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IACA Committee

Chair: Cathy Lyn (Jamaica)
Vice-Chair: Gerd Warnke (Germany)
Secretary-Treasurer: Douglas Carey (USA)
Executive Director: Adam Reese (USA)
Past Chair: Margaret Tiller Sherwood (USA)

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- Nigel Spencer Sloam (UK)
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Members:
- Cristina Mano (Brasil)
- Nigel Spencer Sloam (UK)
- Doug Carey (USA)
- Adam Reese (USA)
WELCOME FROM THE EDITOR
Shubhash Gosine (Jamaica)

Dear Reader:

I am grateful to all those who have preceded me in developing this newsletter. The newsletter highlights current information and ‘Hot topics’. For this to continue, I request that all members contribute, by way of suggestions for topics and writers for articles. We need to increase our membership, please encourage your colleagues to join IACA.

In today’s world, the internet allows us easy access to a lot of information. I hope to be able to guide members to articles, papers and other comments on areas of interest. What our actuaries faced 50 years ago is very different to what we face today and what actuaries would face 50 years from now long after we have left our mark. The role of the actuary has moved from the traditional areas to exciting applications of our expertise such as enterprise risk management and climate change. IACA provides the forum for us to engage in dialogue and fellowship, charting the future of consulting actuaries. It is also essential for us to collaborate with actuaries in other areas of practice and other professions who share our interest in developing solutions that reach far into the future. Our education, technical skills and experience gives us a unique perspective on contributing to solutions required for financial, risk, economic and other world issues.

To the senior actuaries, I ask you to share your interests and experiences with us and guide us appropriately. You are our mentors. For the junior actuaries, I ask that you contribute your time and energy to help make a difference. To everyone else, I say join in and benefit from listening, conversing, exchanging ideas and doing what is necessary to evolve as individuals and as a team.

IACA as a committee of the IAA, reaches out to consulting actuaries providing a forum to engage each other from all parts of the globe to discuss the different approaches and results that many of us have used in solving similar problems. Our network reflects the ethics of our profession.

Sharing of knowledge, access to information and identifying problems that need our input are essential to the future of the profession. Our newsletter, webinars, town hall meetings, colloquia, conferences, congress are all mechanisms to provide us with valuable information.

IACA will be at the International Congress of Actuaries in Berlin, 2018 and at the Colloquium in Cancun 2020. We are looking forward to meeting you there!

More information about membership and events can be found on IACA’s website.

Thank you.

Warmest Regards,
Shubhash
GREETINGS FROM THE CHAIR
Cathy Lyn (Jamaica)

It is an honour and I am pleased to serve IACA as chair for the next two years. We welcomed new and returning Committee members at our meeting in St John's Newfoundland. During my term as chair the IACA leadership shall focus on building a community of active consulting actuaries creating “actuarial wisdom” while developing an international voice through our diverse Committee. We continue to align IACA’s workplan with the IAA strategic goals and at the same time crafting IACA activities to be relevant to the changing landscape for consulting actuaries.

We have prepared already an Awareness Package that includes a Member Value Proposition which will reach out to more consultants in the international arena and consultants in the non-traditional roles. At the same time international events affect all actuaries’ work in some way.

IACA has lots happening!! Please get in touch to participate. For example, we need help seeking out speakers for “hot topics” for the IACA track in the 2018 Congress Berlin Programme (see Gerd Warnke gerd.warnke@gassner-und-partner.de.

SUMMARIES OF RECENT EVENTS

IACA Biennial General Meeting Highlights
Margaret Tiller Sherwood (United States)

The IACA Biennial General Meeting was held 27 June 2016 at the IACA/PBSS/IAAHS/IPEBLA Joint Colloquium held in conjunction with the CIA meeting in St. John's Newfoundland. The attendees approved the minutes of the 2014 Biennial General Meeting, heard the outgoing Chair’s report on activities during the last two years, heard the Treasurer's report, voted on changes to the IACA Rules, elected new Committee members, were introduced to IACA’s new officers, and listened to the incoming Chair’s remarks. The Max Lander and Geoffrey Heywood Awards also were presented. The draft minutes of this meeting will be posted to the IACA website soon.

IACA has a healthy financial situation and will keep the dues at $50C for the next two years. The Rules changes that had been previously distributed to all IACA members were approved as distributed.

IACA members present elected Nigel Sloam (UK) to a second four-year term and Kudzai Chigiji (South Africa), Mike Smith (US), Philip Simpson (UK), and Brian Spence (UK) to their first four-year term.

Past Chair Andrew Vaughan (UK) and Secretary/Treasurer Morten Harbitz (Norway), Rade Muselin (Australia), and Eduardo Estava Fisher (Mexico) rotated off at the end of their terms. Catherine Love Soper (UK) had previously left the Committee mid-term. IACA is grateful for the service all of them performed for IACA.
IACA’s new officers as of the conclusion of the St. John’s Colloquium are: Margaret Sherwood, Past Chair; Cathy Lynn, Chair; Gerd Warnke, Vice-Chair and Chair Elect; Doug Carey, Secretary-Treasurer; and Adam Reese, Executive Director.

The outgoing Chair’s report, the Max Lander and Geoffrey Heywood Awards, and the incoming Chair’s remarks are found in separate articles of this newsletter.

St. John’s 2016 Joint-Joint-Joint Colloquium
Adam Reese (United States)

The picturesque harbor town of St. John’s, in the far eastern Canadian Province of Newfoundland and Labrador was the host to the joint-joint-joint Colloquium, held June 26-29th 2016.

The first “Joint” is in recognition of the coming together of three IAA sections; IAAHS, PBSS, and IACA. The second “Joint” acknowledges the extended networking opportunities at this Colloquium as IAA held the meeting in collaboration with the International Pension and Employee Benefit Lawyers Association (IPEBLA). And the third “Joint” accounts for why the meeting was held in St. Johns, as Colloquium attendees were able to join with the Canadian Institute of Actuaries for several joint activities.

IAA President Malcolm Campbell opened the meeting on Monday morning, which began with two plenary sessions. The first, a regulatory roundtable was moderated by Randy Bauslaugh, past chair of IPEBLA, and featured regulators from the United States Treasury Department; the Province of Alberta; the chair of CAPSA, Canada’s inter-jurisdictional association of pension regulators, and South Africa’s (and PBSS’s) Marius Du Toit.

The second plenary session’s speakers were changed in the last two weeks before the meeting due to changes in the Province of Ontario cabinet. Colloquium attendees heard from Hon. Indira Naidoo-Harris, MPP, who was recently appointed as Associate Minister of Finance. The panel of speakers also included Chris Daykin, Rob Brown, and Mahmood Nanji of the Ontario Retirement Pension Plan Implementation Secretariat.

The Colloquium was a truly global event, attracting over 150 registrants from 26 countries, with 3 or more attendees from each of the countries represented in the following flag quilt.
The Colloquium featured parallel breakout sessions with topics of interest to IPEBLA, IACA, PBSS, and IAAHS section members on all three days, as well as additional plenary sessions on Tuesday and Wednesday. Presentations from all sessions are available on the colloquium website.

Tuesday morning’s plenary panel on Pension and Benefits Governance featured a Canadian, an American and an Australian, followed by a plenary session on Conflicts of Interest from Actuarial and legal Perspectives, moderated by Margaret Sherwood, outgoing chair of IACA, and featured Mark Firman, a lawyer, and Adam Reese, who served as Chair of the Colloquium (appropriately so as he is a member of all three IAA sections that jointly sponsored the event).

Wednesday morning’s plenary session was a joint session with the CIA and featured Michael Woodford, MBE. He was the very first Western ‘salaryman’ to rise through the ranks to the top leadership of Olympus. On October 1, 2011, he was appointed as CEO, but only two weeks later was dismissed after querying inexplicable payments in excess of $1.5 billion and demanding the resignation of the company’s Chairman and Vice President. Mr. Woodford took attendees through the riveting experience of whistle blowing on his own company, and lessons on governance, crisis management, and ethics.

Networking Events
Attendees had ample opportunity to connect and build new or renew old relationships. In addition to a Sunday evening Welcome reception, the Colloquium featured a Gala Dinner on Monday evening complete with local musical and comedy after-dinner entertainment and a joint “Rally in the Alley” with CIA attendees on Tuesday – experiencing the culture and history of St. John’s. Where else in one evening, can you find actuaries and lawyers learning to do Irish Dancing, sing Sea Shanties, get “screeched-in”, while enjoying the long evening daylight and a dinner of fish ‘n chips!

Given the global footprint of the attendees, it was appropriate that the closing plenary session on Wednesday afternoon featured a journey round the world examining the global healthcare cost drivers. The plenary was moderated by IAAHS chair April Choi and the panel included Tom Wildsmith, President of the American Academy of Actuaries, Canada’s John Have, South Africa’s Emile Stipp, and Adrian Baskir from the UK.

In addition to the current chairs of IPEBLA (Lisa Butler Beatty), IACA (Margaret Sherwood), IAAHS (April Choi), and PBSS (Marius Du Toit), the Colloquium attendees included several past chairs including Mitch Frazer and Randy Bauslaugh (IPEBLA); Andrew Vaughan, Ken Buffin, Adrian Waddingham, Mike Toothman and Brent Walker (IACA), Emile Stipp (IAAHS) and Chris Daykin (PBSS).

As with all Colloquia, a great deal of volunteer time is spent in the years and months leading up to the event. The success of the Colloquium is therefore due to the great contributions made by the members of the Organizing Committee, Program Committee, and generous support from the sponsors. A list of the committee members and sponsors is available at: http://www.actuaries.org/stjohns2016/committees.cfm and http://www.actuaries.org/stjohns2016/sponsorship.cfm
SUMMARY OF PRESENTATIONS FOR THE ST. JOHN’S COLLOQUIUM

The Challenges of Advising International Insurance Companies

Mike Lombardi

Mike Lombardi, President, MLBC spoke on Monday June 27 to IACA attendees on “The challenges of advising international insurance companies”. He covered various aspects of those challenges including: the reasons for growth of international consulting, how this is different from regular consulting, the requirements for success, and a brief summary of selected case studies. A lively Q&A followed.

Consulting in Latin America and Caribbean Region

Mike Smith and Cristina Mano

Cristina Mano and Mike Smith, both experienced P&C Actuarial Consultants, spoke on Monday June 27 to IACA attendees and other interested parties on “Consulting in the Latin America and Caribbean Region (LAC)”. The presentation, covered various aspects of the consulting process, including the following:

• Language/communication;
• Style of business meetings;
• Consulting team structure;
• Cultural bias and potential for misunderstanding;
• Local regulation and business practices; and
• Opportunities for actuarial consulting in the LAC.

A lively “Question & Answer/Discussion” followed the formal presentation.

Actuarial working with Lawyers: Expert Witness in Personal Injury Cases and Requirements for Being an Expert Witness in Pension Cases and the Differences Between UK and USA

Chris Daykin and Jonathan Punter

This break-out session looked at two different aspects of actuarial work as expert witness in the Courts, with Chris Daykin sharing experiences of assessing quantum of damages in personal injury and fatal accident claims and Jonathan Punter sharing his experience of pension-related cases, including professional negligence and loss of pension rights and legal construction of Deeds drafted in earlier times with the wording being interpreted in modern financial world.

The focus was on the professional aspects of such work and the practical challenges of working with the team of lawyers and of giving evidence in Court. Each speaker gave examples of cases in which he had been involved.

A lively discussion covering the differences between the US and UK legal environment particularly regarding the statutory declaration an UK expert has to make regarding his obligations to the Court.
As ever, although there were a lot of similarities, North America and UK are divided by both a common language and a common legal system.

**The Challenges of Professionalism in a Cross-Disciplinary and International Environment**  
*Ben Kemp*

“Our complex and interlinked world”

The premise of this presentation is that (1) the professions are under threat, but (2) that now, more than ever, we need—society needs—professional values. Taking examples from the legal and actuarial professions in the UK and elsewhere, we consider what it means to be a member of these professions, and the professional responsibilities this entails. We examine more broadly the role of professional ethics in the actuarial and legal sectors, including the importance, and extent, of the professional obligation to speak up (whistleblow) where things go wrong. We consider also the role of professional bodies and regulators in reinforcing professional values and ethics - how they can help, and how they can hinder. We try to debunk some of the traditional argument between advocates of ‘principles based’ and ‘rules based’ theories of regulation. Our overall conclusion is that there remains an enduring need for professional values. Given the care, attention and importance it deserves, professionalism, properly regulated, can provide the basis for the rejuvenation of the legal and actuarial professions in the 21st century, reshaped and fit for purpose in a more commercial, more international, but less reverent world.

**Trees That Feed**  
*Shubhash Gosine and Cathy Lyn*

The presentation “Breadfruit saving the Caribbean” aims to demonstrate the economic viability and sustainability of tree-cropping the breadfruit by applying actuarial principles to:

- Analyze the current environment
- Develop a model which would be continually assessed and adjusted
- Implement model as a Pilot – using a Jamaican community; collect data, monitor and adjust as necessary for success
- By repeating the model throughout rural communities to create a system that manages the risks associated with food production
- Educate on the benefits of the breadfruit
- Assess the impact on poverty alleviation

This exercise arose out of the Trees That Feed Foundation mission to provide trees to countries such as Haiti, Jamaica and other Caribbean islands. These trees would provide food and industry for those persons that live below the poverty line.

The analysis applies the actuarial techniques and principles of the actuarial control cycle, risk management and modelling.
The aim is to motivate the population to grow food not just with crops but also with trees that can provide food for over 50 years, while providing economic benefits.

UPCOMING EVENTS

IAA and IACA Events
Dates for the next meetings of the IAA at which the IACA Committee will meet:

- **18-23 April 2017** – Budapest, Hungary
- **4-8 October 2017** – Chicago, Illinois, United States
- **30 May - 2 June 2018** - Berlin, Germany (in conjunction with ICA 2018)

Council and Committee Meetings

- **4 - 7 June 2017** – Cancun, Mexico with PBSS
- **30 May – 2 June 2018** – Berlin, Germany – With ICA meeting
- **2022** - 32nd International Congress of Actuaries - Sydney, Australia

For more information on upcoming events, please visit the IAA’s website:

http://www.actuaries.org/index.cfm?LANG=EN&DSP=EVENTS&ACT=INDEX

CALL FOR VOLUNTEERS

Are you interested in contributing to the development and promotion of the Actuarial Sciences? Join IACA and Volunteer to help us achieve and realize our goals and objectives.

We need volunteers for:

- Writing Articles
- Create and Deliver Webinars on relevant topics
- Assist with Upcoming Events – Congress, Colloquium, Conferences and Meetings
- Promoting IACA

Advantages of Volunteering:

- Interacting with pioneers/ mentors and other senior actuaries
- Building professional networks
• Sharing knowledge with other professional bodies in finance and related Industries
• Participating in the evolution of the actuarial sciences and profession.

If you are interested in Joining or Volunteering, please send an email to Cathy Lyn at lcathy88@yahoo.co.uk
Or visit the IACA membership page https://www.actuaries.org/merchandise/section/

You can make a difference!

IACA AWARDS 2016

Consulting actuaries from across the world first met as a group at a special meeting of the 16th International Congress of Actuaries in 1960. Much of the impetus for this first meeting was provided by Max Lander and Geoffrey Heywood. They followed this with a similar meeting in Edinburgh at the 17th International Congress in 1964. It was there that it was decided to set up a Committee to ensure that international meetings focused on issues of concern to consulting actuaries would continue to be held every other year - so on a more frequent basis than the four-year congress meetings of the International Actuarial Association. Geoffrey Heywood was elected Chairman of this Committee and Max Lander took on the role of secretary. Other members being Messrs. Brans (Holland), Carson (South Africa), Hamilton (U.S.A.), Heubeck (Germany), Melville (Australia) and Warren (U.S.A.). In their professional lives, Geoffrey and Max were managing the practice of Duncan D Fraser in the UK.

The IACA Committee organised the IACA business meetings held in Munich in June 1968. At this meeting, it was agreed that the International Association of Consulting Actuaries should be formally constituted, and would meet every second year and would be separate from the International Actuarial Association. Geoffrey and Max remained chairman and secretary respectively until 1976 when both retired from these roles. They were then elected emeritus members of the IACA committee.

Max passed away in 2000, just after IACA became a fully-fledged section of the reconstituted IAA. The first lifetime achievement award honouring Max’s contribution to IACA was presented to Jim McGinnitie at ICA 2006 in Paris.

Geoffrey passed away on May 24, 2014. The first young achiever’s award honouring Geoff’s contribution was presented to Marion Elliott on March 31, 2014 at the Washington ICA. Geoffrey, then, at 98, was still well enough to be appraised of the commencement of this award and learn of its very worthy first winner. In 2008 the Max Lander Award was presented to Paul Thornton, in 2010 to Klaus Heubeck, in 2012 to Fred Kilbourne and in 2014 to Chris Daykin.

The recipient of the 2016 Max Lander Award was John Martin. John became a fellow of the London Institute in 1954 when he was employed by Watson and Sons. He became a partner in 1958 (senior in 1983) and remained in the firm throughout his career. He worked in the UK, Europe, Africa and the Caribbean and
was an honorary advisor to the UN joint staff pension fund. His achievements both in the UK and internationally are legendary. For example, he joined the Groupe Consultatif at its inception in 1978, became its vice chairman in 1982 and chair in 1988. He has been chairman of the London Institute, ACA and a number of other bodies. He was awarded the CBE in 1995.

Geoffrey took a keen interest in younger members of the profession - because they are our future. The second recipient of the Geoffrey Heywood Award was Chintan Gandhi. He joined the UK actuarial profession in 2008, qualifying as a Fellow of the Institute and Faculty of Actuaries in 2013. He works in Aon Hewitt’s UK Retirement and Investment practice and in this role he focuses primarily on advice to pension scheme trustee boards.

Chintan is an active contributor to the Association of Consulting Actuaries. He has been a member of its Public Relations Committee since 2014 and was appointed in 2015 as the Chairman of its Younger Members’ Group - a group that he helped initiate. The Younger Members’ Group is for consulting actuaries aged under 35, or those with less than 10 years’ post-qualification experience. Its aim is to improve the engagement of younger members within the actuarial profession. Chintan’s aim is for the Younger Members Group to explore and promote the many opportunities available to consultant actuaries that are outside of our traditional areas of expertise.

Chintan wants the profession to benefit from the perspectives and energies that younger consulting actuaries have to offer, especially in public policy. Having previously sat on the Staple Inn Actuarial Society Committee, Chintan currently sits on the Institute and Faculty of Actuaries’ Public Policy Virtual Review Group.

Chintan’s initial efforts attracted 70 newly qualified consulting actuaries to a special ACA sessional meeting geared towards younger members in September 2015. He oversaw the inaugural half-day younger members’ workshop which ran alongside the ACA’s main annual conference in February 2016. This workshop focused on possible reforms to the UK’s savings and pensions arrangements. The organisers of this workshop received positive feedback from delegates because of the opportunity it gave them to engage and contribute in ways that were less inhibiting than in a formal conference setting. The ACA now plans to make younger members meetings and workshops annual events. Chintan has already made an outstanding contribution to our profession.
The Actuaries Climate Index (ACI) is an objective, quarterly measure of changes in extreme weather frequency and sea level which will be available online at www.ActuariesClimateIndex.org. The ACI is based on quarterly seasonal data in six different index components from 1961 to winter 2016. Higher index values point to an increase in the probability of extreme climate events by comparison with average frequencies during the reference period 1961 to 1990.

The Actuaries Climate Index was developed through the partnership of the American Academy of Actuaries, the Canadian Institute of Actuaries, the Casualty Actuarial Society, and the Society of Actuaries. The Climate Change Committee appointed by these organizations worked with climate scientists from Solterra Solutions to develop the Index. The Index measures climate extremes in Canada and the United States. The Index will serve to help educate the public about the increased frequency of climate extremes in recent decades. It will also highlight the actuarial profession.

The Index contains a component for high temperatures, low temperatures, high winds, precipitation, drought and sea level. The Index, with the exception of the sea level component, measures extremes rather than averages because the increase in extremes is more relevant to climate risk. Each component is a measurement of the value today compared to the reference period of 1961 to 1990. A thirty-year reference period is common in measuring climate as it is long enough to exclude short-term trends. The difference between the current value and the average for the reference period is then divided by the standard deviation of that quantity during the reference period. This can be expressed in the form of:

\[ \text{ACI Component} = \frac{x - \mu}{\sigma_{\text{ref}}} \]

This creates a dimensionless quantity referred to as a standardized anomaly. The ACI is the average of the standardized anomalies of the 6 components.

The Sea Level component measures monthly average Sea Levels at 76 tidal stations across Canada and the United States. Sea Level is measured relative to the land, and therefore, it is possible that the data from some tidal stations show an increase in sea level due to thermal expansions of the oceans as well as from the melting of land-based ice sheets, while some show a decrease in sea level because the land movements offset any increases in the volume of the ocean. The tidal stations in Alaska show a decrease in Sea Level due to rising land at those locations.

The remaining components are based on grid-level data, where each grid cell is 2.5 degrees longitude by 2.5 degrees latitude across the land portion of Canada and the United States. A grid is 275 km by 275 km at the equator, but the width of the grid cell gets smaller as one moves away from the equator, due to the curvature of the Earth’s surface.

Canada and the United States are divided into 12 regions, and the ACI is calculated for each of those 12 regions, as well as the larger regions of 1) Canada, 2) the contiguous United States, and 3) all 12 regions, ie. the whole of Canada, Alaska and the contiguous United States. The twelve smaller regions are shown here.
The high temperature component is based on the 90th percentile temperature from the reference period for each calendar day. Note that at a particular grid cell, one would have 30 values from the reference period for each day of the year. 30 observations are not enough to get a robust 90th percentile, so a 5-day window is used, with a total of 150 observations to calculate the 90th percentile. For example, to calculate the 90th percentile temperature threshold for November 3rd, the temperatures from November 1st, 2nd, 3rd, 4th and 5th are used. Once the threshold temperature is calculated for each calendar day, we calculate the frequency of high-temperature-days for each month and season in the current period. For example, we may find that the frequency of high temperatures has risen to 30% in the current period from 10% in the reference period. The ACI Component for temperature is \( \frac{x - \mu}{\sigma_{ref}} \), where \( x \) is the frequency of high temperatures in the current period, \( \mu \) is the frequency of high temperatures in the reference period, and \( \sigma_{ref} \) is the standard deviation of the frequency of high temperatures in the reference period. If the value of \( \sigma_{ref} \) in our example was 16%, then the ACI Component would be \( \frac{30\% - 10\%}{16\%} = 1.25 \), which means that the value can be thought of as 1.25 standard deviations from average.

The cool temperatures component is based on the 10th percentile temperature. The increased frequency of high temperatures and the decreased frequency of cool temperatures is an indication that the probability distribution function of temperatures has shifted to the right. For that reason, the decrease in cool temperature extremes is added to the Index.

The precipitation component is based on monthly maximum precipitation values over a consecutive 5 day period.
The drought component is based on the number of Consecutive Dry Days (defined as less than 1 mm of precipitation) for each calendar year.

The Wind component is based on the frequency of high winds. The threshold value is defined as the mean plus 1.28 standard deviations from the reference period, and captures about 13% of the highest wind speeds from the reference period.

Results: The following are two graphs showing 3 of the components in each graph, as well as the overall ACI value. These values show the 5 year moving average, in order to better able to discern the emerging trend from the values. The clearest trends are seen in the Sea Level, high temperatures (T90), and less frequent cool temperatures (-T10). The Wind Power, Precipitation and Drought components are more erratic.

![Index Components: 5-Year Average](image1)

About Caterina
Caterina Lindman works as an Actuary in the Canadian Division of Manulife Financial. She chairs the Climate Index Working Group.

**ACTUARIAL CONSULTING IN THE LATIN AMERICA AND CARIBBEAN REGION: ISSUES AND OPPORTUNITIES**

*Cristina Mano - cristinamano@cmanoatuaria.com*

Latin America and Caribbean (LAC) consists of more than thirty sovereign states and several territories and dependencies, which cover an area that stretches from the northern border of Mexico to the southern tip of South America.

It has an area of approximately 19.2 million km², almost 13% of the Earth’s land surface area. Latin America had a combined nominal GDP of 6.1 billion USD and a total premium volume of 188 billion USD. Based on the 2014 data from Swiss Re Sigma, the LAC insurance density is USD 304 and the insurance penetration is 3.1% of the GDP. The worldwide insurance density is USD 662 and worldwide insurance penetration is 6.2% of the GDP. Compared with the rest of the world, this region has a low insurance penetration and density indicating that there are opportunities for growing the insurance market and consequently the actuarial consulting in the region.
The insurance market is expected to grow in 2016, due to the expansion of the regional economy, despite the economic crises in certain countries and the great diversity among the countries. The number of local actuaries is still small. Based on the data from IAA website, Brazil (1118 actuaries), Mexico (534 actuaries), Argentina (240), Colombia (8) and Caribbean (100) have associations that are full member associations.

Argentina, Chile, Mexico, and Panama also have other actuarial associations that are Associate Members of the IAA, but the number of members is not readily available. The role for the actuary in the region has moved one-step up, so the LAC region needs more local actuaries.

There are some important issues to be considered from Actuarial Consultants from abroad that would like to develop consulting work in the region. The issues are related to language, business meetings, cultural bias, local regulation and communication.

The language is a barrier. Spanish and Portuguese prevail, with the exception CARICOM (Caribbean countries with English as the dominant official language). English is frequently spoken, but not as much as is necessary for deep negotiations. Spanish and Portuguese must be used for clear understanding of details. Even though the great part of LAC Region speaks Spanish, there are some differences in meaning. So the Consultant must be aware of this differences to be as effective as he / she can be. Brazil has another difference because the official language is Portuguese. Few foreigners speak Portuguese. People from Latin America and Caribbean tend to use also our bodies to communicate ideas, mostly if there is a language barrier. Hand gestures are common.

Large insurers accept proposals in English. Medium and small insurers ask for local language proposals. Report is written in the local language. If the work is to be sent to a foreign country, an English report is also required.

Every country has a different business culture. Negotiations for important transactions are usually long, and decisions are made by the higher-ups. The speed in responding or the sense of urgency is not the same in every country. “I will get back to you” may not mean the same.

The conversation before and after the meeting on generalities can take a long time. It is advisable to talk about other general topics before addressing the main issue.

Another issue is related to local regulation and financial reporting. Accounting reports may be designated as IFRS but may differ in specificity and degree of disclosure and implementation. Statutory formats will differ from North America.

Latin America countries can be grouped into three broad categories based on their current phase of regulatory modernization: (1) countries in the process of implementing economic risk-based supervisory frameworks (Mexico, Brazil and Chile), (2) those transitioning to such a regime (Colombia, Costa Rica and Peru), (3) and the region’s remaining countries that have undertaken few or no actions to modernize. The trend towards economic risk-based solvency regulation is set to continue in the coming years.
Lack of data, or minimal data to perform actuarial analysis should be considered. Usually, data from
developed countries or Society of Actuaries/Casualty Society of Actuaries must be used and adjusted.
Sometimes, government data is not current even if it does exist.

Local taxation could be an issue, as it can result in double taxation. VAT is required in some countries. The
issue can put pressure on client project fees and collection.

The composition of a consulting team can vary and depends on several factors:
- the work to be developed and the profile of the client;
- the foreign consultant (if he speaks the language, knows the market, knows the rules); and
- the type of project (if it is a work to be presented locally, if it is to be sent to the foreign parent).

The advantages of a local team are: knowledge of the market and regulation, knowledge of the techniques
applied in the market, low cost of the services (billing rates in local currency), easy understanding of the
client needs, consultants available physically, same language and business culture. Disadvantages are the
possible lack of familiarity with sophisticated techniques and the fact that multinational clients usually
require multinational consultancies.

A mixed team can add knowledge of the techniques applied in local and other markets and knowledge of
sophisticated techniques/actuarial software.

A foreign team has the same advantages as a mixed team but with market unfamiliarity and high cost of
services. It could also bring some inflexibility because of knowledge of more sophisticated techniques
including actuarial software not applied in the region.

Sometimes, a project does not need to be so scientific because of the size, but some degree of complexity
can be useful. So innovation and creativity must be brought by the Consultant.

Differences in approach do not always mean that one is correct and the other incorrect. North Americans
can be very pragmatic while Latins can be wordier in discussions during the meetings and during the
project development. The ideal is somewhere between the two extremes and may vary between people
and the subject matter.

SERVING THE PUBLIC INTEREST CO-EXISTENCE OF ACCOUNTING AND ACTUARIAL
PROFESSION
Dinesh Chandra Khansili, Mithras Consultants

Introduction
1.1 You have to take risks, we will only understand the miracle of life fully when we allow the
unexpected to happen – Paulo Coelho. Is Actuarial profession heading towards to prove the quote true and
fear reflected in letter titled Reputation Damage published in the Actuary, Aug 2014 issue OR profession
would withstand preparing in advance with GCA theme – Changing Risks, Expecting the Unexpected?
This paper is intended to quash apprehensions regarding continuity of the profession and provide
information to combat the fear. This would help each actuarial professional to act as an ambassador of the profession, go beyond encircled boundaries, be vocal, present themselves with other professionals e.g. Chartered Accountants and use similar language in every media of the communication.

1.2 The writer of the above letter referred an extract published in ‘The Week’ magazine which in turn referred an article published in ‘The Times’. The allegations against Actuaries are serious. The article in newspaper focuses on collective defined contribution scheme. This states- ‘Worst of all income is determined by Actuaries, those masterminds responsible for the Equitable Life and with profits funds fiascos. The writer further writes- I worry about the legacy, but also the future of my profession.’

Is threat real?

2.1 The warning given in the letter is being echoed further. This states- the letter titled ‘reputation damage’ gave a cogent warning of dangers of George Osborne’s pensions ‘liberation’ plans. There are echoes of the 1980s when so many members of good final salary schemes were persuaded to transfer to inferior personal pensions. (George Osborne is UK chancellor who introduced Pension reforms including Pension Tax abolishment but simultaneously encouraged not to buy an annuity.)

2.2 Life Insurance, General Insurance and Pensions have been traditional areas where Actuaries made impeccable impact. The prospective Actuaries were examined at fellowship level in these three subjects along with fourth subject as investments. Very few Actuaries practiced in investment area. However some events like equitable life debacle and shrinking pension business in light of continued low interest rates thus increasing employers’ cost, flexibility to members awarded in new emerging jobs like software industries, bid to reduce complexities in increasing mergers and acquisitions, etc. led employers to shift to defined contribution (DC) schemes from defined benefit (DB) schemes. These events and saturation decreased the employment opportunities for Actuaries. Events also invited heavy criticism of Actuarial Profession for which Actuaries were traditionally not accustomed to. The employment opportunities in Pensions would further gravitate in UK as the budget announcement made in the month of March would altogether change the pension landscape. From April 2015, retirees in DC schemes may draw from the pension pot as much as they can, whenever they want with no obligation to purchase life time annuity. Such flexibility may lead to the demand of having full access to retirement funds in other parts of the world including India. The annuity business is down by 50% in UK and with such provisions, the annuity business may further dip.

2.3 The Actuaries have also started criticizing themselves and started realizing what the profession might have done in advance to combat. This is evident from an interview of CEO at Partnership and Actuary, UK. He states, “I am not going to pull any punches here. I am disappointed by the role the actuarial profession has played this so far. Immediately, people gravitated to thinking we need to tell customers what their life expectancy is. I think of life expectancy as roughly the point where 50% are still alive. If people manage to their life expectancy, then 50% will run out of money. Politicians have said we will inform investors about their life expectancies so they can manage to this point. The actuarial profession should be standing up and saying that does not work. The role of a professional should be to look after the public interest and I think the actuarial profession need to do much more.”
2.4 The other market is not showing improvement and unemployment rate which should have been around 3% is around 11% across globe and government policies increasing the unemployment rate around 20 to 25%. The insurance market is also falling in line of overall market. In India, there are many actuarial students who have yet to get employment in actuarial area.

**Analogy of current apprehensions of the existence of profession**

3.1 An analogy to the apprehensions about existence of actuarial profession is much publicised IRDA V/S SEBI row over ULIPs in India. ULIPs dominated the majority of the new business then. During those period apprehension was shown about existence of the life insurance industry by the life insurance employees. The fear was so intense that even Vice President and above level employees in private sector life insurance companies started asking whether Life Insurance Industry shall survive. The fear was more rampant in those categories of employees who had entered into insurance sector from other industries post insurance liberalization period. The argument given those days to quash the fear were- Life Insurance has been in existence from centuries. Life Insurance Industry and Mutual Fund Industries serve two different objectives. While earlier provide long term investments to individual and Government the other serves the aim of short term investment with restricted exposure to the equity market. Government would ensure the protection of both the industries.

3.2 The Life Insurance market witnessed that many regulations followed. There were initial discomfort to the life insurance players but ultimately it is proving to be good for the existence of both the industries. Similarly Actuarial profession has been in existence for centuries and it would withstand firmly in current turbulent period of warranted and unwarranted criticism.

3.3 This analogy may be further extended to an individual level. How false allegations present an opportunity to prove ourselves. Work review is an important part in the life of an individual in any profession during service period at any level in the organization and in any sector be it private or public. If we take a situation that during a surprise or regular visit of Branch office by the senior official of reporting office, on simple pretext the visiting senior official adversely comments on a hard working individual without going into details. The adverse comments made on individual, in turn gives him an opportunity to explain the jobs he/she is undertaking and how the job is being performed. This may be an eye opener for reporting manager and visiting senior official and they may have different outlook towards the individual. Can't Actuarial personnel in similar fashion collectively thwart the criticism today by their act and explanation?

3.3 The current review, criticism of actuarial profession and apprehensions about existence of actuarial profession is giving entire actuarial profession an opportunity to introspection, to justify the work they are performing, how they are performing, what are the professional and legal bindings on them while performing their duties and how the society is getting benefitted by their act. This may not stop here and may extend to zeal to improve further and be ready to face the challenges.

**Accept the truth**

4.1 Need is to accept the truth first. It is seen that very few actuarial professionals come forward to serve the profession. This may lead to a situation that these limited number of volunteers have influence on rest of the actuarial professionals OR this belittle the efforts of already thin number of actuarial professionals.
4.2 President IFoA correctly state that world is getting smaller and international collaborations can also help associations learn from each other. In current developments in UK Pension arena which allows 100% commutation, it may learn from Indian experience.

4.3 In my prior organization choice was given to the employees to opt to take 100% of accumulated provident fund contributed by the employer and employee or take a portion in lump sum and another in pension form. There used to be heated arguments by then sophisticated investment savvy employees that employees should have control over entire fund on retirement and why to annuitise. The flexibility over the total fund would provide freedom to invest in investment instruments yielding high returns which employer may not do.

4.3 Such discussions had strong fan following and many got influenced. But hard realities followed and the cash in hand of retirees was spent on purchasing bigger houses, owning car or bigger car, extra spending on leisure, go for higher sophisticated medical care etc. The individuals also learnt hard realities of economies of scales, nonavailability of funds to invest in by individuals due to minimum volume condition, senses getting weakened with advancement of age and so losing track of smart investment strategy, etc. The cumulative impact was that the money in hand fast started shrinking. This led to the demand from employees’ representatives to allow the existing and retired employees who chose 100% lump sum benefits on exit to deposit back the lump sum amount and get it annuitised. The pressure created and the paternistic approach of the employer yielded to the demand of employees’ representatives. The generation of employees was happy getting regular income.

4.4 Similarly there comes demand from a few annuity holders to take back the lump sum amount which was put to purchase the annuities. The terms and conditions of annuity policy do not allow the refund of purchase price. On querying in such cases one may come across revealing facts that the entire life savings, retirement funds, inherited property were spent on lesser important items than carrying on the life. Such annuity holders go back satisfied if facts are brought to their knowledge that this purchase price would also be spent in the manner all other money was spent. The purchase price is at least giving periodical income.

4.5 The profession which plays safe is not bound to excel. An Actuarial professional while studying come across calculated risk and return theory and study that in a set of data extreme values be excluded otherwise it may distort the results. Actuarial profession has emerged traditionally to provide solution for known and unknown risks. But at times Actuarial professionals become too cautious. A ship may be safe in harbor but that is not what the ships are for. This applies in toto to Actuarial profession. Indian insurance market has seen such cautious approach of Actuaries while designing the pension product during 2003-04. The market had products for accumulation phase but hardly one or two for payout phase. The policyholders were given option to purchase annuity from an open market. But this option proved ridiculous in absence of annuity products in the market. Accepting this situation, insurers filed annuity products offering very low annuity rates. Another example of cautious approach in Indian market was life products offering life cover as low as 101% of single premium. Such product could be demand from uninsurable clients but if the sale of such product would touch 90% or more then it is natural that regulator would step into.

4.6 These are exceptional cases of cautious approach as in the subsequent period Indian market saw intense competition in term products where Actuaries and reinsurers helped general public to get adequate cover at low premium rates. Annuity rates were also got revised upward.
4.7 For long standing organisations and professions, there exist written and un-written policies. Policy makers and common man form their views about organisations and professions based on both. This is natural wish from the policyholders that the Insurance companies would come to their rescue in case of adversity. Similarly for pension plans they wish that insurance or pension funds would pay the agreed amount during their life time. Despite of Insurer warning in unit linked policies in bold letters that risk is borne by the policyholders, policyholders’ expectation from insurance companies’ remain that they would get reasonable returns during policy term and adequate cover. This is genuine demand of policyholders from insurers of covering misfortune than pure investment depending on risk- return philosophy. Life Insurance companies are thus expected to provide diversification from market risk. Insurers and Actuaries have to ensure it in different markets.

4.8 Similarly the pension companies and scheme actuaries may not escape from responsibilities in UK in future if pension holders commute 100% fund and after some years spend all the money and do not make adequate provision for their retirement. Government would also blame insurers and pension companies that actuarial professionals did not advise with force. This is high time for actuaries to collect the data across globe and vehemently oppose the government stand to allow 100% commutation with the help of data.

4.9 Further, the criticism, move at different plateform to shred the wings of actuarial profession and fear among the actuarial professionals relating to profession existence provide ample opportunities to Actuarial professionals to explain more to the general public, clients and policy makers, what Actuaries do. One off event should not impede the pace of profession and younger actuarial professionals should not have second thought about the continuity of the actuarial profession.

Need of the moment to combat criticism

5.1 So actuarial professionals have to re-look to their profession activities intensely, provide guidance to fellow actuarial professionals by senior actuaries, accept and honour the work done by the fellow professionals, treat the student actuary as professional from day 1 and overall effective communication with non-actuarial personnel and take more time to write Executive Summary.

5.2 A former Indian Insurance Regulator was heard in his last working days in IRDA while addressing the actuarial conference in Mumbai, that he should have interacted more with the Actuaries and should have more knowledge about the actuarial profession. These non- actuarial personnel may be approached to write their experiences about actuarial profession and actuarial professionals and make them the ambassador of the actuarial profession.

5.3 An influential former regulator in European Union (EU) who is Liberal Democrat Politician and a former member of European Parliament (MEP) for south east of England and as described the most powerful woman in Britain to influence the EU Policy, in a recent interview to a question – ‘Are there ways in which actuaries should be doing more to engage with policy makers’ replied - ‘You should not be afraid of being technical. Not every MEP wants to or is capable of being highly technical, but there are some and you should share that knowledge. There is often a problem when the technical work goes to lawyers and the public affairs people, and by the time it emerges you are presenting a ‘this is a truth, this is how it must be’ and you have lost all the reasoning. If something is not understood then it would not succeed. If you have genuinely good case then it is usually listened to, especially when it affect real people and the real economy. That is where the European Parliament resides- asking ‘What is the end effect on our constituents?’. 
Reasons for being not worried about the existence of Actuarial Profession

6.1 The Actuarial Profession derives its inspiration from Bacon’s quote- "I hold every man a debtor to his profession, from the which as men of course do seek to receive countenance and profit, so ought they of duty to endeavour themselves by way of amends to help and ornament thereunto". There have been many actuarial professionals who have devoted their lives and are devoting their lives to the cause of the actuarial profession.

6.2 The profession has strong hold in traditional area- financial life cycle, risks and volatility in the life cycle, products- long term and other than long term, product risks, marketing strategies, application to financial services, assessing risk, product design, modelling- deterministic and stochastic, assumption setting and their sensitivities, assessing the capital need and different risks associated e.g asset risk, liability risk, valuing liabilities, pricing, investments, constructing investment portfolios, monitoring investment portfolios, solvency, profits and appraisal value, monitoring experience and applying the Actuarial Control cycle to business, etc.

6.3 Profession is adopting to new changes. The fellowship level exams have moved further. Currently having six subjects- Health and care, life insurance, general insurance, pensions and other employee benefits, finance and investment. It is accepting power of technology and new research e.g. genetics etc. The Actuaries demand is increasing in Enterprise risk management.

6.4 Actuarial profession belief in – serve the public and public interest ensure members comply with its codes of conduct and uphold its professional standard, support its members individually and enhance and may require, members to maintain their status collectively, a learned society which encourage research and facilitates the exchange of ideas between its members. Members have specialized skill, profession awards qualification with designatory letters to members who attain the requisite standard in its examination of their ability to practice its specialist skills, it provides means for and may require members to maintain their skills by continuing professional development (CPD), it follows code of conduct established by the profession and standard of practice within which the members are required to operate, profession has disciplinary procedures.

6.5 The profession is understanding that research and thought leadership are crucial to the long term sustainability of the actuarial profession. The profession across globe has built up a strong knowledge bank for the benefit of a diverse range of interested parties. From actuarial professionals to others in society e.g. academics and public policy makers. This way profession may widen the understanding of value that actuarial input can bring to business issues, not just in our traditional fields.

6.6 The Institute of Actuaries of India is making efforts in its own way. It is worried to increase employability of the unemployed actuarial students and other actuarial professionals. It is seeking ways and means to widen the scope for actuarial professionals in non -traditional areas. For this purpose a task force has been constituted which shall submit their report on time bound basis.

6.7 Institute of Actuaries of India views are being heard on Insurance Bill by Honourable Members of the Parliament.
6.8 The existing senior actuarial professionals in India must be capable of generation of employment for younger actuaries in their organization. For this purpose the actuarial professionals should shed the tag that they are too pricey. It may be true for senior actuaries but not for all. They may be cheaper than IT professionals.

6.9 Senior Actuarial professionals are capable to train the student actuaries for their employability in other than traditional actuarial areas. E.g. Metro Project or Bullet Train Project. The unique quality of actuarial professionals is that their study curriculum combine rate of interest/discount rate, probabilities assigned to the cash flows together with emerging cash flows and apply that in business area along with specifying the risk, identifying the risk, developing the solutions and monitoring the risk under commercial and general economic scenario. Generally the interest rate and probabilities studies are undertaken separately. CFA exams attempted of mixing interest rate with probabilities but it is just at initial stage. The actuarial profession is capable to quantify the risk e.g. Value at Risk (VaR).

6.10 Young and Old Actuaries in India are entering into General Insurance Industry and have started working in various areas as in Life Insurance companies. Earlier actuaries’ role was limited to the IBNR certification but now appointed actuary system is blown up. Agriculture Insurance Company has also recruited full time Appointed Actuary. Postal Life Insurance has also considered to widen the role of the Actuary. Once the actuaries in General Insurance industry, agriculture insurance company, postal life insurance would establish, they may create abundant opportunities for various classes of actuaries and actuarial consultants. The huge data has to be scientifically analysed. Agriculture insurance company would have to understand the crops and losses made due to various events. There would need be to model the events like Hud Hud cyclone. Postal Life Insurance would have to work scientifically and thus would create ample opportunities for different actuarial professionals.

6.11 IRDA has also been instrumental in increasing employability of Actuaries. The first step was Appointed Actuary system in Life Insurance Industry in India and IBNR certification in general insurance companies. IRDA further strengthened Appointed Actuary system in general insurance and health insurance companies and with profit actuary requirement. IRDA is also stressing upon mentorship for young actuaries.

6.12 PFRDA may also be impressed upon to work in line of IRDA for management of Pension Funds and schemes.

6.13 The profession requires peer review of the valuation results and compliance to its guidance notes in life and health, general insurance and pension area.

6.14 Dec 2013 of Actuary India magazine carried an article titled ‘Expand the Horizon’. The article highlights some aspects of Sol-II implementation which require expanding the horizon of actuarial personnel, e.g National Competent Authorities (NCAs) are required to ensure that AMSB (The Administration, Management and Supervisory Body) would be responsible for effectiveness of risk management system, setting risk appetite, risk tolerance limits and approving the risk management strategies and policies. Insurance Companies would require to take AMSB sign off for most material assumptions, document the materiality of each assumption and also rational of expert judgement behind each assumption. EIOPA has further stressed that- ‘It is not acceptable that AMSB delegates the full responsibilities. Further, it is proposed that risk management function would report information to AMSB, both on risks that have been identified as
potentially material and on other specific areas of risk either on its own initiative or as required by AMSB e.g underwriting and reserving risk, operation risk, asset liability mismatch risk, investment risk, liquidity risk, strategic and reputation risk, etc.

6.15 As stated earlier, Institute of Actuaries of India has recognized the necessity to create job environment outside the traditional actuarial areas so that all classes of actuarial profession may get jobs and excel in those areas. Some of existing and former actuaries would have worked in other than traditional areas e.g Cement Industry, GAIL etc and would have made an impact in their working. Such organizations may immediately be tapped.

6.16 There has been tradition in LIC of India to train the prospective actuaries and actuaries in different areas of Life Insurance other than core Actuarial, e.g. Underwriting, Claims, Sales, Marketing, HR, IT, etc. It is evident in market that those Appointed Actuaries trained in various departments of Insurance companies than core actuarial function have earned good name amongst actuarial and non-actuarial personnel within the company and in the industry. The current generation of classes of actuaries would be encouraged to work in other areas in addition to the core actuarial.

6.17 While discussing the processes of council, President of IFoA commented- 42% of our members live or work outside the UK and this number continues to grow. So world is getting smaller. He is happy to state it is encouraging to see more cross-practice research being produced-like examination of the social care cap. This way profession has engaged in creating employment opportunities in non-traditional areas.

Conclusion
7.1 Actuarial profession has already engaged in introspection and it is taking criticism in healthier way. The profession would jump back to old glory with its members’ dedication to the profession and effective communication. This would result into by not ignoring the alarming bells sounding in western countries. In India, Profession has not been criticized in public media yet it has engaged in introspection about IRDA stand that led to issuance of several regulations. Till the profession act in public interest and refrain from projecting extreme as projected threat of AIDS that would have sent fear waves in the society, there is no threat to the continuity of the profession. However the time has come for the profession to be relevant afresh and additionally explain the relevance of the figures quoted to the clients using common sense.

Acknowledgement
• www.actuariesindia.org
• www.actuaries.org.uk
• - Actuary India and UK magazines
• - Daily Newspapers
• - Expand the Horizon- Dec 2013 –the Actuary India by D C Khansili

About Writer;
Mr. Dinesh is currently associated with Mithras Consultants and is Actuarial Consultant to Aviva India. He carries insurance and actuarial experience of 33+years. This includes working and managing insurance and actuarial functions at ARM Life (Lagos), IRDA, Aviva and LIC of India.
He got exposed to insurance regulators at Australia, Malaysia, Singapore and USA and once assisted GoI in preparation of its annual budget.

He was active member of Delhi Chapter of erstwhile Actuarial Society of India and was associated organising initial GCAs.

He encourages students to take up actuarial examinations. Many papers presented in GCAs and written for Actuary India, Actuary UK and in-house magazines are to his credit.

E-Mail: info.mithras@gmail.com or dineshkhansili111@gmail.com

INSURANCE COOPERATIVES IN LATIN AMERICA
Ignacio Maricich - imaricich@forinsurers.com

The cooperative insurance sector is globally growing faster than the insurance market as a whole. Latin America has the same pattern of growth. However, in Latin America, the cooperative legal way to run the insurance activity is prohibited by the law in most of the countries.

Cooperatives and Corporations
Cooperatives and corporations are both a legal way to associate. The Cooperatives are owned by and operated for the benefit of their affiliates and Corporations are owned by shareholders for profit and may be operated as a business to the general public. Benefit and profit may sound like the same thing, but I think you can say “profit is always a number”.

The Insurance Sector in Latin America
The insurance total premium written in Latin America and the Caribbean is close to 4% of total premium of the world, with a penetration ratio of 3% of GDP and a Premium per Capita of USD 291m near half of the world average. |table 1

Total population of Americas is close to 1 Billion. Latin America and the Caribbean total population is close to 630 million and around half of them (52%) are in Brazil and Mexico. Brazil and Mexico also has almost the half of the premium (45%) of Latin America.

<table>
<thead>
<tr>
<th>Table 1: Insurance Market Figures</th>
<th>Total Premium</th>
<th>% GDP</th>
<th>Premium Per capita</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>4,601,170</td>
<td>6.13</td>
<td>645</td>
<td>100%</td>
</tr>
<tr>
<td>Advanced</td>
<td>3,819,748</td>
<td>8.07</td>
<td>3,579</td>
<td>83%</td>
</tr>
<tr>
<td>Emerging</td>
<td>781,421</td>
<td>2.65</td>
<td>128</td>
<td>17%</td>
</tr>
<tr>
<td>Latin America (LAC)</td>
<td>178,022</td>
<td>3.01</td>
<td>291</td>
<td>4%</td>
</tr>
</tbody>
</table>

(1) Latin America figures include the Caribbean (LAC)
(2) LAC is considered part of the Emerging Countries

You can explore these and others insurance indicators at SwissRe Sigma here: http://www.sigma-explorer.com/
The Cooperative insurance sector in Latin America

According to ICMIF Report, the penetration of insurance cooperatives is growing worldwide from 23% in 2007 to 27% in 2014 (in Latin America 10% in 2007 to 12.1% in 2014). It means, the sector is growing faster than the market.

Premium mix by line of business in Latin America Cooperatives is 17% Life and 83% Non-Life, where motor line has the 60% of Non-Life premium in reason of the mandatory motor insurance (liability). [graph 1]

Brazil, Venezuela, Argentina and Mexico have together the 80% of the total Cooperative insurance market of Latin America. [graph 2]

The most important market share of Cooperatives Insurance are: Brazil (7.0%), Chile (9.2%), Mexico (10.1%), Peru (11.7%) Venezuela (22.1%), Argentina (23.9%) and Paraguay (30.4%).

Several big multinational mutual insurers have a strong presence in the region, like Mapfre, Liberty Mutual and Bupa.

Locally owned insurance cooperatives plays a very important role in their own countries and some of them have a very important volume of premiums. For example, Sancor Seguros has almost the same written premium than the entire Panamanian insurance market. [table 2]

Most of the Insurance Coops are Corporations (it’s not their choice)
The cooperative movement has a very big barrier in Latin America and is that regulation of most of the countries only accept corporations to run the insurance activity. So it’s not possible to run the insurance activity organized as a cooperative and in some countries old cooperatives has been obligated to transform into corporations. In these same countries, it is possible to run many kinds of activities as a cooperative, even financials, except insurance.

It may be the cooperative philosophy
When some company is growing faster than the market, without further investigation, you may say it’s because they are doing something better. But if the entire cooperative movement is growing faster than the market, they may have a secret. May be is something about cooperative philosophy (more research required).

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Table 2: Biggest locally owned insurance coops by country

<table>
<thead>
<tr>
<th>Cooperative</th>
<th>Country</th>
<th>Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sancor Seguros</td>
<td>Argentina</td>
<td>1,285</td>
</tr>
<tr>
<td>Unimed Seguros</td>
<td>Brazil</td>
<td>1,012</td>
</tr>
<tr>
<td>La Equidad</td>
<td>Colombia</td>
<td>185</td>
</tr>
<tr>
<td>Mutual de Seguros</td>
<td>Chile</td>
<td>60</td>
</tr>
<tr>
<td>Surco</td>
<td>Uruguay</td>
<td>23</td>
</tr>
<tr>
<td>Fedpa</td>
<td>Panama</td>
<td>18</td>
</tr>
<tr>
<td>Tajy</td>
<td>Paraguay</td>
<td>16</td>
</tr>
<tr>
<td>Columna</td>
<td>Guatemala</td>
<td>13</td>
</tr>
</tbody>
</table>

You can read the ICMIF reports of Latin America and Global Market Share here: [http://www.icmif.org/knowledge/financial-research](http://www.icmif.org/knowledge/financial-research)
OUTGOING CHAIR’S REPORT
Margaret Tiller Sherwood, Past Chair

It has been my privilege and pleasure to serve as IACA’s Chair these last two years, and I have enjoyed it very much. Below is a list of accomplishments during that time.

At ICA 2014 we had six bursary recipients. One of them, Kudzai Chigiji, won our paper prize at that meeting. Another one, Rodrigo Silva, became our IAA representative in March 2015. Kudzai and several others have contributed articles to our newsletter.

In 2010 IACA had helped form the Asia Pacific Association of Consulting Actuaries (APACA). It was formed as a subsection of IACA with the intention that it eventually would become a separate organization. In 2014 that was accomplished with a smooth transition to a new organization that was renamed the Actuarial Consulting Congress of Asia (ACCA), with whom IACA maintains a good working relationship.

Starting in 2014, IACA expanded its members’ only newsletter and issued one public newsletter. This effort has been led by the IACA Publications Subcommittee Chair Gerd Warnke with much help from Editor Rade Musulin and the rest of the Publications Subcommittee.

In 2015 we ran two partial tracks at IAA Joint Colloquia. The first was at the 2015 Oslo Joint Colloquium with PBSS and the IAALS, sponsored by the Norwegian Society of Actuaries. The second was at the 2015 Sydney Joint Colloquium with ASTIN and AFIR/ERM, sponsored by the Australian Institute of Actuaries. We offered bursary programs at these meetings and had two recipients at the Oslo meeting.

We had a great 2016 Joint Colloquium, for which I thank Joint Colloquium Chair Adam Reese, Program Committee Chair Andrew MacRae, Sponsorship Committee Chair Eduardo Lara, our event planning firm Managing Matters, the IAA staff (particularly Christian Levac), and the many volunteers who have worked hard to make this Joint Colloquium a success. This was an incredible undertaking amongst IACA, IAAHS, PBSS, and the International Pension and Employee Benefits Lawyers Association working in close cooperation with the Canadian Institute of Actuaries. IACA had a bursary program at this meeting and had one recipient, Cristina Mano.

During 2014, 2015, and 2016 we participated with several other IAA sections in members’ only webcasts.

We have continued working with the ICA 2018 Committee on a consulting track. The effort is being led by IACA Committee member Gerd Warnke with assistance from other IACA Committee members.

We have looked at other ways to serve IACA members, several of which have logistical issues that make them unrealistic. We are continuing to see if those issues can be overcome and to look for additional opportunities.

I thank the people who have been on the IACA Committee and on the IAA staff during this time. Without their help, all of this would not have been possible.
If you are interested in writing an article for our next newsletter or have any questions, please contact the following:

Cathy Lyn - lcathy88@yahoo.co.uk
Shubhash Gosine - sbgosine@hotmail.com