The International Actuarial market and the changing role of the Actuary

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<u>Synopsis</u>

Over the past few years with the growth in insurance and risk markets around the globe, new opportunities have opened up for Actuaries. The emerging markets have been both a cause and effect for the development of the role of "Actuary" both in existing and nascent markets.

This paper looks at the changing role of the Actuary itself, the influences on the type of work carried out in a sample of countries that are described as "developing" as far as actuarial work is concerned and some considerations as to where future opportunities may lie for actuaries interested in pursuing an International career.

The first part will cover a brief examination of the role of the Actuary and the changing nature of the profession; the second will look at some sample markets around the world and discusses the role of the Actuary in some lesser known locations.

Presented at the New Zealand Society of Actuaries Conference November 2008

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Contents

Part One - The role of the Actuary and the changing nature of the profession

The role of the Actuary and that of the profession as a collective group is continually evolving. Not only within the confines of a specific national border, but increasingly as the need for actuarial techniques has become more relevant in the newly developing markets of the world, so the work itself has had to adapt to fit a wide variety of cultures and nation states to reflect the diversity of economic, political and societal structures that exist.

A "profession" can be defined as:

"….a disciplined group of individuals who adhere to high ethical standards and uphold themselves to, and are accepted by, the public as possessing special knowledge and skills in a widely recognised, organised body of learning derived from education and training at a high level, and who are prepared to exercise this knowledge and these skills in the interests of others."[1]

However, the differences in context of what it means to be a professional actuary in different cultures particularly when considering features such as amount of autonomy and regulatory environment are important to recognise. The track of development of an actuarial profession in any country will be influenced by the perspective of its legislators and key actors overlaid with local norms, cultures and market demands.

There are three distinct patterns of actuarial professional development as described by Burrage[2], briefly reproduced here *(from Clare Bellis' paper referenced below)*:

- In Britain, and in countries such as Australia which derive their institutions from Britain, the actuarial occupation is well organised, with a large extent of self-regulation, and with the education and examination of students firmly under the control of the profession itself. In these countries, the governments have historically delegated considerable authority to the actuarial organisations and to individual actuaries.
- In Continental Europe, Actuaries are regulated more by the state than by their own organisations, and education and examination are also under the control of the state-run universities.
- The United States represents somewhat of an intermediate position. The state governments have historically retained more control and [previously[3]] the actuarial bodies

1 Bellis, C *The origins and meaning of "professionalism" for Actuaries* Actuarial Studies and Demography research paper series, No. 011/97 Macquarie University November 1997

2 Burrage, M, Jarauch, K and Siegrist, H (1990) "An actor-based framework for the study of the professions", in Burrage, M and Torhstendahl, R (eds), *Professions in theory and history,* London and Newbury Park, California: Sage Publications

3 Authors insertion to reflect that the referred paper was written in 1997

have not been strongly organised nationally. However, the model has grown closer to the British model in recent years.

It can be seen therefore that a potential key influencing factor on the development of the Actuarial profession in any "new" market is likely to be the country of origin of the individuals who participate in the development of the regulatory and professional structure of that country as well as the Actuaries working for the consulting practices who advise early market entrants and the local regulators. The supply of Actuaries that meet the demand in new markets is sourced almost entirely from the established English speaking markets of US, UK, Canada and Australia. This is primarily due to global influences on the transportability of the traditional "Fellowship" route rather than the European "University" route.

This discussion of the role of and definition of a "Profession" in the context of Actuarial work is important particularly when considering the applicability of an Actuaries skill set in the developing market. Outside of any regulatory function for which Actuarial sign off is a legal requirement, other financial professionals could possibly carry out some aspects of Actuarial work, and it is in developing markets where fully credentialed Actuaries are hard to find that organisations could find themselves tempted to recruit someone who is "good at maths" instead.

However, the differentiating factor that the Actuarial profession possesses in addition to the extensive and well respected examination process, is its effective code of conduct and standards of practice that are backed up with an effective disciplinary process[4]. It is this implicit "guarantee" that ensures users of information that applicable standards and best practice are followed. The self-regulatory system is open to interpretation of failure however if a 'scandal' erupts, and some fault is found by Government or investigative body.[5] There are some inherent problems however - the small numbers, perceived narrow scope of work, lack of contact with the public and tenuous relationships with Universities are restricting growth of the profession. The creation of whole new jobs around risk pricing and risk management are opening up traditional sections to "non-Actuaries" and the question remains of how to maintain the brand "actuary" but at the same time expand the profession.[6]

These two key different approaches to professional development mentioned before (if we view the US version as an amalgamation), has also influenced the development of the two primary approaches to actuarial education and accreditation, i.e. the *"specialised education plus*

[4] Gutterman, S 2002 *The evolving role of the Actuary in the Financial reporting of Insurance*
[5] Simson, D R F 2006 *The Economy, Society and the Actuarial Profession 1856-2006*
[6] Bolnick, H J 2000 *To sustain a vital and vibrant actuarial Profession*

professional accreditation and reinforcement route followed largely by the English speaking world, and the academic plus regulatory oversight route followed by most Continental countries".[7]

However, one of the challenges that face many Actuaries in the newer developing markets is that there is a lack of a critical mass of peers to form the "collective" that is necessary for a "profession" to exist. Actuaries have a strong sense of identity as members of the actuarial community, and this starts right from student times, with the sharing of the "initiation ceremony" of exam taking. Many Actuaries in nascent markets find themselves somewhat isolated, with only a small handful of other Actuaries to share ideas with, who may be competitors or working in a very different environment. This lack of numbers is likely to influence not only individual Actuaries working in those environments but the development track of the profession itself.

So, the profession as an entity needs more Actuaries to develop itself, and the market needs more to meet the growing demands of developing countries[8].

As per Rod Lester's acceptance speech for the Institute of Actuaries of Australia's 'Actuary of the Year' award in December 2005[9],

> "*My team's work covers a huge range of issues but in a nutshell we have three practices –*
>
> *…*
>
> *And the third is market efficiency; including regulatory and supervisory issues, market liberalization and insurer resolution. This last practice consistently throws up the need to develop the actuarial profession as a core need in most of the [World] Bank's client countries.*
>
> *The reasons for this are almost always two fold – the development of motor third party liability insurance and the emergence of nascent life insurance sectors. Pensions systems can also require actuarial intervention – the number of DB social insurance systems that are either completely broken or creating major fiscal headaches around the world is incredible – and there are a number of actuaries making a nice living out of calculating implicit national debts and helping to design transition paths to more sustainable structures.*
>
> *Most of our client countries have few or no actuaries qualified to IAA standards."*

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[7] Lester R, 2004 as quoted in Gribble, J D, 2006, *Actuarial Supply and Demand,* Presentation for IAA International Congress Paris 2006

[8] For more investigation into predicting Actuarial demand see Gribble, J D, 2006 *Actuarial Supply and Demand,* Traverso, L, 2006 *So, how many Actuaries does India need?* and Traverso, L 2007 *Creating an Actuarial profession in the Middle East Region.*

[9] Lester R, 2005, *'Actuary of the Year Speech to the IAA',* December 2005, see www.siteresources.worldbank.org/FINANCIALSECTOR

When an insurance market is establishing its regulatory structure it inevitably looks towards developed markets to borrow from. As the established markets themselves move towards a more "collectivism" era of greater regulation so these approaches are adopted globally either by competitive pressure, head office insistence or governmental enforcement, particularly after some issue is given air in the media. Whilst these events can bring about 'criticism' of the actuarial profession (Morris etc), more often than not, it increases public awareness of the value of risk management, and thereby the Actuarial profession should be able to take advantage and market its services more completely.

So, is the new domain of an Actuary clear? Milliman[10] carried out a global survey of Actuaries working in Healthcare, which produced some interesting comments (some of which are reproduced below) which reflect the observations above. Equally as interesting are comments on the different approaches taken to solve the issue of the lack of understanding of the Actuaries position by those outside of the profession.

"In some markets Actuaries have been leading professionals for decades. In others, the actuary is a relatively new professional. In these emerging markets, actuaries face a particularly large struggle to define their roles, communicate their value and be full appreciated."

"European Actuaries tend to have more narrowly defined responsibilities, whereas Australians have a wider scope, although in Europe over the past five years there has been a significant increase in the range and understanding of what actuaries do"

"In Singapore, the scope of the actuary is specifically dictated by law. A respondent in Singapore said the work is very difficult because of all the other things put on his plate"

"In Brazil, where lack of clarity may be the greatest, actuaries can have diminished roles; responsibilities normally associated with actuaries are handed off to accountants, economists or statisticians."

"In Mexico, actuaries are well respected professionals and have a wide range of responsibilities including some that are stated by the regulatory framework, such as development of premium rates, reserve methodologies, and solvency or dynamic capital adequacy tests. Because of their background, actuaries are found in most areas within an insurance company, from underwriters to general directors and including IT and sales mangers"

A discussion on how others attempt to take on actuarial roles:

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[10] Shreve, J.L. van der Hejde, M 2008 *International survey of actuarial issues and practices* Milliman May 2008

"North America: 'other areas are unaware of the expertise and value Actuaries can bring in a variety of areas due to their lack of understanding of the complexity of insurance products'

And *'certain people believe they can interpret data without the use of actuarial, e.g. paid claims versus incurred claims for long-term disability coverage'"*

"Europe: 'Actuaries are mainly seen as experts in the life insurance field only'

Some Actuaries look outside to define the domain:

"*Asia: the scope of the actuary is not clear. Underwriting claims processing and other operational areas are passed onto the actuary to decide sometimes. Sometimes the actuary has to make decisions without necessary information or control of the situation. Management doesn't make it very clear whose responsibility it is to make some of these decisions and there is a lack of accountability to the decision made"*

"In Singapore, the domain for the actuary is well defined. There are regulations on the role of the appointed actuary and the roles of the actuary on actuarial functions and risk management disciplines are quite clear"

"There are not many actuaries in Malaysia and thus work is confined to traditional roles such as valuations and pricing"

Other constraints limit the actuary's role:

"Europe – when actuarial skills are used in the health insurance field, they are asked to limit their role to premium and reserve calculations."

"There are new international developments which are sometimes difficult to implement because of the national situation"

There seemed to be two opposing ways of dealing with the domain definition question, either by seeking to show that Actuaries are able to demonstrate applicability to a broader role (US & Europe), or are more structured in their approach, preferring to limit the domain (Asia):

North America: "We foster discussion, communication, education-leadership within the company"
Europe: "I provide lots of explanations and try to make the actuary a real person"
Asia: "Try to limit your tasks to the ones that are closest to "actuarial" (e.g. premium calculation, valuation, etc) Provide suggestions and advice on other 'non-actuarial' issues. People will appreciate suggestions and advice from an actuary. Prioritize work. Define scope of actuarial work in the company."

Asia: "During the course of the project, whenever there is confusion about roles, the proposal becomes our reference. What is critical though, is that protocols with respect to roles and activities are followed throughout the engagement."

The report concluded that "the growth of the actuarial profession in emerging markets is critical, and is based on stronger competency, education within the company, and continued enhancement of the role and value of the actuary. Another challenge the actuarial profession faces is to increase the number of countries with formal actuarial training. There are still many countries in the world that do not offer such formal education programs for Actuaries in general, and even less for healthcare Actuaries."

So before we move onto a more detailed analysis of some of the new markets for Actuaries, I would like to contemplate a few thoughts on the development of the scope of actuarial work and where it is likely to 'sit' in the economy going forward. Certainly there have been a number of articles and features written about the development of the 'holistic' or 'multidisciplinary' actuary[11] and reflections on why the Actuary should be the CRO[12]. In Europe the clear dominant profession for CRO's is the actuarial field, but not so in other parts of the world.

What then could be the 'next big thing'? How about Takaful insurance? The recent Ernst and Young World Takaful Report[13] quoted a Senior Executive from a Takaful Operator as saying:

"Most industry experts predict that the [Takaful] industry will grow to US$10 bn by 2015. A significant amount of work is before us to enable that sort of growth. But if we do all the right things, that number could easily be US$20 or $30 billion"

Currently there are few actuaries working in this field, it is no doubt that it is challenging with the limitations of asset classes which satisfy Sharia requirements meaning that product design and pricing is intricate. There are underwriting limitations placed on the Takaful company due to the mutual nature of Takaful. The key test is to effectively align the interest of shareholders with that of policyholders in a risk fund with a mutual nature.

The crucial elements that comprise a Takaful product are beginning to be demanded by non-Muslim and Muslim alike, the importance of ethics, transparency and co-operative risk protection

[11] Levay, E. J. 2004 *Continuing the global development of the actuarial profession.* British Actuarial Journal **10,** II, 181-183

[12] Sclfane, S Why choose an Actuary as your CRO? *National Underwriter, P&C* Jan 15, 2007; 111,3; ABI/INFORM Global pg. 27.

[13] Ernst and Young "World Takaful Report" downloaded from http://www.ey.com/Global/assets.nsf/UK/World_Takaful_Report_2008/$file/World_Takaful_Report_2008.pdf

methods have appeal particularly when many of the buying public are facing nationalisation of banks and the demise of insurers caught by seemingly complex and hidden transactions.

Part Two – The role of the Actuary in some countries

As has been established above, the growth of the actuarial profession in a country is driven by a number of inter-related factors. Each individual country will therefore exhibit its own characteristics which in turn influences how the actuarial profession develops, what specific type of work is done, where the skill set demand/supply factors are and where the future growth be.

As an economy develops, its GDP increases, its participation in the global financial infra-structure of the world increases the need for various actuarial tasks - compliance with supervision, regulation, competitive pricing, etc., how these changes are implemented, how the market evolves specifically and for what reason, is what ultimately determines the Actuaries job description.

Taking supervision and regulation as an example of how these different interpretations and enactments are played out in the markets is encapsulated in a recent world insurance regulation report[14]:

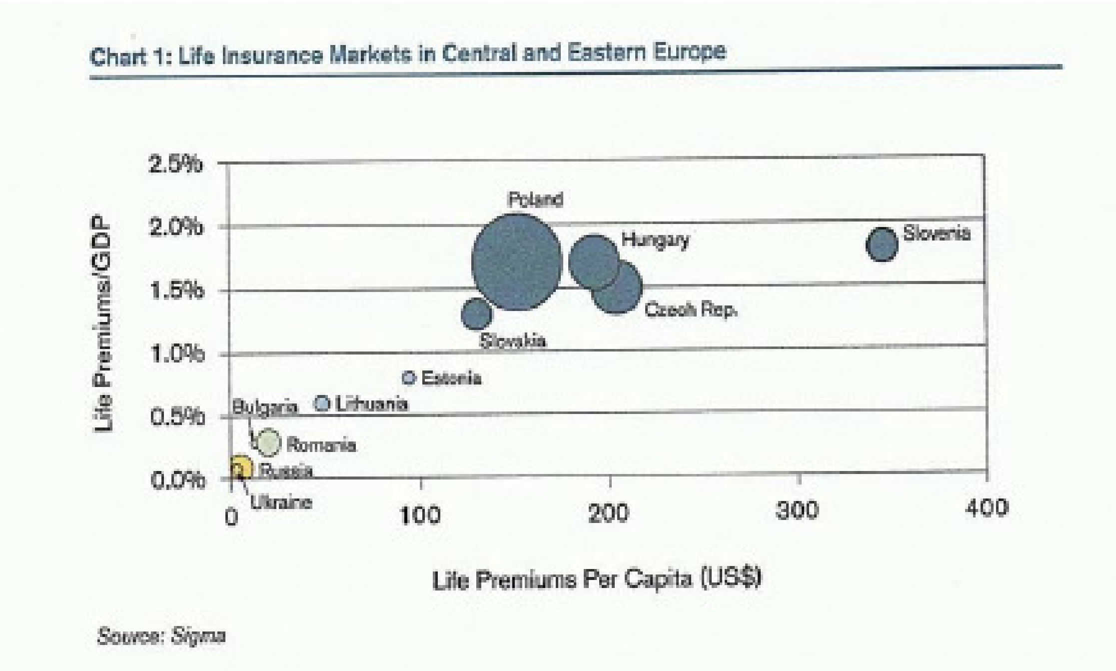
> *"Different approaches to supervision have emerged. Partly reflecting economic development, most are prudential while others remain more protective with further divisions between principles-based and rules-based approaches. Given the convergence between different financial services subsectors, growing numbers of countries (starting with Singapore 1984) have adopted forms of integrated systems with a single regulatory agency. These include the two biggest insurance markets outside the US (UK [1997] and Japan [1998]). Others, including India and China, retain functional regulatory regimes with forms of structured consultation to foster regulatory coherence. Still others, notably Australia, follow a so-called twin-peaks model of having one regulatory agency responsible for prudential matters and another responsible for consumer protection and market conduct functions.*
>
> *…. The EU ….combines a high degree of harmonization of prudential supervisory standards with a national regulator in each of the 27 member states. The harmonized approach enshrined in EU law means that all member states must follow similar standards for insurance supervision, developed under the EU's Financial Services Action Plan, based on mutual recognition. An insurer established and supervised in one member state has the legal right to establish/provide its services in any member state without further prudential requirements. This approach is being developed under the FSAP to cover all of the main areas of financial services and provide a high degree of coherence in prudential regulation (while market-conduct regulation remains at the member-state level)."*

[14] Cooke, J.A and Skipper, H. D 2008 *An Evaluation of US Insurance Regulation in a competitive world insurance market*

As we have discussed, as GDP and insurance markets grow this leads to an increase in demand for actuaries due to increased adherence to global regulatory standards and the increasing competitive forces around pricing, product development and risk management. It is in these developing markets that provide actuaries with interesting challenges and a different, and often more diverse type of role from that which is enjoyed in the more developed markets. Taking one or two sample countries from different regions we can start to build up a picture of these professional differences.

<u>Central and Eastern Europe</u>

Firstly, a snapshot of the nature of the CEE market[15]:



The region is divided into groups based on geographic and economic criteria:

- Central Europe (CE): Poland, Slovakia, Hungary, Czech Republic and Slovenia
- Baltic States: Estonia, Latvia, Lithuania
- South Eastern Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYR Macedonia, Romania and Serbia
- Countries in the former Soviet Union, consisting of three subgroups in Eastern Europe (Russia, Ukraine, Belarus and Moldavia), Central Asia (Kazakhstan, Kyrgyzstan,

[15] From download: http://europe.milliman.com/expertise/pdfs/actuarial-and-consulting-services-6-19-08.pdf

Tajikistan, Turkmenistan, and Uzbekistan) and the Caucasus region (Armenia, Azerbaijan and Georgia).

There is a wide diversity both among these groups and within the same group. Each country is different in terms of economic strength, population size, and insurance market penetration and potential.

The most developed insurance markets tend to be those in the CE countries, followed by the Baltic States. The life insurance markets in these countries started to grow strongly in the 1990s, thanks to the improving economic conditions and regulatory reforms, which were introduced in anticipation of EU membership which was realised in 2004.

More recently, Romania and Bulgaria also became EU member states but the insurance markets in most south-eastern European countries are at a much earlier stage of development compared to the CE countries.

Russia is by far the dominant country in the fourth group in terms of economic strength and the size of its population, followed by Ukraine. Similarly the Russian insurance market is by far the largest in this group. However, particularly in life insurance, official statistics need to be treated with caution; until recently they included significant volumes of short term “tax optimisation” business. Generally the insurance markets in these countries are still at an embryonic stage of development, offering strong growth potential but probably subject to greater fluctuations in short term results.

When we look at the individual markets to assess the impact of the actuarial profession, we need to differentiate between those who are members of the local Actuarial society or Institute, having studied and gained qualification locally, and those who are Fellows of one of the member associations recognised by the International Actuarial Association.

From the IAA come the following statistics for Europe (including Western Europe) of the locations of individual Fully Qualified Actuaries from full member associations, and in brackets those numbers provided as membership levels for the local association:

Andorra	8	Italy	247
(Albania	*25)*	Latvia	16
Austria	198	Liechtenstein	1
Belgium	465	Luxemburg	22
(Bosnia	25)	Malta	2
(Bulgaria	68	Monaco	2
Croatia	49	Netherlands	863
(Croatia	*51)*	Norway	257
Denmark	291	Poland	11
Estonia	17	*(Poland*	*150)*
(Estonia	*24)*	Portugal	122
Finland	124	Russian Fed	1
France1	1874	*(Russia*	*85)*
Germany	2451	Slovakia	1
Gibraltar	1	*(Slovakia*	*108)*
Greece	76	Slovenia	36
Hungary	137	Spain	1495
Iceland	18	Sri Lanka	1
Ireland	392	Sweden	307
		Switzerland	526
NEW ZEALAND	127		

Source: International Actuarial Association

As an example, the sheer size of Russia's population and economic dominance of the region makes it an interesting subject for further analysis. A brief history of the actuarial profession[16] shows the first association, the Society of Actuaries of Russia came into existence between 1994 and 2001 and in 2002 the Guild of Actuaries was formed, thereafter the Actuarial profession began to be promoted. The Guild now participates in international events, contributes towards market development e.g. draft rules for life insurance reserving, rules for actuarial certification and reporting, claims experience investigation, etc.

The Education system is developing, including the translation of textbooks and preparing syllabus. The IAA note that there are 200 students[17] from Russia currently studying under professional examination systems, with a projection of between 1,000 and 2,000 in Central and Eastern Europe under a future International Association Education Programme.

Russia is currently an Associate member of the IAA. It has 130 members (2007) of which 71% are in the insurance industry, 8% in consulting, 11% in Universities, and 7% in pensions.

[16] Download: www.guildofactuaries.ru/Guild%20of%20actuaries-status-1november2007.ppt
[17] Daykin, C *The importance of professionalism for Actuaries* Presented at the 5th International Professional Meeting of Leaders of the Actuarial Profession and Actuarial Educators in Asia September 2007

As an Actuary working in any new territory, there are constant reminders that any "received wisdom" that might have been developed, needs to quickly be challenged. There was an interesting article written in the UK Actuary magazine[18] discussing the sharply different trends in Russian mortality figures, a decline compared to an improvement in most other countries. In 1981 the life expectancy for males was 61.5, increasing to 65 in 1987 only to fall dramatically to below 58 in 1994, before recovering to 61 in 1997. A link was observed to alcohol. In 1981 to 83 the price of alcohol was raised significantly which showed a small improvement in life expectancy. In 1985 Gorbachev embarked on an anti-alcohol campaign involving the wholesale closure of vodka factories. However, after the change to a market economy in 1991, the supply situation rapidly recovered, leading to a reversal of the life expectancy to the previous trend.

Living in a developing country can be full of interesting challenges. Although this example[19] was described a few years ago, many similar experiences are still repeated across the new markets every day. *"…I arrived at the airport at the due time, only to find no aircraft. Further investigation found that there was unlikely to be another plane that day to anywhere. I went to the airport the next day to catch the 'daily' flight. It turned out that the daily flight only actually flew when the plane was full. On the third day, there were enough passengers so we took off…..at 4 am!"*

New markets for Actuaries – Middle East and India

The product mix of the insurance market in the MENA (Middle East North Africa) region is different from most others. Here greater levels of premium income come from non-life insurance, rather than life and the three 'm's – marine, medical and motor, dominate.

In response to a range of external pressures including regional competition, WTO obligations and the competitive pressures of three new financial hubs jostling for position (Dubai, Qatar and Kuwait) the regulatory authorities are adopting international best practice standards which improve transparency and provide confidence in the industry.

The Middle East is currently almost uncharted territory for the Actuary, and therefore one that could be interesting to use as a foundation for a brief attempt to predict how many actuaries a developing region may need in the future.

First, to put the market into context, the insurance penetration and GDP per capita table:

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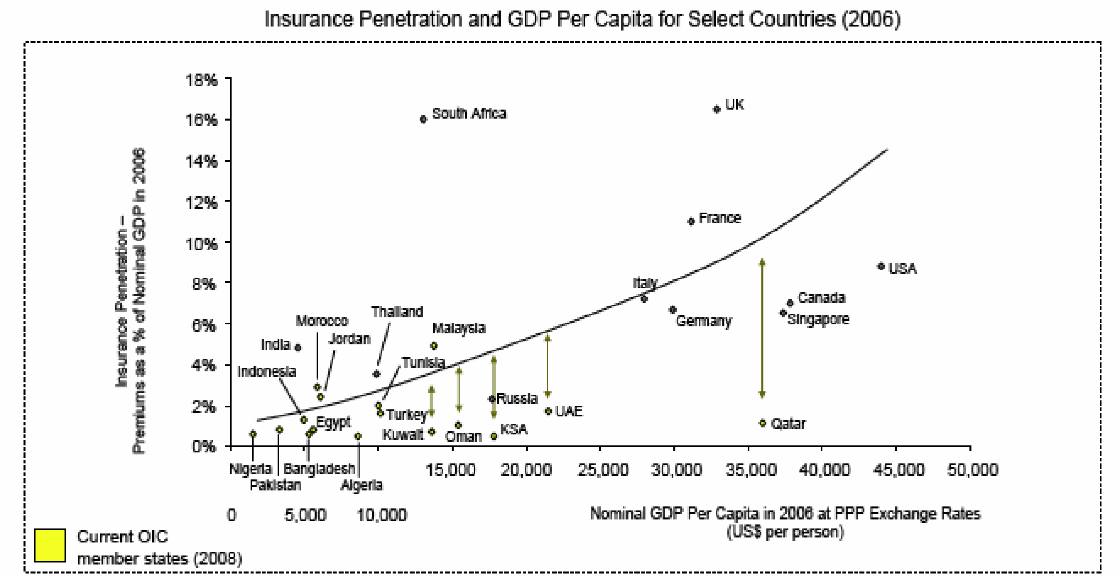
[18] Connor, P, Baskakov, V *"Little concern over longevity and pensions costs behind the former Iron Curtain*" 2000 downloaded from http://www.the-actuary.org.uk/697618

[19] Burton, N *"reports from pastures new in the former Soviet Union"* 2000 downloaded from http://www.the-actuary.org.uk/697640/print



The problem of finding a suitably sophisticated model on which to base a predictor of demand for Actuarial resource in any given country has been explored by a number of writers, and is outside the scope of this paper.

As a crude measure of actuarial demand, one could look at the amount of premium income and relate that to the number of actuaries within the country. In the two countries where the actuarial profession has been established for the longest, the UK and the US, the former has a ratio of 1:50 actuaries to US$1 million of premium income, and the latter a ratio of 1:68. Bermuda, which in terms of market structure (small population, dominance of non-life business) is a closer comparison to some of the MENA markets, has a ratio of 1:83. It is of course much more complex than this, as the requirement for actuarial input differs between the different disciplines of life and non-life, direct insurance and re-insurance but it can provide some interesting speculation, even without factoring in any future growth in premium volumes:

	Non Life premium volume 2005 USDm	Life premium volume 2005 USDm	total premiums USDm 2005	Number of actuaries [20]	Ratio of total premiums: number actuaries	1:65[21] ratio – projected actuaries required
UAE	1526	336	1,862	2	931	28
Qatar	341	18	359	0		6
Jordan	277	32	309	0		5
Egypt	461	300	761	8	95	12
Oman	247	45	292	1	292	5
Saudi Arabia	1385	17	1,402	1	1402	22
Kuwait	403	96	499	1	499	8
Bermuda[22]	n/a	n/a	9470	113	83	
UK	100629	199612	300241	6029	50	
US	625838	517074	1142912	16672	68	

The figures for the actual number of Actuaries are from the International Actuarial Association and are fully qualified Actuaries from full member associations.

The table above also confirms a previous comment, that the levels of premium income for non-life insurance are higher than that of life insurance. This is contrary to experience in East Asia, the UK and Australia/New Zealand where life insurance premium income is far higher, as it is in the two biggest developing markets of India and China.

One of the features of a nascent insurance market is that the industry develops faster than the actuarial profession. The demographics in India show that there are approximately 250 Fellows of the Society (many over retirement age, and others outside the country) and around 5,500 students. Many of these students (62% in a previous 2004 survey by the author) are not currently in an actuarial job but are desperately trying to pass exams with no support or on the job training. The number of people qualifying as Fellows in India is currently only about 2-3 per year.

How will the demand for actuaries in these new regions be satisfied? It is clear, and this has been demonstrated historically in other countries, that in the first instance experienced international actuaries come to a region to provide technical knowledge, training and mentoring. Many of the large international new entrants will transfer a senior actuary to establish and run a team and then hand over to the up and coming local actuary. But, given the evidence as seen in India there is a serious danger of a time lag between the need for the establishment of an actuarial team and the

[20] Figures correct in 2006, have now changed
[21] The ratio of 1:65 was taken as a an approximate average of the UK, US and Bermuda markets to provide some form of consideration for the differences in the market structures
[22] Bermuda figures are downloaded from http://www.abir.bm/downloads/kpmg_reinsurance_in_bermuda.pdf

availability of suitably qualified and experienced individuals. There are also the not inconsiderable hurdles of cultural differences in management style and business practices to be overcome. One of the knock-on effects of this is that ambitious recently qualified Actuaries are able to secure roles that are more senior than the equivalent level of experience would achieve in other markets. This is true of many countries with a developing actuarial profession. It is not unknown for an Actuary in China or India to become a CFO or Chief Actuary within 5 years of attaining their Fellowship. In India the role of Appointed Actuary is not one that is coveted, it is often seen as a political position, and that the person is in the "pocket of the regulator" and therefore not necessarily able to fully participate in strategic decisions. In China pricing roles are heavily regulated and therefore less desirable, and with onerous personal responsibility liability, often only done for a few years as a means to achieving a higher position.

Foreign insurers in India are (currently) not allowed to own more than 26% of an entity, and therefore have joint ventures with different large Indian companies such as Tata (AIG), Max (New York Life) Birla (Sun Life). Most of the 20 or so companies currently operating will have a combination of distribution channels, tied agency (salaried or commission or both), bancassurance, brokerage.

Growth rates that continue to be projected in India are enough to make the hair curl of a Chief Executive currently sat in his office in London or Frankfurt. For example, Max New York Life are opening a new branch office a day, they now have 550 offices, with 15,000 employees (excluding tied agents) with US$2.5bn premium income projected by 2011.

To support that level of business they currently have an Actuarial team of 25 people, under three Heads – Financial Reporting; Risk Management; and Re-insurance. From a product perspective many companies are entering the Health market and considering pensions depending on the outcome of new legislation.

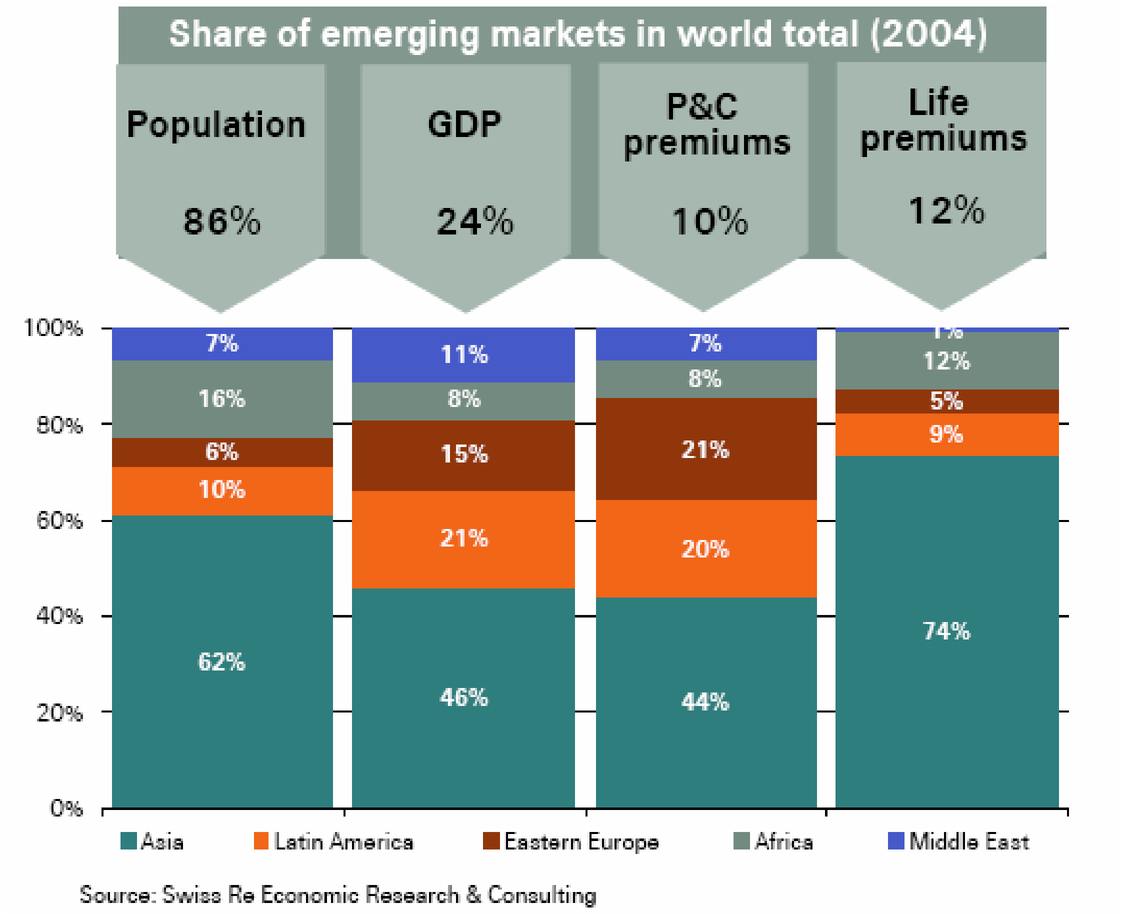
It is generally perceived from outside that the products sold in "new markets" are fairly basic, unsophisticated and therefore from an actuarial perspective one is not able to really be stretched on the product development side. This is quite far from the truth in the case of India. The rapid maturity and growth of the India market has provided for the development of quite sophisticated products utilising leading edge techniques, often surpassing those found in more "developed" markets like Hong Kong and Singapore. This does however also necessitate the need for Actuaries to be deeply involved in all facets of the business from strategy and marketing to explaining the nuances of the new product to the direct sales force – even if your audience of "top tier" direct sales people number 6,000!

The cost of living in the developing markets is not always as cheap as it is perceived, for example Mumbai has high rental costs, with a decent apartment being US$10,000 per month!

East Asia

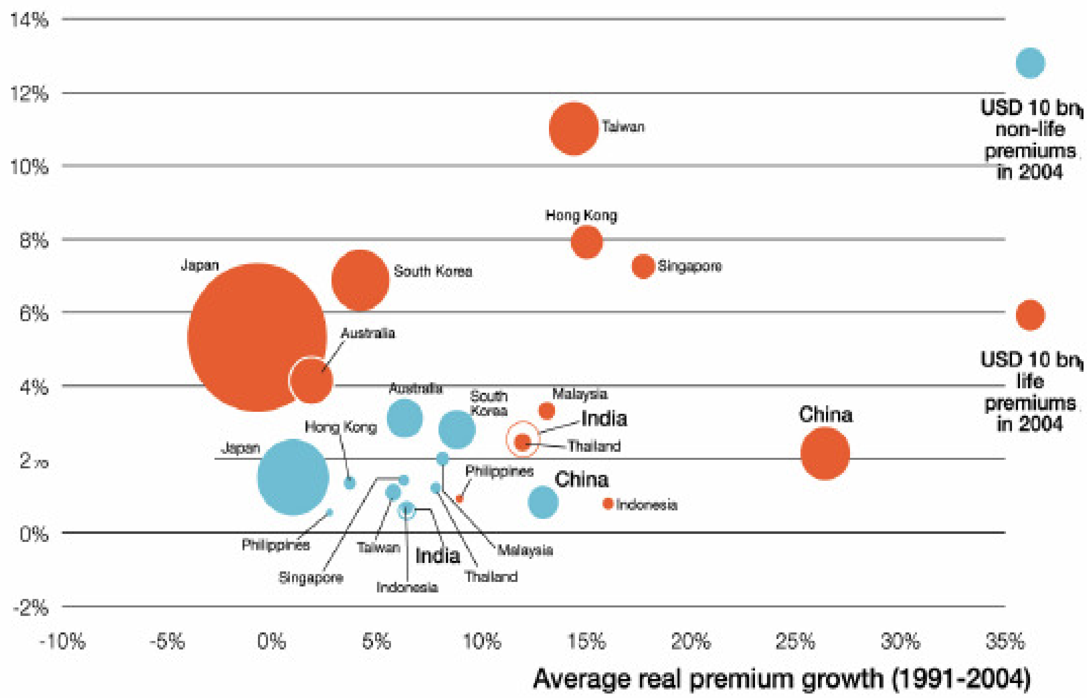
Asia is of course the region we are most familiar with in this part of the world, being in our "backyard", with many New Zealand and Australian trained Actuaries either living in the Asia region or being involved in working on Asia business.

Of all the emerging markets that we have looked at, "Asia" has the largest share:



A look that graph of insurance density and penetration shows where each of the countries is positioned in relationship to each other differentiating between life and non-life insurance.

Insurance penetration 2004, %



Sources: Oxford Econimic Forecasting; Swiss Re Economic Research & Consulting.

From an actuarial perspective, still the majority of the work in the East Asia region is within Life Insurance although that is beginning to change.

To take China as an example, the market is dominated by local players and the top three, China Life, Ping An and CPIC account for 75% market share. Foreign Joint Ventures have to have a rep office before they are able to apply for a licence and then it is granted by Province, not for the country as a whole. The consulting firms tend to concentrate their teams in a Hong Kong Regional head office, and have smaller offices in Shanghai and Beijing. Mainly life and pensions work, with some General Insurance now being carried out.

The insurance market in China is still at its early development stage, and so the tools and techniques being used are less sophisticated than Australia, New Zealand or North America. Many local actuaries learn the common actuarial techniques (ALM, stochastic modelling, performance measurement and management) through text books without much practical experience. Overseas actuaries can therefore add value. However, the actuarial teams are often small, and carry out very wide ranging work. This can lead to very high workloads and excessive hours in some companies. Consultants and re-insurers often have high travel schedules but they do offer very valuable experience in client service and project management.

Salary levels vary enormously, in dollar amounts local actuaries in China are paid less than their peers in Aus/NZ, UK or North America. If an aspiring overseas actuary can achieve a comparable salary to the one at home, that is a good start. Once in the role and doing a good job, so the pay rises are quite quick and eventual compensation can exceed that which they would have got at home. Ex-pat packages are pretty much a thing of the past, and generally given to internal candidates for short term assignments.

As an example of a much smaller market, in Vietnam there are currently less than 10 Fellows in the whole country with less than 50 undergoing training. The main work carried out is financial reporting business planning and financial projections, with companies often choosing to outsource pricing work. From a regulatory standpoint, the regulators in Vietnam wield a lot of power, but are happy to listen and learn. However, all the legislation is written in Vietnamese, so there is an acute need for a technically savvy Vietnamese Actuary in each company.

There is a limited talent pool throughout the insurance industry; there are not enough experienced people to build a structured management team. The attitude to careers is very short term and many are not willing to put in the years of work to become an Actuary. If they do, then their motivation is to move overseas. There is no continuous pool of actuarial students, or associates. There is no one to take from another company. Therefore many companies take on very bright graduates at US$500 per month and train them up. However, the pass rates are low.

The key distribution channel for most insurers is the direct sales force, with a small percentage via bank or direct marketing. This Agency sales force is often part time and 99% of what is sold is With Profits business, traditional endowment type. However, during the past couple of years the product range has become more diversified. There is however a short term attitude which meant that companies that were selling 5 year savings policies 5 years ago are and now having to contend with disappointed customers! The market is still very “raw” with a lot of insurance education required.

The main challenge in Vietnam is around market volatility, insurance is difficult to price, with a lack of data and lack of resources. The compensations personally though are huge, the ability to make an impact, to gain a sense of fulfilment, and to impart and train people with enthusiasm and open minds.

As for working conditions and living costs there, electricity frequently goes off for minutes or hours at a time, for no apparent reason. Generally speaking it is a less intense business culture than, say, in Hong Kong, great emphasis is placed on family life and therefore work life balance is important. People are enthusiastic and keen to please, and eager to see their country does well.

Most people, particularly outside of the big cities, will have a siesta around lunchtime and then work into the evening, due to the heat and humidity. However, the western companies tend to work on more traditional 9 to 5 with senior level working longer as per most countries of the world.

You can certainly eat out for less than $5 and quite reasonably too. A margarita will cost you about AUD$3 in a bar of a good quality hotel, and a bottle of Tiger beer less than AUD$1. A very nice two bed apartment overlooking the river in Ho Chi Minh in one of the best areas will cost about US$2500 per month. Other areas they can be found from about US$600 per month to an average around US$1500 per month.

Summary

This paper has provided a brief look at the development of the Actuarial profession itself, and how the role of the Actuary eventuates in a number of nascent markets, a process that could be described as a symbiotic one.

There is no doubt that the two trajectories will continue, the Profession will continue to develop itself as market forces dictate, whether that is into new areas of Risk Management or by changing the education and professional development process. The global insurance markets themselves will continue to evolve and provide new and ever challenging career options for the adventurous Actuary.

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