

The main difference though, is that Japan 'became rich before it grew old'. In many Asian countries where social security and retirement savings are in their infancy, the family tended to be the safety net in old age. However in China, the low fertility rate described above has led to the so called 4-2-1 problem – 4 retirees are dependent on 2 children, who in turn will only be supported by 1 grandchild. Whichever way one looks at this, it adds up to a momentous issue for the world's most populous country!

2.5 The Social Democracy

Undoubtedly one of the most significant changes in society occurring within the last 10 or even 5 years is the rise of the social network. This medium has the potential to be transformative to many different businesses in the sense of redefining customer relationships. An early model might be seen in the TripAdvisor site, where purchasers of hotel and other accommodation relate their experiences to prospective

customers. The networking aspect of *customers communicating between each other* as opposed to businesses communicating *with* their customers, is something that most businesses are really just starting to explore.

A similar disruption can be seen in the business of government, although this one has developed far more rapidly than in the commercial world. It has never been easier for an individual or a group of individuals to start a discussion, organise a gathering, debate a point, share materials or research or otherwise critique the organisation whose services none of us are able to avoid buying (or at least consuming) – the government's.

The fact that its customers have many forums in which to express their views is a challenge for the 'less than liberal' democracies in Asia, in particular for those for whom free speech is not an inalienable right.

Chinese authorities continue to attempt to control discussions that take place over computer servers physically located there. One means for achieving this is the practice of identifying key words that refer to 'sensitive' events, and then blocking any discussion that uses that phrase. This leads to an interesting cat and mouse game where an ever more creative phrase must be coined and rapidly disseminated through the blogosphere. One recent example is discussion of former Party Chief in the city of Chongqing, Bo Xilai, which is routinely suppressed. Microbloggers (communicating through services similar to Twitter, which is blocked in China) referred to him as 'Tomato', apparently a pun on one of the characters in his name. Nevertheless, the discussions were eventually suppressed, presumably along with many other more innocent ones!

The situation in Singapore is not dissimilar in some ways. The press is subject to censorship rules, although in practice it is self-censorship that makes its effect more widely felt. However Singapore does has a parliament, for which most of the seats are filled through means of a general election. The current parliament has 99 seats, of which 87 are elected, including 7 held by opposition members. The outcome of the 2011 general election is often described as being the worst ever result for the ruling party[xxvi] (the People's Action Party, or PAP), presumably due to it receiving its lowest ever popular vote of just over 60%.

One reason commonly cited for the decline in the PAP's popularity is the increasing proportion of voters with no personal experience of the foundation of the country. These voters are either new citizens from overseas or younger Singaporeans voting for the first time. In both cases these groups tend to be internet savvy, and are increasingly able to read and share dissenting views online. While there are

restrictions in place to prohibit public gatherings to discuss political views, these are not possible in the online world.

One recent example of public dissent in Singapore was over the government's immigration policy, the implications of which were forecast in a white paper released on 29 January this year. The Economist's writer in Singapore reported[xxvii] that a crowd of 5000 assembled at Speaker's Corner to protest the projected increase in resident and non-resident population to as high as 6.9m in 2030 (from 5.3m in 2012[xxviii]). The rally had been organised using Facebook, and is thought to be the nation's largest protest since independence. The authorities have clearly recognised the challenges of low fertility, an ageing population and a lack of natural resources. However the resulting population growth is expected to dramatically affect the living conditions of what by some measures is already the world's most densely populated country.

Malaysia's general election has been called for 5 May, at the time of writing, and as in Singapore, there is a strong chance for the opposition parties to make ground. The incumbent prime minister, Najib Razak was reported[xxix] as describing this as Malaysia's first 'Social Media Election'. This trend away from the more easily controlled print newspapers is a notable difference from the election campaign 5 years ago, when Twitter was just a startup and Facebook had only a small number of users.

2.6 Regulatory Evolution

Two main themes are apparent in considering the majority of regulatory evolution of the insurance sector in Asia – the development of regulatory principles that are being implemented at a global level, and increased attention to market conduct. While both of these themes have been evident in the region for more than 10 years, an increased level of vigour has been apparent in the Asia Pacific, at least, for the last two.

A key driver for increased vigour is the signing of the Insurance Core Principles (ICPs) by the International Association of Insurance Supervisors (IAIS). Established in 2004, the IAIS has quickly become a highly influential association, which '...represents insurance regulators and supervisors from more than 200 jurisdictions.'[xxx] Its 26 ICPs, most recently revised and published in October 2011, consist of a high level framework of statements, standards and guidance material that represents a globally accepted manual for supervision of an insurance jurisdiction.

Since 2011, the financial sectors in Japan, Australia and Malaysia have undergone detailed assessments under the International Monetary Fund's Financial Sector Assessment Programme (FSAP) , and Singapore's review is underway at present. This assessment includes analysis of the insurance segment and the regulatory environment's compliance with the IAIS ICPs. Feedback on the review is published, and appears to be quite direct about areas which are perceived to be deficient[xxxi]. The desire to demonstrate compliance, or at least the intention to comply in the near future is very strong. The large number of consultation papers on regulatory changes in Singapore over the past 12 months bears strong testament to this!

The most substantial area of regulatory review is probably that surrounding solvency capital and risk management. This comes perhaps as no surprise, and echoes developments in Europe under Solvency 2, although not generally to quite the same extent. Risk based solvency capital regulations are being updated (or in some cases introduced for the first time) but include 'standard formula' models, rather than allowing internal models. There is, nevertheless, a lot of work to be done across the region, and there is a shortage of people with relevant skills and experience.

The second key is enhanced consumer protection, or more generally, market conduct. To date many jurisdictions have adopted a prescriptive approach to regulations, including policyholder protection. However a rules based environment can be unintentionally limiting, or introduce unintended negative consequences for customers, and there seems to be a gradual shift towards a more principles based environment, with more over-arching protection mechanisms being implemented.

Last year the Singapore regulator established a broadly composed panel to conduct a '... fundamental review of practices in the Financial Advisory (FA) industry'.[xxxii] The panel's recommendations include steps to raise the quality of advice, to lower costs and to better align interests of customers and providers.

When considering whether to impose caps on commissions, the panel noted that after the removal of commission caps that had applied prior to 2002, commissions for whole life policies trended lower. It was noted that they are approximately 20% lower today than the level of the previous cap, at which point prices had tended to remain. While a complete ban on commissions was also considered, the panel opted to recommend that market forces be left to decide this item, and to support the lower cost objective by enhancing transparency and comparability of prices and products.

Other steps being taken across the region include the use of Policyholder Protection Funds, greater attention on sales practices, eg regulations on telemarketing of insurance products, and more professional handling of customer complaints.

2.7 Geopolitics

It would seem an incomplete discussion of economic and social trends in Asia to fail to at least mention the geopolitical forces currently on display. This area goes well beyond the author's analytical skills and experience, but a few lay observations are nevertheless included for reference.

The situation in North Korea is the most fluid at present, with the usual description of the North and South being 'technically at war' edging towards becoming more of a reality than a technicality. The rhetoric in recent weeks has escalated to sabre rattling, and perhaps beyond, and the South Korean, Japanese and US militaries all appear to be strengthening their defensive positions. These countries are all taking the talk emanating from the Hermit Kingdom with at least some seriousness, although there seems to be a general opinion that the threats are unlikely to lead to any widespread action. The talk may be the result of a power struggle within the country, between the recently crowned "Great Successor" (the young Kim Jong Eun), and the military establishment who keep everyone in order. Alternatively it could be a ploy to divert the attention of the downtrodden masses from their plight and towards the imagined enemies beyond its borders. Hopefully the driver is one of these rather than a more deadly alternative.

The other major conflict, or group of conflicts in the region is to do with territorial borders, mainly within the South China Sea (in addition to several bilateral disputes in North Asia). Many countries claim ownership of various islands, reefs and shoals, mainly, it would seem, for the purpose of proving ownership to potential oil and gas reserves in the area. China has expressed a large number of claims, including locations far away from its own shores, as shown in the chart below[xxxiii].

The US claims an interest in the reasonable settlement of the competing claims, as it wishes to ensure the continuation of the rights to free passage for commercial shipping in the region. So far there have been a number of *relatively* minor clashes between patrols from the competing countries, but with an increased focus on energy security, this issue won't go away quickly.

The other major historical point of tension in the region is between Taiwan and China. Since the pro-independence Democratic Progressive Party (DPP) was ousted from government in Taiwan in 2008, there have been fewer outbreaks of political rhetoric. The international community appears to accept the status quo – a 'strategically ambiguous' position, where Taiwan exercises domestic self government and is unofficially recognised as a state but that it makes no steps to declare its independence. On the one hand this is pragmatic and permits greater economic growth and trade between the territories. However it also risks entrenching China's view that Taiwan is simply a renegade province that will eventually be under its control, while simultaneously foster the continued growth of a separate Taiwanese identity. A greater conflict may therefore be the result sometime in the future.

3 Insurance Market Development

The preceding section highlights a number of social, political and economic themes that influence the development, both past and future, of insurance and other personal financial markets. This section attempts to distil that overview into key

themes which are then compared with some of the projections available from the industry.

A summary of the trends presented in the above material might look like this:

Economic

- Scale: the region is already substantial, with more than 30% of global GDP
- Growth: the region is growing considerably, particularly emerging Asia (17% of GDP) projected to grow at 7% for 10 years
- Unbalanced: financial opportunities and threats exist to tempt and tantalise the unwary

Demographic

- The region is large, particularly emerging Asia at 53% of global population
- Middle class will grow substantially: *'By 2030, Asia will house 66% of the world's middle class population...compared to 28% in 2008'*[xxxiv]
- Yet the population is also ageing rapidly: within 30 years China will have 2 workers for every retiree and Japan only 1

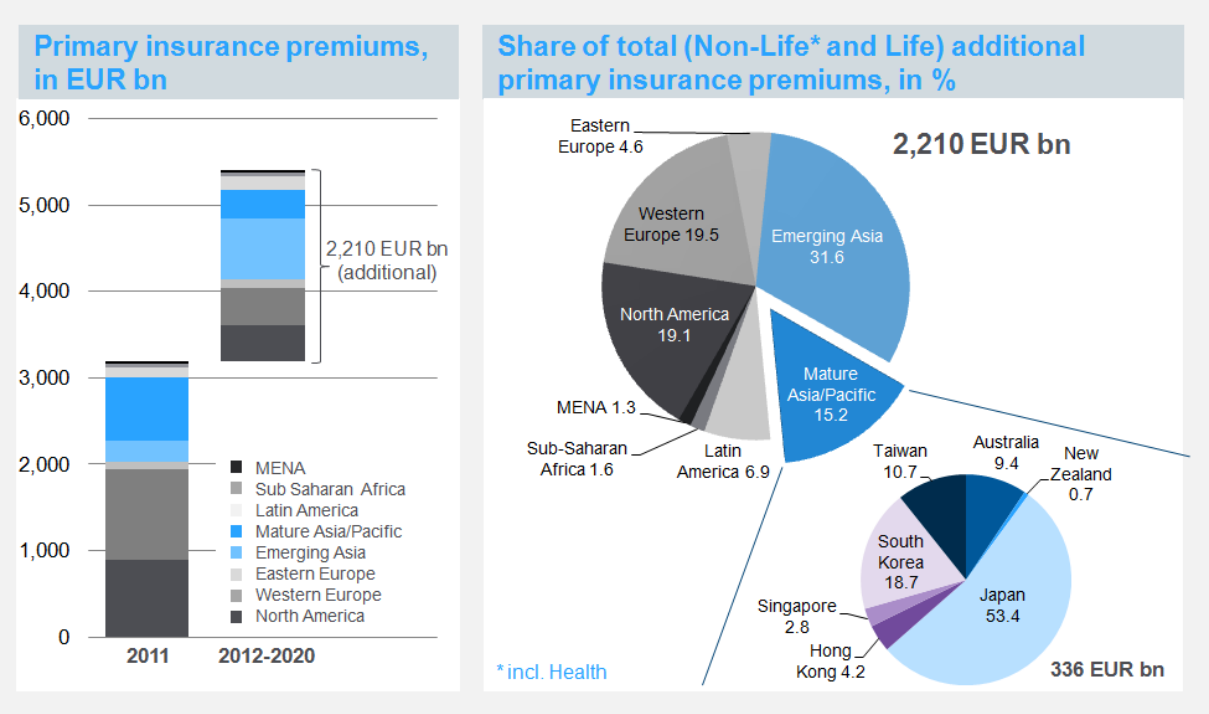
Social evolution

- Customers are becoming more informed and therefore discerning
- Regulators are becoming more vigilant
- Providers are becoming (or need to become) more professional

The inescapable conclusion: in Asia the demand currently exists and will show substantial growth, for a wide range of well designed and professionally delivered financial services for at least the next 50 years. Let's now consider some of the available evidence (and conjecture) that might support this conclusion.

Using projected growth rates from Munich Re Economic Research, the following chart[xxxv] illustrates both the current (2011) and the additional primary insurance premiums projected to be written in 2012-20, broken down by region. The high level result is that 47% of these additional premiums are expected from the Asia-Pacific Region, roughly 2/3 of that from Emerging markets and 1/3 from mature.

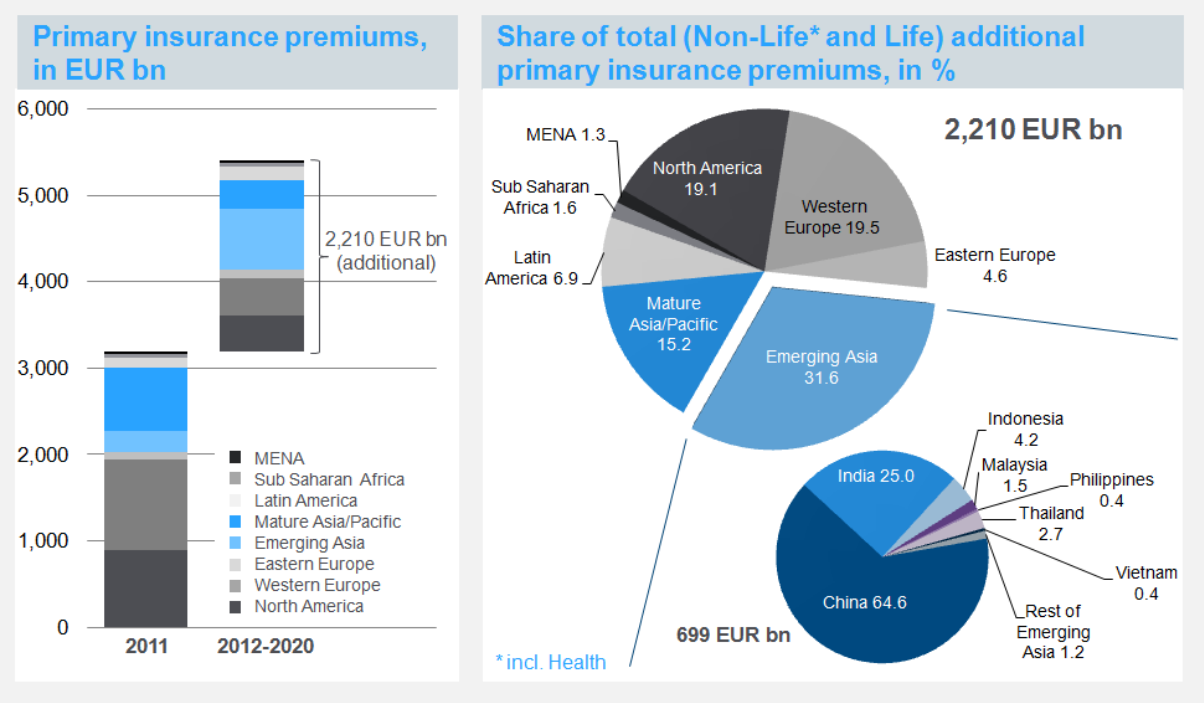
Insurance Market Size – Mature Asia/Pacific Detail



Source: Munich Re Economic Research

The chart above shows that Japan remains the primary contributor for the mature markets, followed by South Korea, Taiwan and Australia. The chart[xxxvi] below breaks out the Emerging Asia markets, which reveals China and India to be the two key territories. No surprises there, although the size of the contribution from those two is by any measure, enormous.

Insurance Market Size – Emerging Asia Detail



Source: Munich Re Economic Research

If the top 20 territories in the world by insurance premium volume were listed (again, projected to 2020), we would see 5 Asia Pacific locations for general insurance, and 8 for life, including 3 of the top 5, as shown in the chart below[xxxvii].

Top 20 countries* according to expected PI premium volume 2020, in EUR mn

P&C

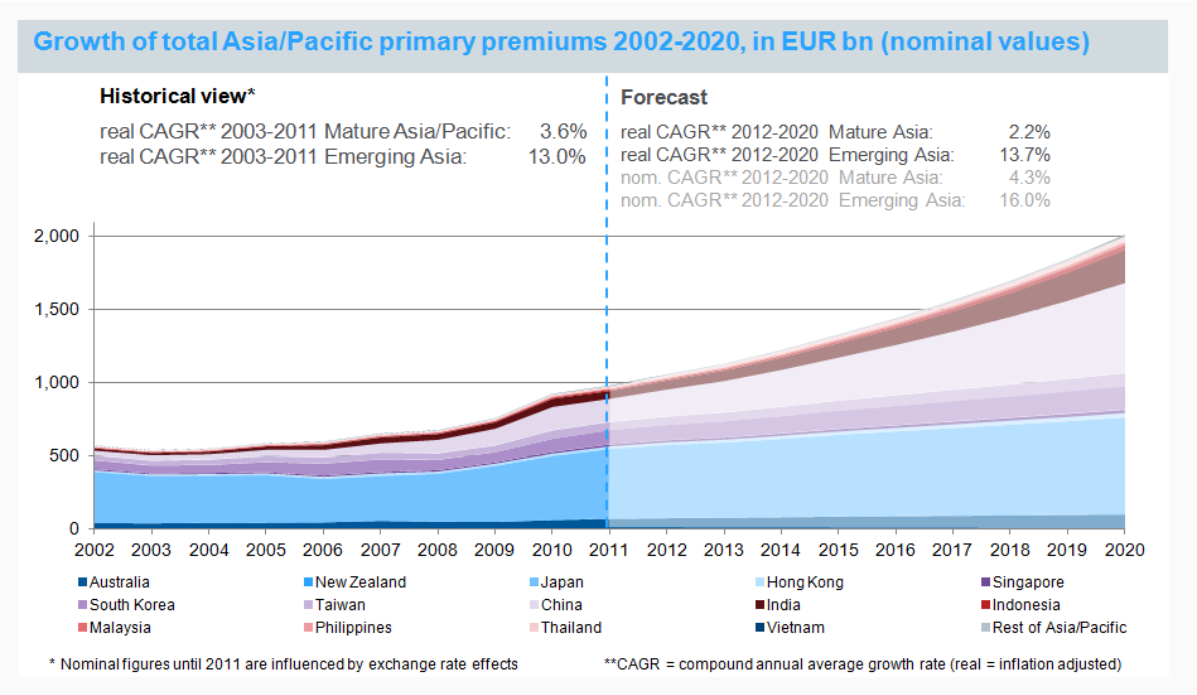
1	United States	531,781
2	China	183,577
3	Japan	131,459
4	United Kingdom	99,954
5	France	77,597
6	South Korea	75,364
7	Germany	72,988
8	Canada	61,633
9	Italy	42,304
10	Australia	33,512
11	Brazil	33,420
12	Russia	32,924
13	Spain	29,258
14	India	24,121
15	Switzerland	17,700
16	Netherlands	17,034
17	Mexico	15,310
18	South Africa	14,462
19	Poland	14,183
20	Belgium	12,794

Life

1	Japan	520,045
2	United States	478,700
3	China	401,956
4	United Kingdom	207,400
5	India	197,061
6	France	182,972
7	Italy	120,971
8	Germany	116,074
9	Brazil	95,060
10	South Korea	84,096
11	Taiwan	76,696
12	Canada	56,739
13	South Africa	48,785
14	Australia	48,617
15	Spain	38,321
16	Sweden	37,673
17	Switzerland	33,227
18	Hong Kong	30,949
19	Indonesia	30,587
20	Belgium	28,671

Source: Munich Re Economic Research

The situation in these projections is not one that will come as a surprise to keen Asia watchers – the trajectory has been evident for some time. This is quite evident in the chart[xxxviii] below, which tracks the historical development of the key territories within the Asia-Pacific. The relatively anaemic growth of the mature territories contrasts with the substantial growth of the emerging ones.

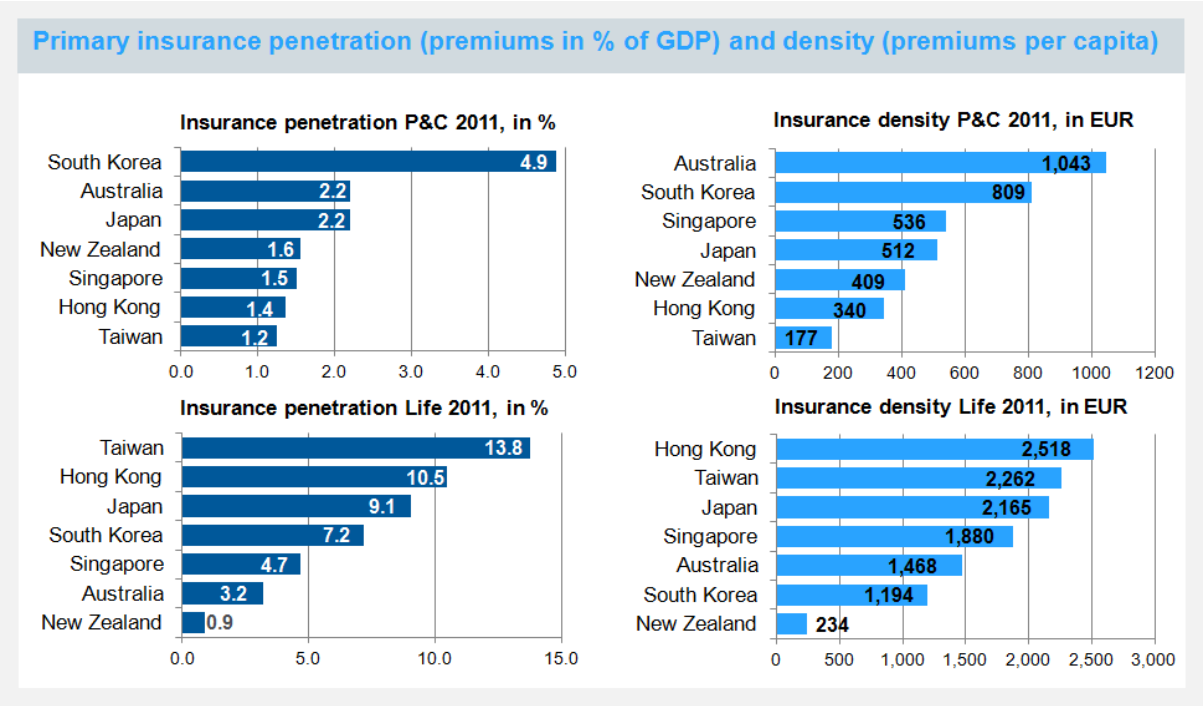


Source: Munich Re Economic Research

These are but projections, and will, no doubt, be proved wrong. However the recent trajectories, combined with the modernisation of the economies and their regulatory frameworks suggests that the general conclusion is well founded.

The assertion at the start of this section claims a much longer timeframe than these projections contain, and it is therefore appropriate to provide reasoning for that view. One feature of the insurance landscape in Asia is the relatively high proportion of savings products that are sold by life insurers (and in the case of South Korea, general insurers).

This is evident in the chart[xxxix] below, by considering insurance penetration rates in the mature territories. Whereas most of the mature markets have relatively similar penetration for general insurance business (the exception being South Korea), and the most developed of those have the highest, the same cannot be said for life insurance business. Australia appears to have one of the lowest penetration levels, at less than a quarter of Taiwan's. The difference here (and for South Korean general insurers) can largely be attributed to savings products (whole of life, endowment, variable annuities, universal life and unit linked), most of which are sold by insurers in most of the Asian mature markets.



Source: Munich Re Economic Research

As a result of the high involvement in the investment and savings sector, and with ageing populations across the region, it's hard to see growth in this sector not continuing for a couple of generations, albeit perhaps at a decreasing rate. This topic will be considered further in the next section of the paper.

The conclusion above also contends that the financial services will need to be well designed and professionally delivered. There are several drivers for this expectation, none which are likely to be too controversial.

1. As outlined in section 2.6 above, regulatory trends in Asia are heavily influenced by international developments, notably the principles being promoted by the IAIS. These are geared towards increasing the quality of enterprise risk management of insurance enterprises, which will increase the cost of underwriting poorly designed insurance products (eg through high capital charges, and recognition of the costs of options).
2. The convergence of national accounting standards to a more transparent, globally accepted standard (eg IFRS) will prevent or at least severely impede the ability of insurers to delay the capitalisation of likely future losses. This situation has plagued several 'mature' insurance markets where 'negative spreads'[xl] of billions of dollars have not been recognised on balance sheets. There is perhaps some justification in this approach, eg where future mortality profits are also not recognised on company balance sheets. In principle, this move towards more realistic accounting standards is

expected to encourage more robust business processes and increase the quality of products overall.

3. Improving standards of distribution are already being seen – these are often driven by increasingly vocal consumers and consumer groups, and also by regulators developing a greater awareness of public needs. A shift towards principle based regulation supports this, as regulators spend less time on reviewing specific details and more time on systematic improvements. The FOFA review in Australia has been taken note of, and while the FAIR review in Singapore didn't adopt quite as extreme a position, there is a clear desire to raise sales standards.
4. An interesting difference between the Australian life insurance industry and that of Asia (and this may be true for general as well), is the relatively low penetration of international or at least regional players in Australia. Conversely, there is a marked absence of Australian based businesses operating in the rest of Asia (with some exceptions in general insurance). However the large number of international players in Asia is a further argument that international standards and consistent processes are increasingly being adopted across the region. While this doesn't automatically change the practices in the market, the influence on local practices and practitioners is substantial.

4 Implications for Product and Channel

Product

Products will increasingly need to represent good value as the buying public becomes more aware of alternatives via consumer group and comparison services, new niche competitors and publicity given to profit margins being earned by insurers. This will mean lower prices on some products, such as unit linked insurance products, and more appropriate terms and conditions on others, for example income protection.

Regulatory and consumer group influences are already encouraging more understandable product definitions, and this is likely to continue. The 'fair treatment of customers' will come to be seen as a minimum standard rather than a nice to have. Japan's insurance regulator, the Financial Services Agency (FSA) in 2008 ruled that insurers had an obligation to pay all benefits payable under policies for which claims had been made, *even though the claimant had neglected to claim for the particular benefit in question.* According to the FSA[xli], in 2005 alone there were 178,000 such claims totalling nearly JPY20b. More than 20 firms were given

improvement orders and one was ordered to suspend all new business operations for a period.

Governments may also take an increasing role in encouraging insurers to offer coverage they might otherwise be reluctant to take on, sometimes in the form of a public-private partnership. Singapore has a successful Long Term Care scheme that was developed in this fashion more than 10 years ago, and more recently launched deferred annuities that are automatically purchased unless actively opted out(although not using the private sector insurers). While many Asian countries have abandoned tariff pricing on motor insurance that used to commonplace, this involvement of governments to help the private sector fill a social policy gap can be expected to continue.

With the increasing focus being placed on risk based capital, the cost of guarantees has increased. This does create an opportunity for reinsurers who can employ more capital efficient structures because of greater diversification both geographically and across business lines, but inevitably means that insurers are looking to alternatives. While it's clear that customers want guaranteed products, when the cost of that becomes transparent, the non-guaranteed option is often taken. This is also resulting in a move away from participating, or 'with-profits' business, where the perceived cost of the guarantees to the insurer are much higher than the expectations of the guarantees from the customer.

As a result of all this, a lot more time is needed to develop and operate pricing, valuation and economic capital models, although presumably if these are done well, a more robust business is the result.

Asia's ageing populations have already prompted insurers to start designing insurance products for the 'silver segment'. One must assume that as the ageing effect accelerates over the next few decades this market will experience an explosion in growth and diversity of product. While price will be an important factor in the purchase decision, insurers will have more ability to differentiate themselves in terms of product design innovation.

Channel

Agency has been the dominant distribution channel for Asian insurers since the industry began. While all markets have adopted other channels, including bancassurance, independent financial advisers and direct marketing, most insurers still maintain an agency force. For many it remains its most important channel. This is

even despite a high degree of awareness of the market development in both Australia and the UK where tied agency distribution has declined substantially. See for example the approximate proportions for several territories table in the below[xlii]:

Estimated life insurance premium sales by major channel (%)

	Bank /Post	Agents	Direct	Agency /Brokers
China	48	45	6	1
India - LIC	1.5	98		0.5
India - Private	25	51	19	14
Indonesia	30	47	23	
Korea	45	33	21	
Singapore	34	49	3	14
Thailand	31	63	6	

Source: Axco Insurance Information Services

One of the challenges of maintaining an agency sales force is ensuring that the company's products are being represented correctly. In 2003, a large number of complaints were made against AIA Singapore about their failure to meet one of the anticipated product features on a series of participating whole life products, known as the 'Critical Year'. At the critical year, the policyholder had been projected to be able to meet future premium payments through cash dividends being produced by the inforce policy. However the decline in bonus rates in the early 2000s meant that this date was pushed back for many policyholders. As a result of the poorly communicated benefit features, and after the involvement of the regulator and a consumer affairs organisation, a support package for affected policyholders was agreed. Clearly this type of mis-selling is not to be accepted.

This conclusion was reinforced in 2009, when another large Singaporean life insurer, Great Eastern, surprised the market and voluntarily offered to redeem a series of single premium investment linked products. These products were linked to a complex mix of financial instruments, which had declined between 40 and 80% during the financial crisis. The move was said to cost Great Eastern SGD250m although it acquired a great deal of goodwill with that move. Management (led by several prominent actuaries) clearly felt that this move would be beneficial in the long run.

As noted earlier, Asian life insurers sell a lot of investment products through their agency channel. In the mass market this has perhaps impeded the operation of retail fund managers, although the result is that customers pay a lot more for access to investment vehicles than is probably necessary. Whether the cut price model will one day succeed and disaggregate the savings and investment providers, or the insurance industry will maintain its premier position remains to be seen. I suspect over time the downward cost pressures of new entrants will force insurers to adapt to a

new model, but whether they remain integrated or spin off new businesses is unclear. The recent FAIR review in Singapore had the opportunity to change the status quo, but appears to have backed away from that, in favour of strengthening training and qualification requirements for agents and brokers.

The challenger to the agency channel is clearly bancassurance. While few people would voluntarily visit their insurer's branch office, many do still regularly visit bank branches. In addition, customer contact databases of banks seem to be superior to most other large retail organisations. The immense power of this financial service provider can be seen in many markets, see for example the change in the Thai market discussed in Linfoot (2009)[xliii]. Managing product flow for a bank channel has a different set of challenges than that for a tied agency force, and many insurers complain that they have very poor margins and are run ragged in their efforts to retain their place in that channel.

Other products that are sold in channels such as Direct Marketing (inbound or outbound telemarketing, typically) are often criticised as offering poor value for money for customers and rely on impulse purchases as well as lack of awareness of the benefits or even existence of a policy once sold. Together with an increase in the amount of regulation around do not call lists and licensing requirements for call centre staff mean that the channel is likely to remain a minor one.

5 What does this mean for Actuaries?

Let's first look backwards, at what this *has* meant for actuaries. Growth in the locally based profession is clearly illustrated in membership numbers of the Singapore Actuarial Society (SAS). Correspondence with the SAS[xliv] reveals a 400% increase in total membership and a 500% increase in its members who are qualified actuaries from 2000 to 2012. At a CAGR of 14% and 16% respectively, this far exceeds the economic or insurance industry growth of that country or region over that period.

There are a number of reasons for this high growth:

- Statutory recognition of the SAS was achieved in 2004, after which Appointed Actuaries of Singapore insurers must be Fellows of the SAS, rather than one of the overseas bodies that had previously been named in the relevant legislation.
- Increased workload requiring actuarial skill sets as a result of domestic and international regulatory developments (as discussed in more detail in the previous section).
- Expanding career opportunities within the life insurance industry. Many actuaries are engaged outside a traditional technical actuarial role in

Singapore – eg Head of Marketing/Business Development, CFO, CRO, General Manager, CEO. In fact 7 of the top 10 life insurers (including composite insurers) in Singapore have actuaries in the CEO role at present[xlv].

- Expanding career opportunities in general insurance and the broader financial services industry. Actuaries have an increasing number of roles in general insurance, as well as consulting, broking, investment management, government, education. While the majority are still engaged by the traditional employers, there is growth in the new spaces.
- Growth of the regional hub may be a factor in the Singapore profession's growth, so this may not be reflected across the region. However the relatively large size of the Society (over 700 members now) makes this growth still relatively significant.
- Expansion in supply of students – with 3 universities in Singapore offering actuarial programmes, as well as a large number of Australian universities, the number of entrants into the profession remains strong.

Actuaries in Asia have a high profile within the insurance industry and are recognised as a leading profession in the technical and business management aspects of enterprises within that industry. This position is likely to grow or at least remain stable for some time, but could come under threat as other professionals develop a strong experience base in the industry.

Due to the large growth of the sector in the region, there is still an excess of demand over supply for actuaries with experience. This last condition must be included, as reports from graduates and other student actuaries suggest that entry level positions are still be hard to come by.

The position outside the insurance sector, while encouraging, will still probably take some time to become substantial. To some extent a victim of its own success, the demand from *within* the insurance sector has reduced the motivation for actuaries to expand further, and as a result, our profession tends to be not well known further afield. This perhaps reflects the situation in Australia in the later part of the 20th century. The same issues may face practitioners in Asia, but I'll leave this topic for someone else to explore.

The broad range of positions within the insurance sector offer opportunities for actuaries with many different proclivities. Whether in financial reporting, systems development, product or pricing work, sales and marketing, management, leadership, recruiting, advising, risk, regulation etc etc, the possibilities are manifold. In whichever particular discipline, actuaries can be expected to be accorded a high degree of respect, trust and responsibility, and consequently high expectations.

Living, working and raising a family in a foreign country has its share of challenges of course. Essential attributes of individuals wishing to chart this course would include strong communication skills (in particular listening!), a high degree of patience, a thirst for new experiences, a flexible and adaptable approach, and an open minded world view. While these may all be positive traits anyway, they become even more critical in someone trying to come to grips with an unfamiliar environment.

Looking back on my own actuarial education path, I can identify a number of lessons or attributes I've had to 'unlearn' in order to become a better actuary. Perhaps the most important conclusion that can be drawn from this ramble through the Asian countryside is just that: we should be ever vigilant of our environment and its needs, and continually challenge ourselves to deliver a better service, while always maintaining our professional standards.

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