

# Actuary **Australia**

**Is Something Happening in South Africa?**

**5th Financial Services Forum – Event Review**

**Home Equity Release – An Untapped Market**

**A Tale of Three Cities – Canberra, Melbourne, Sydney**



I'm writing this editorial in the early days of the Melbourne Storm debacle. It raises serious questions regarding integrity. Surely integrity is doing the right thing because it is the right thing – not “doing what you can get away with”.

Integrity is a serious issue for us as actuaries. How do we keep our integrity yet be commercial? I know that is something I struggle with as I see things as very black and white, but what do we do when there are shades of grey? Our *Actuarial Pulse* (pp 8-10) this month touches on these areas of personal and professional integrity.

Generally I think of myself as very honest (too direct some might say and they would probably be right). However there were a couple of questions in there that made me squirm. It was a good reminder to me that keeping quiet about something I was not happy about is not honest and explains why I had felt so much better when I expressed my opinion (albeit a month later).

We did debate about whether to even put these questions to the profession – but the Editorial Committee agreed that the results would be very interesting, and of course would make good reading. So I hope you were all brave enough to answer honestly and I am keen to see the outcome in this edition.

We have a diverse range of articles this month which I hope you enjoy reading as much as I did. As always please feel free to send in articles, or send ideas in for articles if you are not comfortable writing them yourself. Although, it is good to step out of your comfort zone every so often. – CRH ▲

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## Actuary Australia

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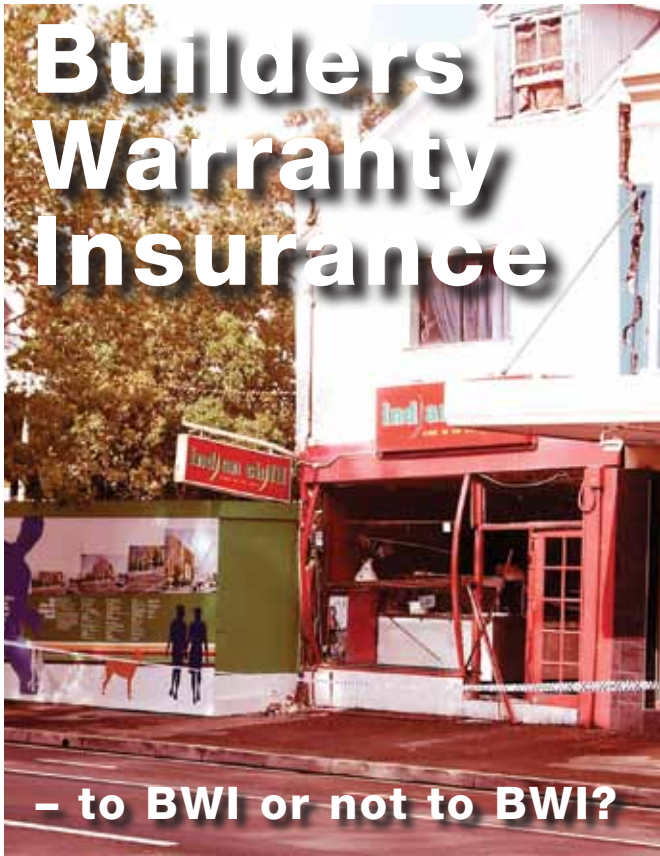
### New Website

The Institute website has been redesigned to make it easier for members to find what they are after. The site is also more robust and provides a foundation on which to offer a media rich experience throughout the second half of 2010.

Content is still being uploaded and this will continue over the next few months.

Visit [www.actuaries.asn.au](http://www.actuaries.asn.au) – we would welcome your feedback. Comments should be sent to [actuaries@actuaries.asn.au](mailto:actuaries@actuaries.asn.au)

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**“History does not repeat itself but it does rhyme”**  
 – Mark Twain said something of the sort.

**“History does not repeat itself, historians do”**  
 – Max Beerbohm added this piece of wisdom.

**“History repeats itself, historians repeat each other”**  
 – credited to Philip Guedalla.

Perhaps a quote from the movie, *The Matrix*, sums up recent developments in the Australian Builders Warranty Insurance (BWI) market best: “A déjà vu is usually a glitch in the Matrix. It happens when they change something.”

As BWI is mandatory in most states, if a builder cannot get insurance, they cannot work. Their apprentices and sub-contractors cannot work. Developers cannot build new homes. Instead of being converted into something more useful, raw materials pile up. Potential housing supply shortages are exacerbated. Mandatory insurance inadvertently creates a direct link between the supply of insurance and the progress of construction projects. This is a politically sensitive issue that gets a lot of media attention, along with all the reputational risks that goes with it.

**What BWI covers**

In essence BWI is insurance to protect consumers against builders with inadequate financing, or builders who produce sub-standard, shoddy work.

In practice, coverage varies significantly between states. BWI is available both on an annual basis and for specific construction projects. It is written on a ‘losses occurring’ basis and exhibits potentially long tailed claims development as illustrated below.

Years	1-4 yrs	5-10 yrs	11-15 yrs
Exposure from policy inception	Building work and large developments can take several years to complete.	NSW and Victoria policies cover structural defect claims that are reported within six years of completion of the building works	Uncertainty regarding coverage can result in lengthy court disputes before a claim is finalised.

A key criterion when it comes to BWI coverage is whether it is provided on a ‘first resort’ or ‘last resort’ basis. First resort cover (as provided in Queensland) is supposed to pay out upon the confirmation of sub-standard building work, leaving the insurer to seek recovery from the builder. Last resort cover (used in NSW and Victoria) requires the consumer to initially pursue the builder to rectify the problem, and only provides cover in aggravated circumstances, currently limited to a builder’s licence being revoked, or the death, disappearance or insolvency of the builder.

In Queensland, the mandatory cover is more or less for six and a half years from inception of the policy. In NSW and Victoria cover is largely mandatory and provides for structural defects reported within six years of a building being completed (two years for non-structural defects). Further state specific coverage information can be found on the websites of the organisations listed below.

State/Territory	Organisation / Authority
NSW	NSW Office of Fair Trading
VIC	Building Commission of Victoria
QLD	Building Services Authority
WA	Departments of Consumer and Employment Protection
SA	Office of Consumer and Business Affairs
TAS	Consumer Affairs and Fair Trading
ACT	ACT Planning and Land Authority
NT	Building Practitioners Board

**Australian BWI Profitability**

As you would expect, experience and profitability varies by state and detailed historical information is not readily available in the public domain. However, a report issued during November 2008, by the Senate’s Standing Committee on Economics, *Australia’s Mandatory Last Resort Home Warranty Insurance Scheme*, noted that it had been provided with confidential company loss ratio information. This indicated that the 1997 to 2001 underwriting years had been highly unprofitable, with the post 2002 reform years returning to profitability.

The long tailed nature of BWI claims development can mask the true extent of losses for many years. This uncertainty and the pursuit of

increased premium might have slowed insurers' response to the developing BWI crisis in the late 1990s. The collapse of HIH in 2001 was the eventual catalyst for reform.

Commentators have suggested that HIH accounted for approximately 30% to 40% of the BWI market in 2000/01, and their sudden exit left a gaping hole in supply. Other insurers and reinsurers in the market were, at the same time, raising concerns regarding the ongoing viability of the industry, given the emerging realisation that the business had been making losses. To retain insurer participation, the NSW and Victorian governments jointly announced a plan to reduce the claims burden and stabilise the BWI market, on 13 March 2002. This plan included, amongst other measures, a move to a last-resort scheme and a reduction of coverage limits.

### Uncertainty Risk

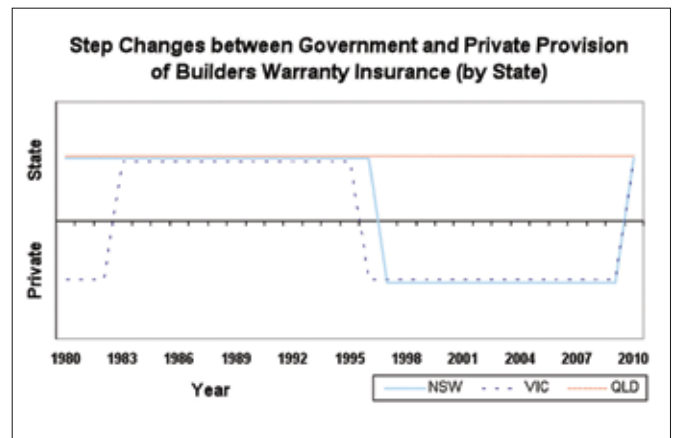
Legislative changes and developments in the courts in the last two years have caused significant uncertainty for providers of BWI. A NSW Supreme Court ruling, *SP57504 v BigCorp*, temporarily set a precedent for claims to be covered beyond policy time limits (subsequently clarified through an amendment to the regulations). *Waterbrook at Yowie Bay Pty Ltd v Allianz*, raised questions about whether lost rental income, alternative accommodation costs and business interruption costs should be covered by BWI policies. Applying to all policies issued after 19 May 2009, the *NSW Home Building Amendment Bill 2008* added a fourth 'trigger' (builder's licence suspension or cancellation) to last resort covers, and more recently, the legality and enforceability, of requiring builders to pledge security, has been questioned.

### History Rhyming

In 1996/7 the NSW and Victorian Governments decided to privatise BWI, following the 1993 Dodd inquiry, which recommended that "there was no reason for the Government to continue in its monopoly of the insurance market and moreover its political ownership leaves it vulnerable to pressure not faced by private insurance".

In 2002, to avert a worse supply-side crisis, the state Governments opted to retain and attract more insurers into the industry by reducing the mandatory coverage, with an associated reduction in claims cost. This did not result in a long-term sustainable solution, and arguably resulted in a product for which there would not have been much voluntary demand.

Competitiveness in the private market has in all likelihood driven BWI premiums down in the last few years and a number of companies in the industry have been reassessing the attractiveness of providing cover. CGU announced its exit from the NSW market place from 1 December 2009, Lumley did the same from 1 January 2010, and most recently Vero announced that it would exit the industry from 1 July 2010. With QBE and Calliden the only insurers remaining locally, the NSW State Government decided it was time to intervene, announcing its intention to return to a state-funded scheme from 1 July 2010. The Victorian government has subsequently followed suit. This is where the 'history rhyming' bit comes in...



### The proposed scheme in NSW and Next Steps

The NSW Office of Fair Trading website provides some useful information regarding the new proposed state-funded scheme. It is proposed that builders who have eligibility with existing insurers will be transferred to the Government scheme automatically (although some additional consideration is being given to cases where builders have pledged security).

Amendments to the Home Building Act are being drafted, to allow implementation of the scheme, with the website noting that other major changes are unlikely to be made.

The website goes on to say that all of the current insurers and those that recently exited the market, have been invited to submit expressions of interest to participate in the new scheme, as service providers. It proposes that insurance services (presumably including claims handling and premium administration) will be supplied by selected service providers. This will be done on behalf of the Government, which will take on the risk and provide the necessary funding.

Further details have yet to be announced, so expect a lot of activity in this space in the next couple of months.

### The Way Forward

Queensland provides a mandatory, state-funded, first resort BWI scheme, that covers losses reported within six and a half years of policy issuance. Tasmania has made cover voluntary since July 2008. Things are about to change in NSW and Victoria, where both states have a mandatory, privately insured industry, differentiating between structural and non-structural defects, with cover provided for up to six years following completion of building works. The other states have their own idiosyncrasies. Isn't the way forward obvious? Go back! We need to find the BWI worm hole so that we can start again. ▲

**Malcolm Jewell**

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*Disclaimer: This article reflects the personal views of the author*



One of the pleasurable activities of being President is the chance to welcome our new actuaries into the Profession. The Institute held its second Professionalism Course of the year during April, which was attended mainly by those who qualified for the new actuary designation. I had the opportunity to speak with many of the new actuaries at the dinners held on Monday and Tuesday. This reinforced for me the benefits to be gained from the decision taken last year to expand the actuary designation to those who have completed Part II, have three years' relevant work experience and have completed the Professionalism Course. All our new actuaries are a credit to the profession and we are strengthened by having these professionals publicly acknowledged and accepted as actuaries. For some members this was a chance to re-engage with the profession, while for others it represented the opportunity to truly feel a valued part of the actuarial community.



Professionalism Course Dinner in April

One way of re-engaging with the profession is to join a committee or a taskforce. The Institute has many opportunities for volunteers and there are plenty of ways to get involved. Not only can members provide a valued service to the Institute as part of a committee, but this is also a great chance to meet new people in an environment where you are all working towards a common goal. Volunteering may also provide the opportunity to expand skill sets or knowledge beyond that called for in a current role.

I would especially like to extend an invitation to our new actuaries to get involved! Remember, any member can join committees or taskforces – in most cases you do not have to be a Fellow.

By a quirk of timing, we will have six vacancies on Council at the end of 2010. If you have ever thought about joining Council, now is a good time to put your plans into action. We are interested in having a wide cross section (gender, background, age, practice area) of members apply – a diverse Council will reflect the diversity of our profession.

Council is ultimately responsible for all the activities of the Institute. Council deals with major issues of strategy and policy. It is responsible for the leadership, governance and stewardship of the Institute. This means articulating Institute priorities and preferences and approving the strategic plan. Also, Council must ensure the Institute is well run and managed and adheres to stated policies and procedures. Council's stewardship role means that it is responsible for maintaining the Institute's standards and reputation. It takes a pro-active risk management role and actively maintains and enforces ethical standards.

Being on Council puts you at the hub of the profession – Councillors are kept fully informed on all key issues. Councillors are in a position to consider the strategic drivers affecting the profession and recommend the actions to take to make sure the Institute is well placed for the future.

Council meets six times a year for a five-hour meeting. It is estimated that the time commitment for being a Councillor is approximately one day a month, including the time spent at Council meetings and reading the Council papers. In addition to Council responsibilities, most Councillors are also involved on other Institute Committees (such as a Practice Committee or a Council Committee). The work on these other committees is in addition to the time spent as Councillor. I encourage you to think about being a Councillor. I have certainly enjoyed and benefited from my own time on Council.

The Institute is in the process of revising its CPD strategy, to make sure that we have a comprehensive plan to address the CPD needs of all members. This initiative is being led by the Education Council Committee (ECC), which has responsibility for the education needs of all members – both pre and post qualification. Some key points to address are the typical subject areas to be covered on a regular rotating basis, at various depths. This will vary by each of the major practice areas. In addition, where practice areas or member numbers are too low to justify standalone sessions, we are looking at where we can potentially partner with others in providing CPD opportunities. A further possibility is in 'soft skill' areas, where members can improve their general business skills in areas such as report writing, communication and understanding stakeholder viewpoints. Some recent courses have been offered in these areas on a trial basis to gauge member interest. ▲

**Bozena Hinton**

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# Christine Brownfield



## Title...

Head of Strategy and Finance, Insurance (but I'm currently on maternity leave so mostly 'Mum')

## Organisation...

ING Australia (and my family for the Mum bit, though more a 'disorganisation' since our second set of twins arrived a few months ago)

## My favourite energetic pursuit...

Step moves aerobic classes ... the footwork takes so much concentration that I forget I'm puffing

## My favourite meal...

Vegetarian degustation – with the accompanying wine – anywhere that offers it

## The last book I read (and when)...

Just finished *The Fifth Vial*, by Michael Palmer

## My favourite CD...

*Fallen* by Evanescence

## My interesting / quirky hobbies...

Nothing very quirky; I enjoy reading crime fiction whenever I get the chance

## My ideal weekend day...

It's all about the nights at the moment – any day is ideal if it follows a good night's sleep. But perhaps an outing with my family where everyone has fun, somehow reading the weekend papers, then dinner out with friends

## If stranded on a desert island I'd take...

Lots of books

## The person I'd most like to meet...

An aunt who died when I was two years old

## What gets my goat...

The processes/ bureaucracy in so many organisations (and not just financial services!) that creates difficulty and complexity where there should be simplicity

## What I wanted to be when I grew up...

It kept changing but there was a long spell where I wanted to be a food technologist

## Why I decided to become an actuary...

I enjoyed maths but was not sure what to do with it then near the end of Year 12 a careers teacher suggested being something I'd never heard of – an actuary – and I'm glad she did!

## Where I studied to become an actuary...

Melbourne Uni when the Part I actuarial subjects were via correspondence with Macquarie, then Macquarie when they briefly offered a Masters course in actuarial studies, then specialist subjects via the Insitute

## Qualifications obtained...

B Com, M Ec, FIAA, F Fin

## My work history...

I started out at (then) Norwich Union, spent a couple of years consulting in the financial service practice of (then) Tillinghast, and have been at (then) Mercantile Mutual/ (for now) ING Australia for the last 11 years in a few different roles

## What's most interesting about my role...

Working within a business unit is a pleasant change from being part of a corporate function and it has been interesting to have exposure to all parts of the insurance business unit

## My role's greatest challenges...

Fitting it into three days a week

## Who has been the biggest influence on my career (and why)...

Lots of people have had an influence but two stand out. At Norwich, Tim Chambers' mentoring and his confidence in me as a newly qualified actuary were instrumental in developing my own confidence as an actuary. Paul Bedbrook at ING encouraged my contribution across the business and beyond the confines of the statutory appointed actuary role

## My most important decision...

Deciding that I did have the experience and confidence to take on an appointed actuary role

## My biggest regret...

Nothing major

## I'd like to be brave enough to...

Try skiing again – the last time I skiied I injured myself, but my partner loves skiing and my three year olds are very keen to try it

## My proudest moment...

The births of my children

## The best party I've had...

Our housewarming many years ago; I didn't even make it out of bed the next day

## The Olympic sport I'd like to be in...

I guess some sort of skiing in the winter Olympics would ensure my fear was conquered

## If I were a car, I would be a...

Something fuel efficient that easily fits the child restraints required for four kids under four

## My earliest memory...

Counting out pegs with my mother while she hung out the washing

## My most embarrassing moment...

Turning up to the opening dinner of a work conference in Prague wearing tracksuit pants and a fleece as my luggage had been delayed on route from Heathrow

## In my life I'm planning to change...

I want more sleep

## The age I would like to stay...

Thirty-five, plenty of life experience but still young(ish)

## My next holiday destination is...

Hopefully, relaxing

## My best advice for my children...

Right now - stop scratching your mosquito bites

## Four words that sum me up...

Calm, stubborn, conscientious, caring ▲

## Christine Brownfield

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# The Actuarial Pulse

The Actuarial Pulse is an anonymous, web-based survey of Institute members, run on a monthly basis, giving members an opportunity to express their opinions on a mixture of serious and not-so-serious issues.

**Next Survey** A new set of questions will be available in July 2010.

**What would you like to know?** If you have a question you would like to put to the membership, email it to [editor@actuaries.asn.au](mailto:editor@actuaries.asn.au)

**Results** Report generated on 16 May 2010, \*365 responses to the survey

The catalyst for this survey was my involvement in the Professionalism Course, particularly the discussions around ethics and integrity. I am genuinely curious to identify the areas of business life where actuaries are most likely to stray from an objective interpretation of 'honesty'. I am also interested in the rationale for those departures.

The other purpose of the survey is to provide a gentle reminder of the wide range of possibilities of falling short of one's own high standards...

The following table shows a breakdown of the respondents by their membership status, which is used for the analysis throughout the article.

Accreditation	Count
Fellow	235
Associate	65
Student	30
Other	35

## Q.1 Running late for a meeting and not giving the real reason (in the last three months)?

Accreditation	No	Yes
Fellow	76%	24%
Associate	82%	18%
Student	70%	30%
Other	91%	9%

The result indicates that it is not unusual for people to give false excuses.

The comments from those that answered 'Yes' reflected a range of excuses ● saves the explanation of a long story ● necessary white lies ● personal reasons, and reflected people's principles ● what matters is the total contribution, not when it is done.

The comments tied to the 'No' answers were generally individual commitments to either truth or punctuality or even habitual "tardiness that is well known and no excuses are necessary."

## Q.2 Have you had a sick day when you haven't really been sick (in the last year)?

Accreditation	No	Yes
Fellow	91%	9%
Associate	75%	25%
Student	77%	23%
Other	100%	0%

It was recognised that this didn't apply to everyone. Nevertheless, an overall result of 12% of members 'chucking a sickie' is worth exploring. One category of 'Yes' responses legitimately applies to family responsibilities, i.e. the person was not sick but was using a sick day to care for a family member, especially those with young children. Some clues to the nature of the other category of 'Yes' responses could be obtained from some refreshingly candid responses ● Mental Health Day ● couldn't be bothered going to work that day ● hung over.

Unsurprisingly, when you are a sole contractor or a casual employee, sick days mean that you don't get paid, "so all that happens is that you end up with a hole in your pocket."

## Q3 Have you modified your CV, omitted or exaggerated a role, project, achievement or title (in the last three years)?

Accreditation	No	Yes
Fellow	90%	10%
Associate	83%	17%
Student	77%	23%
Other	79%	21%

There were a number of issues that were raised by this question. Some people explained that it was a good idea to omit details for practical reasons, given their lengthy work history, which is understandable. There were also plenty of references to the principle that a CV is a "marketing document" and, as per my column in May AA 2009, I support that proposition. The challenge is to identify where to draw the line between fact and fiction when "selling yourself and maximising your packaging", as one person put it.

It makes sense to "highlight strengths not failures" but does that mean it is OK to leave out a recent role that was a poor experience? What about claiming ownership for a great project where you were a minor participant? One neat answer was "to put the most attractive yet truthful case forward".

There was one other side issue. I was surprised how many people do not have a current CV because they have been in the same company/job for some time. It may be worth pointing out that some people obtain satisfaction from updating their CV on an





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annual basis to reflect their achievements, whether or not they are looking for a new role. And it certainly helps when or if the time comes when they really need it.

However, some members appear very lucky and don't require "a little padding around the edges" or even "a total restructure" of their CV. They have "no need to exaggerate, as [they] really are that awesome" and their "work clearly speaks for itself." What a fantastic position to be in!

**Q.4 Have you exaggerated or misrepresented figures for remuneration discussions (in the last year)?**

Accreditation	No	Yes
Fellow	98%	2%
Associate	94%	6%
Student	77%	23%
Other	94%	6%

Well there are certainly not many people pushing the envelope here; although some responses noted that the adverse economic environment over the past year was certainly a contributing factor. The aspect that concerned me was the number of people who do not feel that there is any room for negotiation in their organisation ● No ability to discuss my remuneration ● I take what is offered – no discussion ● I haven't ever been in a position to be able to discuss remuneration

Perhaps this is another assumption that could be questioned? The question seems to have provoked two respondents that suggest "perhaps should exaggerate the figures as my pay is always below average" and "in hindsight maybe I should have, because there are some very overpaid people in the market."

**Q.5 Have you discovered a material problem or error but chose not to raise the issue (in the last year)?**

Accreditation	No	Yes
Fellow	98%	2%
Associate	94%	6%
Student	77%	23%
Other	94%	6%

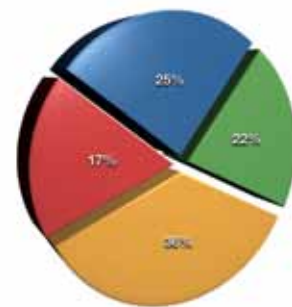
It was gratifying to find, as expected, that there were very few Yes responses from Fellows here. There is a lot of emphasis in the profession, and the Professionalism Course, of "raising your hand" in these circumstances and the comments supported this. The most common theme was that is failing to raise the issues when first discovered will "always come back to bite you." "It will eventually escape from under the rug," therefore it "is easier to tackle the molehill now" and "always deliver any bad news early."

**Q.6 Have you agreed to timeframes that you know are unrealistic (in the last three months)?**

Accreditation	No	Yes
Fellow	72%	28%
Associate	75%	25%
Student	60%	40%
Other	81%	19%

Yes Responses: (% comparison)

- Fellow
- Associate
- Student
- Other



This was very interesting with a material number of 'Yes' responses, especially amongst the students. The comments indicated that there are two broad camps. The first camp is the 'optimist camp'. Words like 'hope', 'aspirational' and 'stretch' were used to defend the 'unrealistic' timeframes. I agree that optimism is not a 'cardinal sin' (as one person rationalised), but when does optimism become misleading and potentially dishonest?

The second camp is the 'victims camp'. I was very sad to read how many responsible professionals feel that timeframes are 'imposed' and that they 'aren't given the choice'. It was clear that many people feel they have limited power or that 'everyone does it'.

I appreciate that clients, whether they be internal or external, are demanding and that there are some immovable deadlines (eg 30 June). However, I am concerned that agreeing to an unrealistic deadline could be compromising one's reputation. At least some of the victims were not passive, so at a minimum, it may be worthwhile (as per a couple of comments) to express your disagreement even if it will be 'ignored'.

**Q.7 Have you attended a meeting where you remained silent on an issue, even though you could have added to the outcome (in the last three months)?**

Accreditation	No	Yes
Fellow	68%	32%
Associate	62%	38%
Student	60%	40%
Other	69%	31%

**Q.8 Have you attended a work meeting where you expressed agreement (explicitly or by silence) on a conclusion or action that you didn't support (in the last three months)?**

Accreditation	No	Yes
Fellow	62%	38%
Associate	65%	35%
Student	60%	40%
Other	69%	31%

There did not seem to be many people actively agreeing to courses of action that they did not support so the following section looks at these two questions together as there is a common theme of silence and a common response rate with over one third answering 'Yes' to these questions. Most of the many comments were defending or explaining their silence.

There were a number of references to meeting behaviour in response to Question 7, citing the personalities and status of those in the room, as well as time pressure and conclusions that had been drawn well in advance of the meetings taking place.

It was reassuring to know that many members felt that whilst "sometimes useful information is confidential and although it would help the discussion I may not have the right to share it" and hence "compromise the other person's position and integrity."

It was sad to read how many professionals felt there "was no point" or the "decision was already made," especially when "ego and emotions come into play." More alarming was the common view that "consensus is very important". Certainly, once a decision is made by a team, it is important to support the team, even if the decision was contrary to one's individual view. My concern with this question is how often that actuaries are remaining silent **before** the decision is made. Many people pointed out the importance of "picking your battles" because "you can't fight them all". It may be worth reflecting on the clarity of your criteria for "picking your causes".

It is difficult to speak up for something that you believe in especially if "you know that your concerns had been ignored before." As one respondent eloquently put it "meeting attendees do not always want to hear about the elephant in the room, and it can be thankless to be the one to raise it."

However, it may also be worth thinking about the types of decisions that are worth standing up for. It would be a shame if the passive approach became so habitual that we forgot how (and when) to speak up or lost sight of what was really important to us, especially if you have "some reservations about the ethics of the decision makers at the meeting."

**Q.9 In the last 12 months have you been uncomfortable with a report that you were responsible for (e.g. scope, assumptions, purpose, results) without clearly detailing your concerns or the limitations?**

Accreditation	No	Yes
Fellow	91%	9%
Associate	89%	11%
Student	77%	23%
Other	100%	0%

Like Question 5, it was reassuring that there were a lot less Yes responses here, given the emphasis of the Code of Conduct. I would have liked a little more insight into the circumstances of the Yes answers but there were not many comments. The few 'Yes' answers tended to reflect discomfort with the personal accountability associated with important reports – and this is probably a good thing.

One important thing to note is that the use of "caveats, caveats, caveats" will not always be sufficient in ensuring that any uncertainty, unreasonable assumptions or limitations are covered off. The position of the caveats, assumptions and reliances within a report is important. If they are buried at the back of the report, in amongst tables and figures, there is a much greater chance of the outcomes and conclusions of the report being used incorrectly.

**Q.10 Have you felt uncomfortable in answering these questions?**

Accreditation	No	Yes
Fellow	85%	15%
Associate	85%	15%
Student	83%	17%
Other	100%	0%

This was an opportunity for more general responses as well as a measure of the extent to which the survey achieved its second purpose. It was satisfying to read how many people found that the survey "made you think" or caused them to reflect on "some of the decisions I make". The comments also illustrated the range of perspectives among the survey participants.

Some traditionalists felt that "every professional should have been able to answer no" while others felt that "answers are not black and white". One person thought it was "hilarious" and one person "went numb from the boredom". With an increasingly diverse membership there will always be room for different values and ethical positions. I hope that we can reconcile that diversity with a minimum threshold of integrity that enhances the reputation of the profession.

Finally, to those respondents who appeared concerned about their privacy, I can assure you that when all responses arrive they are, and will remain, anonymous!

Further thoughts, observations and opinions are most welcome, especially on the final comments of one respondent "these questions have made me think... whether acting in a truly ethical way can come across as sanctimonious and produce the 'wrong' long-term result." ▲

**Martin Mulcare**

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**With assistance and colour from Dave Millar**

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**Editor's Note:** If you have a set of questions you would like to ask the profession, why not be a 'guest' Pulse Reporter for a future edition. Please contact me via [Editor@actuaries.asn.au](mailto:Editor@actuaries.asn.au) for further information.



# Is something happening in South Africa?

I was once told a story by my father when he visited the US a few years ago. While getting on a bus in New York, the bus driver politely asked "Where are you from?", to which my Dad answered without hesitation "I am from South Africa". "Oh", said the bus driver, "I have a friend that is from Zambia, his name is so and so", "Do you maybe know him?"

I certainly won't attempt to destroy all the misconception about our wonderful country, but I might shed some light on the life of an actuary in a land filled with opportunity and wonderful weather.

## South Africa at a glance

South Africa is located on the southern tip of Africa, has a population of around 47 million people and is governed by a democratically elected government. Jacob Zuma is the third democratically elected president after the collapse of apartheid during the early nineties when Nelson Mandela was released after spending 27 years in prison, most of it on Robben Island.

South Africa has nine provinces with Gauteng and the Western Cape the most active from an economic perspective. Pretoria, Johannesburg, Durban and Cape Town are the biggest cities in the country and are home to a significant portion of the population.

South Africa is a country rich with mineral resources including gold, diamonds and platinum. However, many regard its most valuable resource to be its people. Archbishop and Nobel Prize winner

Desmond Tutu coined the phrase of 'Rainbow Nation', something that has stuck over the years. With 11 official languages, South Africa is indeed a rainbow nation.

## Professional Environment

South Africa has around a thousand qualified Fellows and is regulated by the Actuarial Society of South Africa (ASSA). Actuaries in South Africa have traditionally qualified through the UK based Faculty and Institute of Actuaries. However, from 2010, ASSA has launched its own education system and henceforth South African students will be exposed to some issues that specifically relate to South Africa.





South Africa offers the actuary many challenges, some of which are very different to that faced by professionals in developed countries. From the total population of around 47 million people around a third own insurance products, most of which are sold in the higher income markets.

One of the biggest socio-economical issues is the widespread prevalence of HIV/AIDS. South African actuaries have become leaders in the development of sophisticated models to predict the future impact of this disease on mortality and life expectancy. AIDS has also challenged the South African actuary's view on risk, as there is a very real need for insurance products in all socio economic groups, including those where AIDS is prevalent. Growth in the insurance market over the last few years has been driven by, amongst other things, increases in the number of funeral policies sold. More and more people have to pay for an unplanned funeral of a sibling, parent or extended family member.

On the short term (general) insurance front, actuaries have increasingly become involved in the operations and management of short term insurance companies in recent years. This trend has probably been sparked by the introduction of direct insurance and the increased focus on accurate risk rating. In South Africa, some companies even rate on the colour of your car.

The pensions and healthcare environment has recently been put under the spotlight with the government's planned introduction of the NSSS (National Social Security System). Under this system, the government envisages setting up a compulsory state-run medical and pensions plan in the next 5-10 years. As is often the case with schemes of this nature, its financing remains one of the main challenges. Currently around 20% of South Africans carry around 80% of the tax burden. The introduction of the NSSS can arguably be seen as an additional tax on the rich to support the poor. The envisaged NSSS will most likely present the insurance companies operating in the retirement fund and healthcare markets with some specific challenges going forward. However, South Africans are generally a resilient bunch and many providers will no doubt also see the NSSS as a potential opportunity.



One of the areas where actuaries are starting to make a footprint is the investment and banking industries. Traditionally, actuaries were not utilised in these areas, but companies are increasingly becoming aware of the multi-skilled nature of actuarial professionals. This is probably the area where the actuarial society will see the most growth in the coming years.

### International Actuarial Conference ICA 2010

During March 2010 the 29th International Congress of Actuaries was held in Cape Town. The theme of this year's conference was true to the spirit of South Africa: *United in Diversity*. The conference provided actuarial professionals from around the world the opportunity to be academically stimulated with seminars that covered the whole of the actuarial spectrum and then some. One of the highlights of the scientific program was the keynote address by Professor Paul Embrechts on *Financial Market Crisis: Lessons learned and future implications*. He awed the audience by unpacking some of the causes and solutions to the financial dilemmas the world faced in the recent past. Furthermore, the Congress also had a busy social program integrated into the conference proceedings to ensure that delegates had the opportunity to fully explore and appreciate the beauty of Cape Town and its surrounds. Some of the highlights included the Gala Dinner held at the historical Castle of Good Hope which ensured that every attendee experienced true Africa. Other highlights included the wine tastings in the Stellenbosch Winelands as well as the afternoon golf held at the spectacular Pearl Valley Golf





Estate. ICA 2010 was a mere taster for the main event on the South African calendar for 2010: The FIFA Soccer World Cup.

**World Cup Action**

The biggest sporting event the world has ever seen will be held in South Africa during June and July 2010. The 2010 FIFA Soccer World Cup has finally come to Africa. South Africa has over the past few years invested billions to ensure that the event will be a once in a lifetime experience to visitors and South Africans alike. South Africans have truly embraced the spirit of the World Cup with celebrations already going on as the countdown to the World Cup continues.

A total of six new stadiums were built specifically for this event including the awesome white structure of the Moses Mabhida stadium in Durban (below) as well as the venue for the opening game and the final at Soccer City in Soweto (above). It is expected that around 300,000 foreign visitors will come to South Africa during the tournament that will be played around the country at 10 different venues. This would be the ideal opportunity for South



Africa to showcase its natural beauty and address some of the misconceptions people may have about this country. We hope to see you here!

**Sala Hantle and Totsiens**

Alas, we have run out of space on this postcard from Africa. We trust that this glimpse into the life of a South African actuary has been both interesting and insightful. Who knows, maybe we are even able to lure an Australian actuary or two to our fair shores. There is no better way to say good bye than by using the Sesotho and Afrikaans words “Sala Hantle” and “Totsiens” respectively. And as they say in Tswana: “salang sentle, re solofela go le bona mo nakong e e sa fediseng pelo”: we hope to see you soon. ▲



**Regard Budler**  
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# 5th Financial Services Forum

## *Renovating the Financial System*

Forum Plenary Session in progress

**T**here was a very positive buzz from delegates attending the 2010 Financial Services Forum as important industry issues were discussed throughout the plenary and concurrent sessions.

This year's Forum attracted 357 delegates and will be remembered for a number of great features, not least the cheerful drums of TalkOz and the sight of **Senator Nick Sherry** giving the Institute's CEO **Melinda Howes** a 'hug' following his luncheon address. **Barry Rafe**, moonlighting as the Forum Facilitator, effortlessly weaved his way through four plenary sessions with understated humour and intellect. Results from the pre-event Vox Pop Survey and the use of SMS for questions added interest to the sessions.

### Plenary 1 – The Human Perspective: What Australians Really Need

The opening plenary session presented three expert views on the needs, wants and fears of Australians in planning for their retirement and other financial goals. Our speakers brought home the importance of 'reality checks' on the solutions offered by industry and government.

**Bernard Salt** from KPMG outlined a range of key issues for the next decade which impact on the demands of financing retirement and other social needs. He described the new retirement pattern expected by baby boomers – transition to retirement, working 'older' and flexibly and needing to fund much longer retirements than in the past. He noted that 'Big Australia' immigration targets would help fund the temporary adequacy gap of the generation who had only part access to the superannuation guarantee regime. He predicted that Australia would look different in coming decades as Gen X approached their most productive years, Gen Y start to think about financial commitment and the emergence of 'new tribes' (Chinese, Indian and New Zealand born residents) shaped society.

**Frank Ashe** brought a behavioural finance perspective to the discussion, referring to Daniel Kahneman's research on happiness and the disproportionate influence of recent experience on satisfaction. He recommended being aware of the difference of people's expectations and 'wants' before the fact, and their capacity to adapt and be satisfied in arrears. He was reasonably pessimistic about the potential of increased financial literacy to lead to better

individual decision making, but regarded it as essential to creating a level of trust in the financial system.

**Heather Dawson** from Mercer, observed that most people want to do the right thing to plan for their future and feel 'proud' of their choices. However, they generally didn't know how to go about this and were often paralysed by the fear of making a wrong decision (e.g. typical response to 10 investment options is to split 10 ways equally).

### Plenary 2: The Industry Perspective: Five Things to Change

Each panel member was asked to identify five changes that they see emerging within industry in coming years.

The session began with **Paul Bolinowsky**, of UBS Asset Management, giving a manufacturer's perspective of the industry. In what was a recurring theme for the session, Paul stressed both improved efficiency and increased investor education as important renovations required in the Australian financial system. He stressed the importance of collaboration between manufacturers and distributors in designing the best product solutions for investors.

**Jo-Anne Bloch** from Mercer, continued with this theme, offering a planning perspective on industry renovation. She highlighted the recent industry reforms, which have been driven by some high profile disasters along with a series of government sponsored reviews. Jo-Anne stressed that by reforming the local industry, Australia can emerge as the blueprint for financial planning.

**Michael Dwyer**, the CEO of First State Super, identified both the adequacy of the current superannuation guarantee requirements along with the simplicity (or complexity) of the superannuation industry as some of the key areas where renovation should be focused. These renovations will ultimately improve confidence, which is vital for the success of the industry.

### Plenary 3: An Outsider's Perspective – A Fresh Look at the Australian System

**Hazel McNeilage**, Head of Funds Management at QIC opened day two with lessons she had gleaned from working overseas for seven years, and observations on what had and had not changed



Plenary 1 Panel – Heather Dawson, Frank Ashe, Barry Rafe and Bernard Salt



Registration



Financial Services Forum Lunch – Senator Nick Sherry



Lunch Discussion Panel – Melinda Howes, Andrew Boal, Senator Nick Sherry and Michael Rice



Plenary 2: standing: Mike Dwyer, Barry Rafe, and Paul Bolinowsky, seated: Melinda Howes and Jo-Anne Bloch



Plenary 3 – Barry Rafe and Hazel McNeillage



Plenary 4 Panel – standing: Mike Barker and Barry Rafe, seated: Mark Baxter, John Trowbridge and Tony Coleman



Bozenna Hinton, Senator Nick Sherry, Meredith Brooks, and Melinda Howes



Mike McLaughlin, Bozenna Hinton and Richard Lyon – *Understanding Actuarial Management* – 2nd Ed. launch



Meredith Brooks



Forum Dinner



TaikOz



Andrew Boal and Diane Somerville



Andrew McKee and Susanne Szoldra



Daniel Levy



Martin Stevenson



Shauna Ferris



Martin Mulcare and Beth Lawson



Anthony Asher, Ribhi Alam and Paul Swinhoe



Glen Langton, Peter Jones, Darren Wickham and Andrew McRae



Hoa Bui, Richard Land and Grant Robinson



Mark Baxter, Anthony Bice and Jacob Hook



Barry Dillon and Eric Ranson



Ian Callil and Duncan Rawlinson



Annie Liao and Tim Gorst



Andrew Ngai, Wade Matterson and Michael Sherris



Acumen/QED Sudoku Station



Coffee break



Deloitte Barista

**Silver Sponsors**



Caroline Bennett and Mike McLaughlin (Deloitte) with Bozenna Hinton



Bozenna Hinton and Jenny Lyon (Acumen/QED)



Bozenna Hinton and Clive Aaron (Towers Watson)



in the Australian system during her time away. She noted the consolidation of superannuation funds and enhancements to fund governance, with investment committees becoming more influential, and investment consultants taking a more advisory role.

Among the lessons learned were that the 'soft' side of investment management should not be underestimated, markets should learn from each other, Australia should learn more from its Asian neighbours, and the provision of adequate retirement incomes on a sustainable basis is a common challenge globally.

### Plenary 4 – A Regulator’s Perspective: How Australia Measures Up Globally

The final plenary session was presented by **John Trowbridge**, Executive Member at APRA. Australia’s relatively good performance during the financial crisis is often attributed to a robust regulatory regime, so going into the session we were interested to hear John and the panel’s views on this.

John noted a number of factors which helped Australia through the crisis relatively unscathed including our banks’ relatively prudent lending standards, the Government and Reserve Bank’s response and our close trade ties and proximity to China. In contrast to this, John expressed the view that the disclosure regime in Australia was still less than ideal with consumers of financial service products heavily reliant on third party advice, the quality of which has been shown to be often lacking in some recent high profile examples.

The panel of **Tony Coleman**, **Mark Baxter** and **Michael Barker** then put forward some interesting thoughts on the current state of global regulation. Mark noted that, in the UK, one of the regulator’s objectives was to promote London as a financial services hub, resulting in a fundamental conflict of interest that may have contributed to the crisis in that country. This was particularly relevant given our government’s recent proposal to promote Australia as an Asia Pacific financial services centre. Finally, Michael expressed his view that the current sovereign debt crisis in Europe still has a long way to run and is likely to be a precursor to the next financial crisis, noting that “you can’t solve a debt problem with more debt”.

### Concurrent Session Highlights

There were many highlights running through the concurrent program. One session entitled **Practical Perspectives – Complying Risk Management with LPS and GPS 220** was unusual in that special invitations had been issued to general insurance actuaries to attend, because the topic was relevant to all appointed actuaries. The aim of this session was to generate some debate and discussion about what was required of an appointed actuary in general or life insurance when signing off on the ‘suitability and adequacy’ of an insurer’s risk management framework under LPS 220 (or GPS 310). To get the ball rolling, **Ian Laughlin** spoke about the needs of board members and senior management given their risk management responsibilities, and what they might expect from the appointed actuary in providing sign-off.

**Stuart Bingham** spoke about APRA’s expectations, and emphasised the crucial role of the appointed actuary in sound

management of the insurer. He noted that the appointed actuary is ideally placed to form a holistic view of key risks, and that the sign-off requirement is a great vote of confidence in the profession.

**Jennifer Lang**, speaking as an appointed actuary in life insurance, noted the increasing emphasis on risk management in the Financial Condition Report (FCR). She discussed the value of this centralised focus on risk management, the overall risk profile, and the holistic approach this supports.

**Andrew Huszczo** then gave an interesting perspective as an appointed actuary in general insurance and as a CRO. He noted the commonality between general insurance and life practices and talked through a number of points, stressing the critical importance of culture.

The Institute would like to thank all sponsors for their contribution to the success of the 2010 Financial Services Forum. Our particular thanks go to our three Silver Sponsors for their continuing support of this event; Deloitte Actuaries and Consultants, Towers Watson and QED Actuarial. Our thanks also goes to DW Simpson, Satchel Sponsor and to RGA, Hospitality Sponsor. ▲

### Financial Services Forum Organising Committee



(L to R) standing – Ian Laughlin, Wade Matterson, Craig McCulloch and Brendan Counsell. Seated – Sarah Hodgkinson, Meredith Brooks, Diane Somerville and Emma Simonson (absent – James Hickey)

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**John Smith reviews Chris Coon's paper on Home Equity Release. This was presented at the recent International Actuarial Congress in Cape Town.**

**H**ome Equity Release (HER) loans are also called 'Reverse Mortgages'. Money is lent to retired people with a home but little income. Interest is rolled-up into the loan until death, move to care or voluntary move-out of the family home.

With joint ownership, the term is until the second exit.

After exit, the home is sold and loan repaid. Any surplus goes to the borrower or their estate. Modern loans have a Non-Negative Equity Guarantee (NNEG). The lender writes-off any accumulated shortfall. The interest rate is generally 1% to 1.5% more than a bank floating mortgage rate. This premium pays for the NNEG and illiquidity. Utilising a floating rate avoids a fixed rate break penalty on voluntary move-out, if rates have fallen.

Earlier generation products did not have an NNEG. This caused a big problem if the accumulated debt started to exceed the value of the home. The elderly borrower could be evicted!

Other earlier schemes had low take-up rates. There were various styles of products, including:

- sale and lease-back of home;
- using the loan to buy an annuity;
- using the loan to buy stocks or other investments; and
- sharing the capital appreciation of the home.

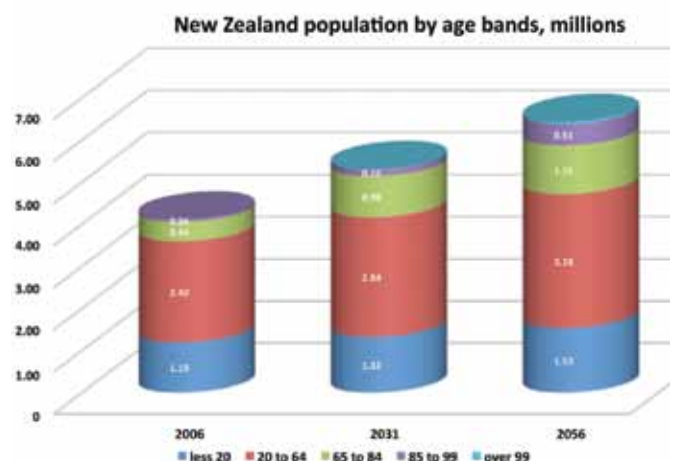
HER with NNEG overcomes earlier design flaws, by

- freeing up equity in one's home;
- at reasonable cost; and
- without risk of eviction.

For the elderly with diminishing funds, alternatives to HER include trading down or taking in lodgers. An HER is often more convenient. Nevertheless, the market remains largely untapped with demand outstripping supply. Following the GFC, available funds to back this product are scarce. Few investors want to lock their funds up for decades.

### Market penetration

Social attitudes are changing. In some sectors of the population, the family home is increasingly shared between generations. Retirees need more money, as life expectancy is rising by one year every five years. New Zealand's population is expected to grow by 56% over the next 50 years. However, the age 65+ group is expected to grow by 231%:



The estimated HER market potential for New Zealand is:

	2009	2030
Population over 65	0.53 million	1.10 million
Number of Homes	0.28 million	0.59 million
Average house price	\$350,000	\$925,000
Total 65+ house values	\$100 billion	\$550 billion
Anticipated market in 2030		\$33 billion

Assumptions:

- 80% of over 65s own their own home; average occupancy of 1.5;
- 2.5% real house price inflation; 20% of over 65s take HER; average LVR is 30%

Estimates of existing HER loans as a proportion of market potential are:

UK	4.0%
USA	2.5%
Australia	3.2%
New Zealand	2.8%

### Loan to Value

NNEG is a complex risk. The tail end of a contract is many years ahead, and the loan to value ratio (LVR) generally increases over time. Requiring a sizeable buffer through minimising the amount borrowed limits the provider's losses through final NNEG write-offs.

The maximum HER loan depends on the applicant's age and the value of the home. Typically, 15-20% of the home's value can be borrowed at age 60 increasing to 45-50% at age 90. Older borrowers have a shorter timeframe in which the loan might exceed the value of the property (become "uncovered").

### Non-Negative Equity Guarantee

Risks include:

- longevity of life – early death removes risk;
- move out rates to a care facility;
- rates of voluntary move out – sometimes health related; and
- house appreciation vs. interest rates.

### House appreciation

House appreciation is a key factor in the success of HER schemes. A typical pricing assumption is that interest is 4% above average house price growth.

Actual house price movements are volatile and cyclical. Initial assumptions are therefore based on a cyclical model. Tail Value-at-Risk is usually estimated by stochastic simulation.

In the UK, real house price inflation has been 3% pa since 1938. For New Zealand it was 2.45% pa, with nine cycles:

Period	Years	Average real growth
1936 - 1942	6	4.1%
1942 - 1950	8	(0.9%)
1950 - 1960	10	5.1%
1960 - 1971	11	0.8%
1971 - 1980	9	0.0%
1980 - 1986	6	3.9%
1986 - 1992	6	1.4%
1992 - 2001	9	3.1%
2001 - 2011*	10	4.5%

\*assumes no growth 2010 - 2011

Typical HER provider assumptions are:

Consumer price inflation	2.5%
Variable mortgage rate	7.5%
HER loan rate	8.5% - 9.0%
House appreciation with normal variation	4.5% - 5.0%

### Funding

Rating agencies agree with HER demographic assumptions. However, economic assumptions for AAA risk are much tighter. This is a major constraint in the availability of cheap funding as banks want liquidity and low credit risk. Alternative sources of finance are pension annuity matching and securitisation.

Each HER loan is repaid on move out or death. However, a book of HER loans has a steady cash-flow from loan repayments for 30 years. This is a natural hedge for indexed annuities with regular instalments. Future funding of HER could come from annuities which could be via buy-out of defined benefit pension liabilities or securitisation.

Home Equity Release allows retirees to access capital in their home, without making repayments. The no negative guarantee caps the liability. The accrual of loan is offset by capital appreciation. Providers set loan limits to minimise risk NNEG bites. Stochastic simulations model interest and volatile capital movements. Other assumptions are death, move to care and voluntary move-out.

Following the GFC, liquid funds available to lend-out have dried up. Demand for loans is largely untapped. Penetration is less than 5% of the estimated potential market. Alternative sources of finance are required. One possibility is using the proceeds of a bulk annuity transfer to grant new HER. The resultant cash flow provides a good match for long tailed liabilities. ▲

### John Smith

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*The author is Secretary of the New Zealand Society of Actuaries and an accredited member of the Institute of Actuaries of Australia. This article and tables are based on Chris Coon's paper on Home Equity Release presented to the International Congress of Actuaries in Cape Town [http://www.ica2010.com/docs/19\\_final\\_paper\\_Coon.pdf](http://www.ica2010.com/docs/19_final_paper_Coon.pdf)*



**H**as the current system missed the point of university education? Leigh Roberts has issued a significant and detailed challenge to the Australian actuarial education system (*Actuary Australia*, April 2010) with its reliance on undergraduate programs:

*"... the typical undergraduate actuarial science degree is narrow pedagogically, crammed with preliminary courses in several disciplines and the maximum number of actuarial courses, and offering little opportunity of arts/science courses of a broadening nature."*

If this system is at fault, there is a natural tendency to bring this to the attention of the parties that created the system, universities and the professional bodies, and advocate change. However, these parties are responding to community pressure from both employers and prospective undergraduates. Besides, the change that Leigh advocates: "(programs) aiming to bring students to solid third year level in mathematics, statistics and/or finance, or at least two of these areas ... (giving) graduate diplomas in actuarial science an advanced role" is already available to some extent, and relatively unpopular.

When speaking to large numbers of school leavers on university open days, their main interest seemed to be obtaining a qualification that would secure them a well-paid job. I can never remember any reference to the idea of scholarship for its own sake; perhaps this is understandable, given the cost involved. In contrast, and at a time when it was normal to enter the profession directly from high school, I was extremely fortunate to have had some advice from Tig Melville which has remained etched in my memory for nearly 50 years: "You must go to university first; it does not matter what you do."

The Macquarie program, when it started, seemed to provide the best of both worlds: the university experience of scholarship for its own sake and vocational training. However, professional bodies need to have a certified level of competence in their syllabi. To attract school leavers, university courses need to be accredited to provide vocational competence, and as a result, undergraduate actuarial programs have more or less followed the corresponding UK syllabus, subject by subject, ever since. As Leigh comments: "the shift from teaching actuarial science from within the profession

*to teaching it in universities did not, however, greatly alter the nature of the product offered."*

When Macquarie began in 1968, the old UK associate program was easily covered in three years, permitting some flexibility. However, as the UK "Core Technical" program (corresponding roughly to the old UK associateship) has expanded, this flexibility has been lost, as Leigh laments. Consequently, the valuable broadening experience of a university education can easily become lost in compliance with the professional syllabus, and professional training is now conducted by organisations that were not really designed for this purpose. The result is not optimal for the profession, the universities, and most importantly, for undergraduates.

While we may sympathise with Leigh Roberts' diagnosis, his suggestion of predominantly graduate actuarial programs would disadvantage the actuarial profession because graduate study would remove material that is distinctly actuarial from early years at university, which is when thought patterns are established. If actuarial programs became post-graduate, undergraduates would only absorb core concepts from other disciplines in their most formative years. This would not matter if these concepts came from unrelated areas, such as biology, law or pure mathematics. However, Leigh's post-graduate approach would make it more difficult to impart actuarial concepts to open minds because non-actuarial ones would have the advantage of incumbency.

### Identifying core actuarial concepts

Leigh Roberts talked about actuarial science without defining it, and perhaps there is no such thing. I did wonder if this was not related to Adam Butt's problem of trying to identify the core concepts of the actuarial discipline in his article about actuarial education (*Actuary Australia*, March 2009):

*"As I listened (during a training session) to the finance academics state their core concepts (time value of money, diversification and arbitrage) and the law academics (precedent), I realised that, despite seven years of education, three years of industry experience and four years of academic experience, I could not use my education to identify the core concepts of what an actuary does."*

This lack of a clear identification of core concepts is also evident in the slogans of professional bodies, such as the UK profession's "making financial sense of the future" and the Australian Institute's "measuring and managing risk and uncertainty" or "whenever there is uncertainty about future financial outcomes...". These phrases do not identify the core skills that are unique to actuaries and may, therefore, strike non-actuaries as pretentious. (Looking at this issue in the opposite direction, is the actuarial profession not also 'good with numbers'?) Solving Adam Butt's problem of identifying core concepts is, therefore, not just an educational issue because it would also help the profession identify, more accurately, its place in the world. In seeking answers, we could begin by reverting to the UK Institute's Royal charter:

*"The consideration of all monetary questions involving separately or in combination the Mathematical doctrine of probabilities and the principles of interest."*

Once again, this is overstated, because neither probability theory nor the principles of interest are uniquely actuarial. However, the combination of probability and compound interest is more or less unique to the profession, particularly in the fields of pensions (while they last) and insurance. We could argue that if we know the probability distribution of general insurance claims and rates of mortality then (subject to safety margins, other adjustments and matched assets), the required reserves are expected present values. The security of insurance companies then has a scientific basis which depends on the (weak) law of large numbers applied to present values.

So, is actuarial science based on the law of large numbers applied to present values? And does it make expected present value the core actuarial concept, thereby answering Adam Butt's question? Does the profession need to defend the proposition that the application of the law of large numbers to present values can be regarded as science?

If there is such a thing as actuarial science, this enhances, considerably, the credibility of core actuarial concepts. This creates a strong case for expecting that actuarial science and its associated core concepts be respected by educational partners. When dealing with actuarial undergraduates, should this science not be treated as an academic discipline in its own right alongside such disciplines as mathematics and economics?

### Designing undergraduate programs around core concepts

Full coverage of actuarial science and its concepts in undergraduate programs does not mean that there needs to be a subject by subject match of university courses to the UK professional subjects. This could be changed to a topic by topic match, with full coverage, and an academic program that repeatedly emphasised core concepts (without being distracted by them). Here I would support Adam Butt's suggestion that actuarial undergraduate programs need to be re-designed around core actuarial concepts, once they are identified. Furthermore, it is important that these core concepts are introduced early, preferably in the first semester of an undergraduate program. At some stage, actuarial and competing

“ As the UK 'Core Technical' program has expanded, flexibility has been reduced and consequently the valuable broadening experience of a university education can easily be lost in compliance with the professional syllabus and professional training is now conducted by organisations that were not really designed for this purpose. ”

non-actuarial ideas, such as the law of large numbers and arbitrage, should be compared, critically evaluated and challenged.

Including probability and statistics, the distinctly actuarial component of Part I consists of six UK Core Techniques subjects and these all require roughly one quarter of a year of full-time study at the appropriate level for syllabus coverage that is both full and allows for a critical analysis of concepts and methodology. This adds up to approximately one and one-half years of actuarial study in the standard three year bachelor degree. It seems to me that universities should be adding scholarly material to the basic professional syllabus, such as critical analysis of ideas, rather than arguing for a reduction in syllabus coverage.

To be fair and considerate to school leavers, there is much to be said for distributing the required one and one-half years as 25% of first-year, 50% of second year and 75% of third year. This allows school leavers to choose four disciplines of 25% each when they enter university, from which point they progressively specialise, with realistic choices after both first and second year. Actuarial 'majors' would still complete a program that includes a significant non-actuarial discipline (of their choice) to third-year level.

Implementing such a change would require an alternative Part I. Within the 25+50+75 bachelor degree, different parts of the current courses would need to be shifted into modules based on the university level at which they can be taught. This is superior to the current system where some material (e.g. Thiele's differential equations?) that is too difficult for the level at which a course is taught at university can simply be omitted under the 85% coverage accreditation policy. The non-actuarial components of Part I and mathematical requirements, which vary from state to state, present further challenges.

Finally, the last thing the profession needs right now is yet another educational upheaval unless it has been properly thought out. ▲

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*The views expressed in this article are the author's own views and do not necessarily reflect those of his academic or Council colleagues.*





**Actuary in a Box (AA148 – Solution)**

You have been given the set of tiles pictured in Actuary Australia Issue 148. Rearrange the tiles so that they fit into the smallest possible rectangular box. You may rotate the tiles, but flipping the tiles is not permitted and tiles must not overlap

**Discussion:** 16 entries were submitted this month. Of these, the smallest rectangular box that entrants were able to fit the tiles into was a 9 x 7 box. 12 entrants managed this. There are a number of ways by which this can be managed. One such solution is given below:



The only (theoretically) possible box of smaller area that could hold the tiles is a 6 x 10 box, but no entrants managed to fit the tiles into such a box. The winner of this month's prize, selected randomly from among the 12 'best' entries was **Michael Johnson** who will receive a \$50 book voucher.

**If I Only Had a Brain**

In a fit of nostalgia, I recently re-watched *The Wizard of Oz* and came across what is commonly known as 'The Scarecrow's Conjecture'. Immediately after receiving his diploma from the Wizard, signifying that he now has a brain, the Scarecrow recites: "the sum of the square roots of any two sides of an isosceles triangle is equal to the square root of the remaining side." Although, at first glance, this sounds remarkably similar to Pythagoras's theorem, it differs in three key aspects (the Scarecrow is summing square roots, not squares; he is summing any two sides, not the two shorter sides; and he is considering isosceles triangles, not right angled triangles) and it is very easy to find a counter-example necessary to disprove it (for example, consider a triangle with sides of lengths 4, 4 and 1).

This suggests two things: that the writers of *The Wizard of Oz* deliberately included the mistakes and that the Scarecrow didn't get his brain after all. Nevertheless, the conjecture does give rise to some interesting problems:

1. Is the Scarecrow's conjecture ever true?
2. Consider this variant on the Scarecrow's conjecture: *the square root of the hypotenuse of a right angled triangle is equal to the sum of the square roots of the other two sides*. Is this conjecture ever true?

Of course, there is one other possible explanation for the Scarecrow's statement. In disproving the Scarecrow's conjecture, we have assumed that the rules of Euclidean geometry hold true. However, Oz is a world quite different from our own and it is very possible that, in a world governed by witches and populated by talking lions and the like, that an alternative geometric system exists. If this is the case, then perhaps the Scarecrow did get his brain after all.

**The 1 that I want**

This puzzle is a variant on one that featured in a more recent movie (made in 2007). For your chance to win a \$50 book voucher, break the following code and email your solution to: [inthemargin@actuaries.asn.au](mailto:inthemargin@actuaries.asn.au).

0, 1, 0, 0, 1, 0, 0, 0, 0, 1, 0, 0, 1, 0, 1, 0, 1, 1, 0, 0, 0, 1, 1, 0, 0, 0, 1, 0, 1, 1, 1, 1, 1, 1, 1, 0, 0, 1, 1, 1, 1, 1, 1, 0, 0, 0, 1, 0, 0, 1, 1, 0, 0, 0, 1, 1, 1, 0, 0, 1, 0, 0, 0, 1, 1, 1, 0, 0, 0, 1, 0, 0, 0, 1, 1, 1, 1, 1, 1, 1, 1, 0, 0, 1, 0, 0, 1, 1, 1, 1, 1, 1, 1, 1, 0, 0, 1, 0, 1, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 0, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 0, 0, 0, 1, 1, 0, 0, 1, 1, 1, 1, 1, 0, 0, 0.

**Bonus question:** Which (2007) movie featured the 'original' version of this puzzle? ▲

**Solutions:** 1. No. Consider a triangle with sides of length x, y and z, where 2x > y > z. Case (i) 2√x = √y + √z ⇒ 4x = y + z + 2√yz ⇒ 4x - y - z = 2√yz. Case (ii) 2√z = √x + √y ⇒ 4z = x + y + 2√xy ⇒ 4z - x - y = 2√xy. Both cases lead to contradictions. 2. No. Consider a triangle with sides of length a, b and c, where a + b < c and a, b, c > 0. √a + √b = √c ⇒ (√a + √b)² = c ⇒ a + b + 2√ab = c. This is false.

# More Than Maths

This month's column may not apply to everyone. Please continue reading if all of the following applies to you:

- you have a 'special someone' (SS) in your life eg spouse, partner, parent; child
- that SS is genuinely interested in what you do at work; and
- that SS is not lucky enough to be an actuary.

OK, for those readers who fit this profile, I am going to attempt to address the challenge of answering the simple question "How was your day?"

Let me outline the problem as I see it... Your SS is genuinely interested and so it is important to share something material about your day to satisfy their curiosity. At the same time you are conscious that they are not familiar with your work issues and usually there is some complexity in those issues. How can you outline an important aspect of your day without boring them or confusing them? More positively, how can you explain that aspect in a manner that they understand and appreciate? The real test is whether your SS is game to ask you the same question tomorrow!

Here are some suggested methods, with no guarantee of success. For the purpose of the illustration let's say that you have had a really good day, the highlight being a clever breakthrough that you have achieved while working on a product design project.

1. Let's stick with principles. There is little value in going into the details of the product and your breakthrough. Your SS will probably be satisfied with a broad description of the project, your role, and your clever breakthrough.



2. Think about what communication style usually works with your SS. A diagram may help for some people. An analogy may work for others. Some people like to hear the result first (like a newspaper report). Some people prefer the chronological approach (like a short story).
3. You might describe the emotions involved rather than a focus on the technical matters, because your SS will almost certainly understand your feelings. For example, the frustration with the design flaw, the excitement of the research and the pride in the outcome.
4. Remember to pause occasionally to check that your SS is still engaged, interested and perhaps understanding your account. You might ask a question, or allow them to ask a question, to confirm that you are on the same frequency.
5. If are feeling brave, you can seek informal feedback at the end of the conversation: "Darling, what did you like about that story?" "If I was to describe my day tomorrow night, what would you like me to do differently?"

What might be the benefits of getting better at relating significant elements of your day? Firstly, I suggest that if you can provide a simple outline to your SS, and they understand, you will improve your ability to convert complex to simple for other people as well.

Secondly, you will probably feel better about sharing your challenges and achievements. Most importantly, I would like to think that your relationship with your SS will benefit as they improve their understanding and appreciation of you and your work life.

Talking business with your SS is not easy and it takes more than maths to succeed. I would like to invite you to have a go and I would welcome your feedback.

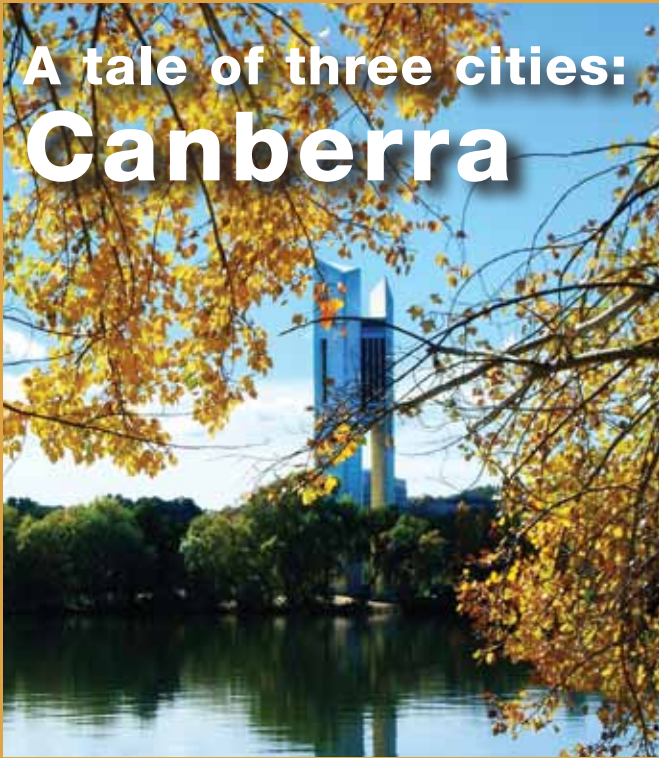
The Institute's new website has a much improved search function and you should be able to find past columns easily.

You can also access them via [www.etiam.com.au/resources/articles](http://www.etiam.com.au/resources/articles). ▲

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## A tale of three cities: Canberra



The Carillon (bell tower)

### What are the highlights of working in your city?

There is no doubt that Canberra is a relatively small city (some would say town), and while this limits the actuarial working opportunities, it makes for a relaxed lifestyle devoid of the hustle of Sydney and Melbourne. A highlight is the lack of traffic; although my work is on the other side of town, it is still only 15 minutes from home.

Canberra's predominant industry is the public service, but education is also recognised and the interplay between policy and university research has been acknowledged as a key area of growth. There are great opportunities for collaboration between actuarial researchers, economists and public policy experts, and interaction with federal government.

### What are the disadvantages?

Canberra is laid out in such a way that getting around town without a car can be impractical. I've also been told that living in Canberra can be isolating if you don't know many people, however, the opportunities for socialising are there if you look for them, particularly given the rate of growth of the City Centre.

Being away from the centres of financial industry may cause a feeling of detachment, but interaction with business is part and parcel of academic research (through joint research activities), and for those who remain pro-active, consulting opportunities with business can be developed.

### Where else have you worked?

Prior to my current role at the Australian National University, and consulting from Canberra with

Sydney-based Professional Financial Solutions, I worked for six years with the Australian Government Actuary.

### What kind of actuarial roles are available?

The three main employers of actuaries within Canberra are the Australian National University, the Australian Government Actuary, and Access Capital Advisers. These three wouldn't have more than a dozen Fellows between them, which gives an indication of the size of the Canberra actuarial community. Fellows, Associates and students can be found scattered about other organisations, including public service departments such as Finance, Tax, Health, AOFM, AIHW, PHIAC and the ABS, and private sector consultants such as Dixon Advisory. Additionally a number of actuarial consulting firms have small offices in Canberra with actuarial staff. For academics, as Canberra is the seat of federal government there are often consulting opportunities on the doorstep to supplement academic work.

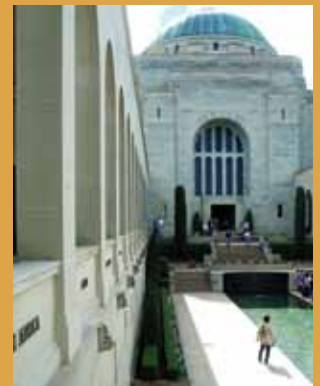
### How do you do your CPD?

As an academic CPD is part and parcel of my job.

### What opportunities/limitations are available for participating in Institute activities?

Although the Institute actuarial seminars have been held from time to time in Canberra the small actuarial population limits the demand for regular seminars.

An advantage of the size of the actuarial community is that the majority of Canberra actuaries know one another; at Christmas time the Canberra-based actuaries get together for a long lunch to catch up. While the ANU and the Institute have run joint workshops in the past, and the Institute usually has presidential dinners in Canberra, the main Institute activities are, of course, based in Sydney or Melbourne. Thankfully the founders of Canberra placed our city mid-way between the two, and only a short plane trip away from both.



War Memorial

### Does your partner (if you have one) like living there?

Canberra is wonderful for families; it has a great public primary school system, wide-open green spaces as well as bushwalking at Tidbinbilla, fantastic cycle paths, and plenty of quality restaurants, wineries and leisure facilities. Being so close to both the south coast and snow fields is a bonus. Having a couple of quality football teams in the Raiders and Brumbies goes a long way to satiating the needs of my six year old son, while my four year old gets his fix from the National Zoo and Aquarium, Questacon and the many playgrounds around town. ▲

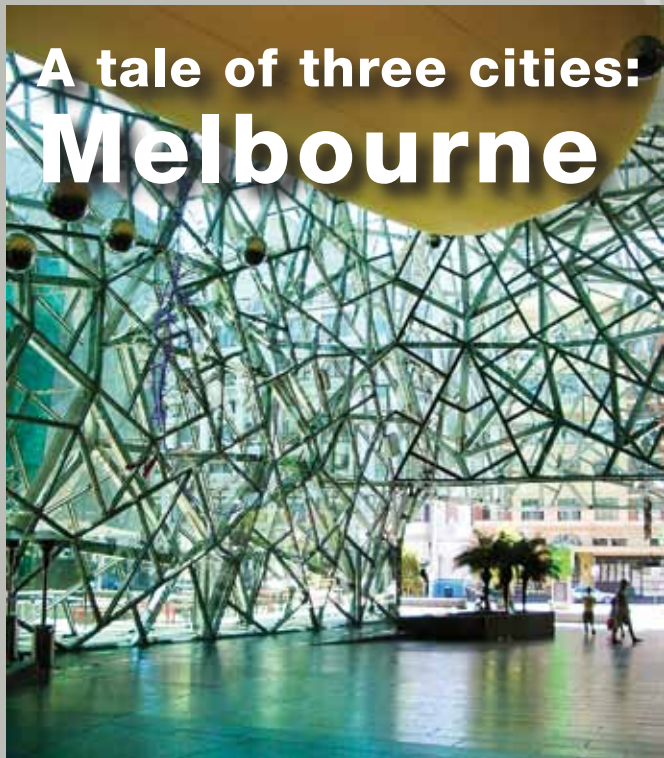
### Tim Higgins

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Lake Burley Griffin





Federation Square

**A**s any Melbournian will tell you, Melbourne is, without a doubt, the best city in the world to live in. In the past 10 years I have worked in Melbourne, Canberra and Sydney, and Melbourne is the only one of these three cities that I have ever felt that I wanted to make my home. Canberra is a beautiful city, but one with few career opportunities, little to do in your free time and has freezing cold winters. Sydney, on the other hand, has many activities, but it is extremely difficult to get to many of them (especially if you don't have a car), essentially rendering the city, in many ways, less interesting than Canberra. In Melbourne, however, there are just as many things to do as in Sydney, if not more (many consider it to be the cultural capital of Australia), and there are the added advantages that it is the easiest of the three cities to get around; has the nicest climate; has a lower cost of living than Sydney; and isn't overrun by cockroaches.

From the point of view of being an actuary, however, there are a lot of disadvantages to living in Melbourne. Sydney is the financial services capital of Australia, and as a result, there are far fewer jobs available



Flinders St Station and Eureka Tower

for actuaries in Melbourne than there are in Sydney. At the time of writing this article, job website *Seek.com* has 26 positions advertised for actuaries in Sydney, but only one in Melbourne. From speaking to various actuarial recruiters, I have been told that the best opportunities for actuaries in Melbourne are with banks, superannuation funds and consultancies.



Her Majesty's Theatre

Several insurers have offices in Melbourne. However, the insurance industry in Melbourne is constantly shrinking, with the recent trend among insurers being to relocate their Melbourne operations to Sydney. Other job opportunities for actuaries in Melbourne include working for the Victorian public service and working as an actuarial studies lecturer at either the University of Melbourne or Monash University.

Another disadvantage of being an actuary in Melbourne is that sometimes it feels as though the Institute forgets that we exist. The Institute's activities are very Sydney-centric. This limits the opportunities for Melbourne actuaries to participate in Institute-organised CPD activities and to network with other actuaries. Nevertheless, it is not impossible to participate in Institute activities from outside Sydney. I have been a member of the *Actuary Australia* Editorial Committee, which meets monthly



Federation Square



Swanston Street

in Sydney, since the start of 2009, and although I have only been able to attend two of the meetings in person, I have participated in all of the other meetings over the telephone. As for meeting the annual CPD requirement, there are still a number of CPD activities that can be done from outside Sydney. Several of the activities that I have undertaken in order to meet the requirement include marking Part III exams, reading journal articles, and participating in training activities offered by bodies other than the Institute.

Having worked in Melbourne, Sydney and Canberra, my opinion of the three cities is that Sydney is a great place to work, Melbourne is a great place to live and Canberra is a great place to go for a weekend away. Whether Melbourne is the best city for you really depends on your priorities in life. However, for me, any disadvantages associated with working as an actuary in Melbourne are more than outweighed by the wonderful lifestyle that I enjoy here and I have no plans to move back to Sydney in the near or distant future. Melbourne, I love you! ▲



Docklands

**Genevieve Hayes**

[inthemargin@actuaries.asn.au](mailto:inthemargin@actuaries.asn.au)



## A tale of three cities: Sydney



Harbour Bridge

### What are the highlights of working in your city?

Sydney is a great place to work in – it's hard to imagine being anywhere else. I feel like I'm in the heart of the Australian financial sector. I live just a 30 minute commute away from work on the bus – a leisurely pleasant bus ride where I can indulge in some pre-work reading. Sydney has the world's most beautiful harbour and a wonderful climate (coming from England, I find the weather amazing). Sydney is also very close to beautiful bushland and mountains and has an unbeatable coastline.



Palm Beach – view from lighthouse

### What are the disadvantages?

Big cities can seem a bit unfriendly sometimes and Sydney is no exception. It is also a very expensive place to live and commutes are getting quite long for many people. Sydneysiders continually moan about the state of the roads and public transport which I think is most unfair as I don't find it too bad (but then I'm comparing it with London).

A disadvantage for me is that I do miss England from time to time (but not the weather) and have a long way to go to get my fix.

### Where else have you worked?

I'm from England and worked the first six years of my working life there. I come from the north of England and can remember the excitement and buzz I felt of getting my first job in London. In my view, London is the only place to work in England if you're going to be actively involved with the actuarial profession – I used to work round the corner from Staple Inn.

I have also worked in America – based in Jacksonville, Florida, but moved around a bit including stints in the

Blue Mountains

sleepy mid-west town of Des Moines and Minneapolis. I enjoyed this opportunity but couldn't settle in America (most Americans don't understand this – and this is the reason why I couldn't!)

I came to Australia in 2002 and started working in Bondi Junction, briefly worked in the city before ending up in North Sydney.

### What kind of actuarial roles are available?

Every conceivable role under the sun is available in Sydney. The majority of Australian actuaries live and work in Sydney. A lot of global companies have Sydney offices so there are plenty of good opportunities to travel or do stints overseas.

### How do you do your CPD and what opportunities / limitations are available for participating in Institute activities?

I do far too much CPD because it is so easy to do in Sydney and get quite involved with the Institute – I really must stop volunteering for things. On top of the usual conventions and forums that tend to

be in Sydney these days, I did exam marking for a few years before recently joining the Board of Examiners to help review and sign-off on exams. Of course, working on *Actuary Australia* is the most interesting role – which would be much trickier if I wasn't in Sydney. I've now just joined the LFRSC of the LIWMPC (and my first job will be to change the acronyms).



Taronga Zoo

there (the train service from North Sydney to the City during the day is terrible).

### Does your partner (if you have one) like living there?

My wife, who is from Canberra, loves Sydney. I met her in Sydney so she was already comfortable there. We now have two young children and we have found a lovely family friendly, bushy suburb just 30 minutes from the city.

### Any other comments?

My family back in England have been out to visit many times and are totally in love with Sydney themselves. ▲

### Matthew Wood

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# Research Developments

The Research Committee of Council (RCC) is seeking inputs from members to help lay the foundations for a successful second Australian Actuarial Research Grants selection round and first Australian Actuarial Research Contracts round over the second half of the year.

**Research Grant** applications in stipulated priority areas are given preference in selection; RCC aims to award at least half of all grants in these areas. The priority areas used last year in the initial round are set out below.

RCC concluded that use of this relatively wide-ranging list of priority areas had generally worked well; there were clear signs that the list had led several researchers to think about how their research relates to the profession’s fundamental needs. RCC has therefore decided to retain this approach, but to invite the views of members before the actual content of the list for this year’s round is finalised. We have invited the practice committees and the university actuarial groups to suggest changes or additions to, or deletions from, last year’s list. Members can also send suggestions directly to RCC, at [research@actuaries.asn.au](mailto:research@actuaries.asn.au), by 5 July.

**Research Contracts** support research on more specific topics that will be set out in the call for applications. This research is aimed at developing knowledge, tools, methods or models that will be important in day-to-day practice. Contracts will be made available to qualified researchers for projects addressing the stipulated topics, through the form of tendering process described on the website (‘Education & Professional Development’ tab on homepage, then ‘Research’ > ‘Funding’ > sub-section ‘Australian Actuarial Research Contracts’).

The notified topics will succeed in encompassing each practice area’s main needs only if practising members provide their inputs ... again either through practice committees or directly to RCC, and again by 5 July.

We strongly urge members to participate in these processes that are at the heart of developing a productive and valuable research agenda for the profession. (Further information: [research@actuaries.asn.au](mailto:research@actuaries.asn.au)). ▲

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Priority research areas used in 2009	Examples of subjects that might warrant research attention
Actuarial applications in the financial sector	<ul style="list-style-type: none"> <li>Regulatory policies</li> <li>Extension of actuarial reserving to bank provisioning</li> <li>Behavioural finance</li> <li>Barriers to effective application of actuarial approaches</li> </ul>
Basic actuarially related research that cuts across practice areas	<ul style="list-style-type: none"> <li>Risk theory</li> <li>Conceptual frameworks</li> </ul>
Enterprise risk management and regulatory capital	<ul style="list-style-type: none"> <li>Risk appetite/risk culture</li> <li>Extreme risks</li> <li>Dependencies &amp; diversification</li> <li>Reserving, risk margins &amp; risk-based capital</li> <li>Pricing</li> <li>Risk transfer</li> <li>Specific risk factors; e.g. credit risk, operational risk</li> <li>Crisis plans</li> <li>Executive remuneration</li> <li>Shareholder value &amp; governance</li> </ul>
Financial reporting	<ul style="list-style-type: none"> <li>Accounting standards; actuarial inputs to what is primarily accounting research</li> <li>Distressed market conditions</li> <li>Fair valuations</li> <li>Pro-cyclicality</li> </ul>
Investment issues	<ul style="list-style-type: none"> <li>Equity risk premium</li> <li>Valuation techniques for assets (e.g. unlisted assets)</li> <li>Evaluation of Economic Scenario Generators</li> <li>How risk should be measured &amp; modelled</li> <li>Blending long-term perspectives with short-term market models</li> </ul>
Mortality and longevity risk	<ul style="list-style-type: none"> <li>Modelling &amp; theories</li> <li>Improvements ... e.g. quantified in an Australian context</li> </ul>
Population health & ageing	<ul style="list-style-type: none"> <li>Health financing &amp; insurance</li> <li>Adequacy &amp; costs of retirement incomes – ‘Risk in Retirement’ Retirement income product design – ‘Risk in Retirement’</li> <li>Integration of approaches &amp; policies (e.g. retirement self-funding with aged pension; &amp; policies for health, retirement income &amp; aged care)</li> </ul>
‘Public policy research’	<ul style="list-style-type: none"> <li>Approaches &amp; models for managing financial impacts of natural disasters</li> <li>Approaches &amp; models for managing financial impacts of climate change</li> <li>Approaches &amp; models for managing systemic risk</li> </ul>

## Aptify Database for the Education Unit

The Institute is moving to a new membership database in June 2010 called *Aptify*. This will replace the current *iMIS* database. *Aptify* is an American program which has a large number of standard features covering customer management, membership, education, events, publications, committees and accounting. *Aptify* was determined to be a more powerful and flexible system to meet the needs of all the Secretariat's functions both now and into the future. Like the *iMIS* database, *Aptify* integrates with the Institute's website and the new website has been developed in tandem with the implementation of *Aptify*.

The Institute contracted the Karman Group, to provide a customisation of the *Aptify* database for the Education Unit. The Institute's education program is very complex with multiple sources for completing Part I subjects (through accredited universities, UK exams, the Exemptions Committee or credit transfers from other actuarial societies) and a history of changing requirements such as new subjects being added or dropped, transition rules and changes to the requirements for Associateship, Fellowship, and more recently the new actuary designation. The Secretariat has managed these changes through a combination of manual processes and contracting specialist programmers on a case-by-case basis to develop complex database reports.

The process of customising *Aptify* for the Education Unit began

with the development of a Proof of Concept (POC) in May 2009 to demonstrate that the system could be customised to meet a selection of the specific needs of the Institute's education program. These included the development of an online enrolment form that links to the database; a feature to easily create a pathway to Fellowship between defined start and finish dates and set all the requirements for each pathway; a system for defining subject equivalents so that past subjects could be expressed as an equivalent pass in the current pathway; and an online pathway status page showing which subjects members had completed and indicating when this had been achieved by an equivalent subject.

Following the POC, other customised features were scoped and documented for the Education Unit. These include the ability for student members to see their eligibility for exemptions and pay for them online; back office wizards for the manual processing of enrolments and exemptions; the ability to define milestones and milestone completion combinations (such as the new actuary designation); and run reports on who has achieved these milestones.

The Education Unit completed extensive user acceptance testing in April and May. The *Aptify* system will be used for Semester 2 enrolments in 2010. ▲

### Philip Latham

Education Manager

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## Actuary of the Year 2010

### Call for Nominations

The Institute of Actuaries of Australia invites nominations from Members for the award of **Actuary of the Year 2010**.

Recognition and celebration of the achievements and contribution of one of our members is an ideal opportunity to promote the value which actuaries can add.

This award is presented to an individual who has brought credit to the profession and made a key contribution to business, the community, government or the profession.

It is expected that a particular recent contribution can be identified in making this award, although an ongoing contribution may be considered relevant. There should be public awareness of the individual and, in making the award preference will be given to a person who will bring favourable publicity to the profession.

Nomination forms for Actuary of the Year can be downloaded from **www.actuaries.asn.au**

### Deadline for Nominations – 30 June 2010

#### Nominations should be sent to:

**julia.purves@actuaries.asn.au**

### Times Online

Martin Waller: *City Diary* – 6 May 2010

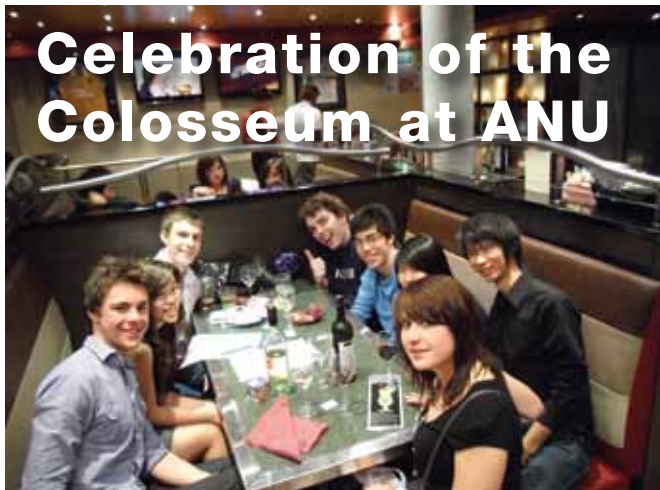
**Strong feelings among the actuaries**, over a slight by a sports commentator called Robbo Robson (no, me neither, but I don't do football — he writes a blog for the BBC).

Liverpool players "have shown all the imagination of the Institute of Actuaries," he claims.

Caroline 'Caro' Instance, Chief Executive of The Actuarial Profession, takes umbrage. "We've researched and come up with a variety of practical advice on how to get out of the financial crisis.

The best Liverpool have managed is to sell Xabi Alonso to Real Madrid for £30 million." Plus "Rafa Benitez has 3,952 fans on Facebook. We have 5,579." (Article supplied by Richard Lyon)

▲



An AFEC members general meeting (aka trivia night)

Imagine studying at a world renowned tertiary education institution, but having no idea about what career paths lay ahead of you. Or even worse, not leading an active social life. Well that's when AFEC comes along and saves the day.

The Actuarial Finance Economics and Commerce Student Association, better known as AFEC, is the representative student society for the ANU College of Business and Economics. By now many readers of the regular student column would know that AFEC provides all the support and guidance that its members need in order to enjoy a successful and fulfilling university experience.

We aim to provide our members access to a wide range of career opportunities and information, as well as numerous social events to mingle with fellow students in a relaxed and friendly environment.

There was no other way to begin the academic year except by having an extravagant party so students could mark the beginning of a promising year ahead. For some students, their promise doesn't always have an academic focus, so it is important to get the party started for these members! During orientation week, AFEC held its inaugural toga party aptly named the 'Celebration of the Colosseum'. The night was filled with an endless flow of wine and amazing costumes ranging from fierce gladiators, elegant Roman princes and princesses as well as the ordinary peasant. In fact, some of our members may well have found their calling in costume design!

As the orientation week passed, it was time to get serious. AFEC also facilitates the interaction between potential employers and students. We hold several barbeques with sponsoring firms so students are given the opportunity to learn about graduate and intern positions as well as what to expect when starting out as a graduate. Our annual corporate cocktails also provided students the opportunity to network and build important business relationships with potential employers. The relaxed but professional environment allowed students to delve into deep discussions with representatives over a drink or two.

The official University Actuarial Week took place soon after, which

consisted of several actuarial firm presentations to budding actuaries and luncheons with firm representatives from Sydney. As usual, the events during the week were a raging success; however there is plenty of work that goes on behind the scenes to make it that way. Thanks to all of those involved and to all the firms that attended!

The annual actuarial trip has yet to come and will be scheduled to occur during the mid semester break in October. The trip to visit Sydney firms provides enthusiastic actuarial students the perfect opportunity to learn more about the actuarial profession and future potential employers. Students will attend information sessions and presentations by actuarial firms which will allow them to gain an insight into what life is like being an actuary. For companies who are not already participating and are interested, please contact us (details below).



Celebration at the Colosseum – toga party fashionistas

At AFEC, we strive to provide students with events that facilitate a complete university experience. We hope that our activities will not only be enjoyable but informative for all our members. ▲



**Anna Sardana**

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## What is an actuary?

Over the last four months since I started I have been speaking to a number of actuaries working outside the traditional areas in the so-called “wider fields”. There is one thing they all have in common – at some point in the conversation they say to me something like: *“of course I’m not a real actuary”*; or *“I’m not doing actuarial work”*. As someone who has spent most of my career working in superannuation and wealth management in a variety of non-actuarial roles, I can certainly identify with this sentiment.

But quite recently I have come to realise that being an actuary is not about the work we do. **Being an actuary is about the way we think. We bring that with us to any job.** There is actually no limit to what can be considered actuarial work – it’s any work where an actuary is using their actuarial skills and training – regardless of whether there are enough actuaries already working in the area to call it an ‘actuarial practice area’. Other professions like lawyers and accountants do not define themselves by the type of work they do. Neither should we.

There is a viewpoint amongst some of our members that I call the ‘stick to our knitting’ argument. That is, if there is no established body of actuarial science in place (e.g. there are no papers being written by actuaries and no research going on in the field), then we have no value to add and it is not actuarial work. I see it the other way around. Once actuaries start practising in a new area, (e.g. non-insurance health or risk management), they will start writing papers, doing research and swapping ideas. A body of actuarial techniques and approaches will grow organically. In order for this to happen, we do need those ground-breaking actuaries who are forging new areas of practice, and the Institute’s strategic intent is to support such actuaries.

## Australia is at the bleeding edge

We have had visits from senior actuaries from the UK and the USA recently. Conversations with them have made it clear to me that Australia is at the forefront when it comes to actuaries working in broader roles in financial services and other industries. I suspect that there are a number of reasons for this. One is that the job market here in recent years has made it difficult for some university graduates to find roles in traditional practice areas. Also for some

young graduates, there is the lure of getting rich quick in investment banking (perhaps less of a possibility in a post-GFC world). Another factor in my view is that many Australian actuaries do have an adventurous and entrepreneurial streak that makes us willing to seek out new and different roles. Perhaps this is a result of our educational system which (unlike those of other countries) teaches complex judgement along with the technical skills.

However we arrived here, we are in an enviable position compared to our US and UK colleagues. We are already practising in a broad range of areas, and are gaining traction and reputation in many of them. In the immortal words of those 1980’s philosophers Timbuk 3: “The future’s so bright, I gotta wear shades”!

## Actuaries in Banking

I recently held networking evenings in Melbourne and Sydney for some of the 170 actuaries currently working in banking and finance. Conversations with these members made it clear to me that once a bank started employing actuaries in a certain area, they quickly realised how much value they could add and usually started hiring more. We now have a number of senior banking managers – non-actuaries – who are championing the cause of employing actuaries in banking. With those numbers employed, banking and finance should certainly be considered a core and growing practice area for actuarial employment. If you are working in banking and want to network with your actuarial colleagues, please contact us and we will put you on the list for the next event.

## What’s happening at the Institute?

During May all areas within the secretariat have been very busy completing the project to implement our new IT database called *Aptify*. We expect that by the time this is published the new system will be bedded down. I anticipate that it will save us lots of time in the secretariat, and as a result will mean we can continue to improve our service levels to you. The new website infrastructure has been put in place as part of the IT upgrade, but we are only a small way through the whole web project. What you are seeing now is by no means the finished product in terms of either functionality or look. Expect to see incremental improvements over coming months, with the full new functionality expected to be in place by the end of the year. We have a group of 40 members who are testing the site but additional feedback is always welcome! I have also been hard at work finalising with Council the strategic direction for the next three years, and we are well underway with our marketing and operational plans. We plan to launch these to members in either July or August. ▲

## Melinda Howes

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## Diary Dates

7 June	Melbourne	<b>Course</b> – Improve your writing skills.
15 June	Sydney	<b>CPD Course</b> – How to influence your key stakeholders – (based on research on how actuaries think) with specific focus on how to deal with senior personnel such as CFOs. The course has a risk management flavour but is relevant for all areas of practice. We are currently taking expressions of interest for the next course being planned for September.
22 June	Melbourne	<b>Graduation Dinner</b> – all members welcome.
22 June	Sydney	<b>Course</b> - Improve your writing skills.
24 August	Sydney	<b>Graduation Dinner</b> – all members welcome.

# Strategically placing Actuaries around the globe.

## Market Update

### Working overseas

The market for Actuaries outside of Australia is an ever changing scene. With parts of Europe slipping into a permanent after lunch siesta, and Asia grabbing talent wherever it can, the picture is certainly one of great disparity. Even the US, once seen as being "impossible" to enter for even the highly skilled, is now creaking it's door open to the possibility of employing overseas Actuaries. As always, you have to have a skill set or certain experience that is in demand for an employer to take the higher risk strategy and support an international move. So what should you "get into" to have employers salivating at the very thought of recruiting you? Here are some ideas of where we see global growth in the future – Predictive modelling, Solvency II and Takafal.

**Contact Lesley Traverso for more information on trends in the global Actuarial market**



### Sydney – Nearly/Newly Qualified General Insurance

This niche consulting company is looking for strong GI Actuaries at the nearly/newly qualified level to join their dynamic and friendly team. You will have experience in reserving and pricing and ideally some well developed consulting skills. This firm has an innovative approach to work where everyone is given a chance to develop their full potential. Providing advice to clients for various reserving and pricing projects you will also have the following:

- Strong academic record
- GLM and SAS experience
- Developed business skills and the ability to "think outside the box"
- Opportunities for involvement in non-traditional actuarial projects
- Desire to develop new services to clients

**Contact Claire Street for more information.**

### Lesley Traverso

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### Sydney – Pricing Actuary, Group Risk

Due to an increase in business in the Group Risk area, this leading Australian Insurer is looking for an experienced Group Risk Pricing Actuary. You will be nearly/newly qualified and have strong technical Group Risk experience. The role will primarily involve pricing and product development as well the following key aspects:

- Providing support in the development of marketing initiatives
- Developing robust models to manipulate and model data and recommend improvements
- Consider data modelling issues and propose process improvements
- Set realistic and achievable deadlines for modelling, risk analysis and other new business development activities
- Mentor and develop junior members of the team

**Contact James Lecoutre for more information.**



### Sydney – Associates/Fellows General Insurance

Due to continued growth, this leading Australian Insurer is looking for Actuarial associates or Fellows to join their Commercial Lines team. You will have at least 3 years of experience in either a pricing or valuation role with strong SAS and excel skills. You may also have decided to stop your exams but are still working in a technical environment. Strong interpersonal skills and the ability to communicate results effectively are a must for this role.

- Conduct portfolio analysis to promote better management of the portfolios
- Provide pricing advice to the business
- Valuations and claims monitoring to identify trends
- Contribute to the budgeting and forecast process
- Develop strong relationships and deliver recommendations to key stakeholders

**Contact Claire Street for more information.**

### James Lecoutre

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M: +61 (0)404 397 503  
james.lecoutre@dwsimpson.com



### Sydney – Pricing Actuary, Life Insurance

Leading Wealth Management company is looking for a qualified Actuary with Capital Management and profitability analysis experience. Working as the 2iC, you will provide product and Actuarial advice on financial implications of pricing and product, business strategy and initiatives for retail investment products.

- Review the profitability of Investment Platform products on a regular basis
- Assist in new product development including responsibility for advice on pricing, advice on product design and systems, policy documents and client communication
- Provide actuarial expertise and insight with regards to profitability of retail investment products to various parts of the business
- Communicate and liaise with key internal stakeholders
- Training and mentoring of team

**Contact Lesley Traverso for more information.**



### Singapore – Nearly/Newly Qualified Capital Modelling

Based in Singapore but with responsibilities across Asia our client is looking for an experienced general insurance Actuarial student or newly qualified Actuary to join their capital modelling/ERM department. Working closely with the Chief Actuary, this is a great opportunity to build your expertise in a growing area and establish a new team within this leading International Insurer.

- Capital Modelling experience and a strong interest in ERM
- Solid understanding of reserving and solvency issues
- Work closely with the company to establish and implement ERM framework
- Ability to communicate with a wide audience and build relationships outside of actuarial
- Involvement in additional ad hoc projects and other core actuarial functions

**Contact Claire Street for more information.**

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