Actuaries in Banking

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Actuaries in Banking

Abstract

A discussion of the roles and experience of actuaries working in the banking sector as provided through a member survey and several in-depth interviews. It examines backgrounds and pathways into banking, current roles and perceptions, areas of development and future opportunities.

Keywords – banking, actuaries, education, career, regulation, risk, capital, liquidity.
1 Introduction

The purpose of this paper is to provide a snapshot of actuaries working in the banking sector today. It is our presentation and discussion of survey results collected from members of the Australian profession, the Actuaries Institute (the Institute), in February and March 2014.

Our objective is to better understand how the profession (if the survey permits that description) is faring in the sector and provide a platform for further discussion. The Institute’s Banking Practice Committee (BPC) was established late last year as a vehicle for supporting the growth of actuaries in banking and we hope this paper is a small contribution to that effort.

2 Executive Summary

- Actuaries are working across a range of banking roles; predominately in front-office investment banking (19%), middle-office finance (17%) and credit risk related roles (19%). Banking actuaries come from a diverse range of backgrounds; mainly life and general insurance (38%) and a strong emerging segment of actuaries with careers starting in banking (21%).

- The main attractions to a banking career are broader career opportunities (31%) and variety of work (26%) compared to traditional areas. This is reflected in the extremely wide range of current roles of our survey respondents.

- Credit risk modelling roles are a natural bridge for actuaries with modelling and programming skills acquired in general insurance practice; though technical product pricing (as led by actuaries in the insurance sector) is emerging for certain banking products.

- Risk-based capital and internal credit risk models are still very much a "work-in-progress" and some actuaries are emerging as thought-leaders in these fields.

- Regulatory change, in particular, the Basel III liquidity requirements are opening up opportunities for actuaries for the technical challenges of liquidity risk measurement and modelling; a largely "green-field" specialist area.

- More training in banking-specific techniques and regulatory requirements is required to seize the current opportunities open to actuaries.

- Regulatory change and the evolving challenges of banking risk management since the 2008-2009 financial crisis are seen as the key drivers for the future opportunities of actuaries in banking.
3 Methodology

Data collection for this paper took two forms. The first was a survey conducted with the assistance of the Institute; targeting members who have identified themselves as working in the Banking Practice area. The second, a series of interviews conducted with self-selected survey respondents.

3.1 Survey

The survey took the form of a series of multiple choice and free response questions. It was targeted at the 293 members of the Institute who have self-identified as working primarily in Banking Practice and make up just over 7% of all Institute members.

The survey was available for over two weeks in the second half of February 2014. Overall, there were 47 respondents, representing 16% of the potential member universe; though not all respondents answered all questions.

We have made no attempt to correct for biases or self-selection but only note that any inferences are inevitably subject to these limitations. The survey is plainly limited by a sample size that is statistically inadequate for some of the stronger inferences we tried, but failed to resist making, in this paper.

The full text of the survey questions can be found in Appendix A. A discussion of potential refinements in the event the survey is repeated in the future can be found in Appendix B.

3.2 Interviews

Following the survey, a series of interviews were conducted to provide context and colour on the survey results, and allow a free-flowing discussion to capture views, themes and issues from actuaries deeply involved in Banking Practice.

Five interviews were conducted in mid-March and these responses have been captured alongside our discussion of the survey results below. These discussions were wide ranging and featured actuaries with a range of banking experience in a diverse set of roles.

4 Results & Findings

4.1 Pathways

As banking is relatively new sector for the profession, we were initially interested in how members arrived at a role in banking.

Figure 1 below shows the distribution of the number of years worked in the banking sector. It displays an even allocation across the experience brackets, indicating in our view a good mix for the survey results and inferences. More importantly, it may also imply a healthy distribution of new entrants and seasoned professionals across the sector.
Figure 1. How long have you worked in the banking sector?

- 0-2 years: 9 (21%)
- 3-6 years: 7 (17%)
- 6-10 years: 12 (29%)
- 10+ years: 10 (24%)
- No response: 4 (10%)

Figure 2 shows the typical practice areas of survey respondents prior to their movement into banking. Overall, it shows that there is a broad mix of backgrounds from traditional, predominately life and general insurance, and non-traditional areas.

Figure 2. Which practice area did you work in prior to banking?

- I have worked in banking since graduation: 9 (21%)
- Life Insurance: 9 (21%)
- General Insurance: 7 (17%)
- Superannuation: 5 (12%)
- Investments: 2 (5%)
- Other: 6 (14%)
- No response: 4 (10%)

The “Other” category includes financial risk consulting, superannuation and academia. It is tempting to explain the number of respondents from life insurance by reference to the fact that all four big Australian banking groups have life and wealth management subsidiaries, but the diversity of their current roles (in Corporate Finance, Markets, Treasury and Finance), suggest something less clear-cut. The exception is Economic Capital roles in Finance, which has typically been noted as a crossover role from life insurance to Banking.

Almost half of the respondents with a general insurance background are currently in a Credit Risk role. Further discussion in interviews revealed that general insurance experience could provide the technical training for the application of statistical and programming techniques in credit risk modelling. Within the consulting firms especially, actuaries can move naturally from general insurance projects to bank projects and banking focused teams.
Overlaying the result with time spent in the banking sector highlights that members beginning their careers in banking is a relatively new development, with two thirds of respondents in this category working in banking for five years or less.

The large percentage of members working in banking since graduation is noteworthy as an encouraging sign that the profession is already making inroads in the sector. The reason for hiring “straight out of uni” was beyond the scope of the survey. Post-survey interviews anecdotally suggest, however, managers of teams with a strong modelling focus and some familiarity with actuaries, will favour students with an actuarial degree over non-actuarial economics and commerce graduates.

Figure 4 provides an overview of what attracted individuals to banking.
Broader career opportunities and variety of work are the dominant themes. Grouped together, we can infer that the majority of respondents were motivated by the breadth of role and responsibilities available in the banking sector compared to traditional practice areas.

As presented in figure 5, overlaying this with general role categorisations based on job title (refer to Appendix C), these categories have a high percentage of roles which can be recognised as management level roles.

**Figure 5. Attracted you to banking / General role categories**

<table>
<thead>
<tr>
<th>Broader career opportunities</th>
<th>12%</th>
<th>19%</th>
<th>2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>The variety of work</td>
<td>2%</td>
<td>19%</td>
<td>2%</td>
</tr>
<tr>
<td>More money than traditional</td>
<td>5%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>practice areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International opportunities</td>
<td>2%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>A particular practice area</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e.g. treasury risk management)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No particular reason</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>10%</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

We put forward the following points as contributing factors:

- There is plainly a wider array of roles available in the banking sector due to diversity of products and services available from banks. This can be seen in the result of the next section on current roles.
- There is typically no “actuarial team” or department across or within banking divisions, requiring actuaries to seek a “home” within a range of product and service areas.
- The lack of statutory or regulatory prescribed roles encourages actuaries to work across product lines in addition to regulatory driven areas.
4.2 Current Roles

Actuaries have taken on a variety of roles within banking. As summarised in Figure 6 below, the strongest categories are Investment Banking, Finance and Credit Risk. Role categories were not defined in the survey and respondents relied on their own judgment for the best fit.

The high combined percentage in Investment Banking and Markets (29%) shows actuaries are active in “front-office” roles as well as the more habitual group service and middle-office roles. At this level, there is pleasing variety of roles across the highly diverse segments of Credit Risk and Treasury.

The large percentage of members in Credit Risk roles was expected based on the anecdotal recognition of this area as the more natural “cross-over” point from statistical modelling roles in general insurance noted above.

During our interviews and discussion with BPC colleagues, we learnt that Credit Risk modelling is still a relatively nascent field and actuaries are prominent in thought leadership, framework and process development within banks. The complexity and variety of banking risk exposures and the weight and urgency of regulatory requirements has created a large space for actuaries to build out and develop a career.

The number of actuaries working within Treasury is both noteworthy and encouraging. Treasury roles have been more closely aligned with the accounting profession with its traditional location
within Group Finance. Through further discussion, a number of factors were revealed to have driven this development:

- Since the 2008-2009 financial crisis, Treasury management at banks has increasingly focused on liquidity risk modelling, management and pricing, which is a relatively underdeveloped area.
- Accounting techniques that have a “balance sheet focus” are perhaps less suited to the challenges of stress tests, sensitivity analysis and other quantitative risk measurement techniques applied to liquidity risk and other asset / liability modelling.
- Recent regulation such as Basel III has increased the need to understand liquidity characteristics and the requirement to hold liquid assets for uncertain future events has increased.

Segmenting the results by “Manager” type reveals a good balance within the top areas of Investment Banking, Finance and Credit Risk and actuaries are working in senior roles within Treasury. Other Risk areas are more made up of actuaries at “Analyst” level.

Figure 7. General area of Banking Practice / General role categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Manager</th>
<th>Quant / Analyst</th>
<th>Analyst</th>
<th>Retired</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Banking / Corporate Finance</td>
<td>14%</td>
<td>5%</td>
<td>2%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Finance (Report into CFO division)</td>
<td>5%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Credit Risk – Models and Frameworks</td>
<td>5%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Other Risk (e.g. Market Risk, Operational Risk, and other areas that report into the CRO)</td>
<td>7%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Markets</td>
<td>7%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Treasury</td>
<td>7%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Corporate Banking</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Credit Risk – Decisioning</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Product Management and Pricing</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Retail / SME Banking</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>No Response</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
</tbody>
</table>
Examining the respondents own thoughts on the relevance of their skill set in their current role is also revealing. This is shown in Figure 8 below.

**Figure 8.** What actuarial specific skill sets are applied in your current role?

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad statistical modelling and analytical skills</td>
<td>11 (26%)</td>
</tr>
<tr>
<td>Cashflow / Financial Modelling</td>
<td>9 (21%)</td>
</tr>
<tr>
<td>Ability to apply complex judgement and reasonable tests</td>
<td>8 (19%)</td>
</tr>
<tr>
<td>Knowledge of other actuarial disciplines</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>No specific application</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>No response</td>
<td>10 (24%)</td>
</tr>
</tbody>
</table>

The dominant skills that are applied on a day-to-day basis are the traditional skills of statistical analysis, cashflow and financial modelling, combined with the ability to apply complex judgement.

Overlaying this view in Figure 9 with the “Manager/Analyst” category, shows a significant number of Managers, not unsurprising, using complex judgement within their current roles.

**Figure 9.** Actuarial specific skill sets / Current role categories

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>Manager</th>
<th>Analyst</th>
<th>Quant / Analyst</th>
<th>Retired</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad statistical modelling and analytical skills</td>
<td>2%</td>
<td>14%</td>
<td>10%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Cashflow / Financial Modelling</td>
<td>7%</td>
<td>14%</td>
<td>5%</td>
<td>14%</td>
<td>7%</td>
</tr>
<tr>
<td>Ability to apply complex judgement and reasonable tests</td>
<td>5%</td>
<td>5%</td>
<td>14%</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>Knowledge of other actuarial disciplines</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>No specific application</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>No response</td>
<td>12%</td>
<td>7%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

**General role categories**
- Green: No Response
- Red: Retired
- Blue: Quant / Analyst
- Orange: Manager
4.3 Perceptions

Actuaries are positively regarded within banks and there is no evidence of any perception issues that are limiting the opportunities of actuaries within banking. Within the major area of Credit Risk, there is some indication that actuaries are perceived as “modellers” as opposed to managers using skills “across the control-cycle”.

As shown in Figure 10 below, there is a significant group that do not believe their actuarial background is relevant to their colleagues’ perception of their skill set. This is notwithstanding that actuaries themselves certainly feel particular aspects of their skill set is relevant on a day-to-day basis, as presented above. Although strong quantitative skills are seen as a key feature of the actuarial profession it was noted by some respondents that actuaries were not necessarily “top-of-mind” for quantitative roles.

Figure 10. How do your colleagues perceive the relevance of your actuarial background in your current role?

- Actuaries have strong quantitative skills, and alongside other professionals, this formed the basis of my role in banking. 16 (38%)
- My actuarial background is largely irrelevant as I have proven myself through initiative, application and success in areas specific to my role. 9 (21%)
- Actuaries are perceived as highly competent problem solvers. 6 (14%)
- Actuaries are perceived as skilled financial modellers. 4 (10%)
- Actuaries are conventionally hired for my role. 1 (2%)
- Actuaries are perceived as skilled risk managers. 1 (2%)
- No response 5 (12%)

Number of respondents
4.4 Current Applications

As a bridging question to future opportunities, we asked what areas of banking are best suited for actuaries. This question allowed multiple responses, so has been broken down into percentage terms of those who actually responded, and grouped by colour into related areas. Unsurprisingly, this is in many ways an extension of existing activity as indicated by the 45% of respondents who selected Credit and Other Risk areas.

Figure 11. Which areas do you believe are currently best suited for actuaries?

Treasury and Product Management and Pricing both scored above 10% and indicate strong interest in these areas. We suggest Treasury is a reflection of the increased regulatory and market focus on funding and liquidity as discussed earlier. Typically an accounting and balance sheet focussed role, the demands of a Treasury role in banking has clearly changed since the 2008-2009 financial crisis as indicated by the raft of new regulation by global regulators to improve the liquidity risk measurement and management, controls, and systems of large banking groups.

Actuaries have a well-established role in Product Pricing in the insurance sector as that market has seen a significant increase in disciplined pricing techniques over the last decade. Actuaries emerged out of reserving roles to apply statistical techniques to traditional and innovative rating factors to assist underwriters manage renewal and new business pricing.

In a similar way, actuaries clearly believe there is scope to apply a similar skill-set to banking product pricing. In post-survey interviews, we discussed the application for more high-frequency products in the retail sector and the uses of quality data available in this sector for certain products such as credit cards, loans and deposits.
4.5 Areas for Development

Banking is not dominated by one qualification and all ambitious banking professionals are constantly improving their skills and knowledge in at least one area. We wanted to get an understanding of any areas that might be linked to the current and future opportunities, but where respondents felt actuaries were less comparatively competitive.

Similarly to the previous section, multiple selections were permitted, with all responses given an equal weighting. The outcomes, grouped by colour into related areas, are shown in Figure 12 below.

![Figure 12. Which skills and knowledge areas need to be most urgently addressed for actuaries to flourish in Banking Practice?](image)

As is often seen in questionnaires and debates on this topic, communication and influencing skills were seen as the top area for development. We judge this to be no different than outcomes observed for traditional practice areas.

Another clear theme was the need for development of specific quantitative skills for banking. Although actuaries are well trained and drilled in financial modelling in the early years of work experience, more banking-specific modelling techniques are lacking from the syllabus. This is an obvious area for improvement in education and CPD. Like general insurance, inexperienced actuaries can be taught by practising actuaries at consultancies.

Bank regulation is also standout area for improvement. There has been significant regulatory change since the crisis and there is no better time for actuaries to acquire this knowledge and experience. Alongside modelling techniques, it is perhaps the most readily accessible by self-learning and attendance at industry seminars. Developments related to accounting standards revisions requiring forward-looking credit provisions is another developing area. Challenges of this nature are essentially actuaries' “bread and butter” and it is no surprise that actuaries both within consultancies and banks are gaining ground in this area.

Overall, there is broad range of areas of improvement, which suggests actuaries are in need of banking-specific education, which is not yet available through any actuarial body.
4.6 Future Opportunities

The final question in the survey was “Which current issues and challenges faced by the banking sector are best suited for actuaries to respond to?” Though an open-ended question, the results gravitated around the two topics of risk management and the Basel capital standards.

Figure 13. Issues and Challenges

Specific topics included stress testing, sovereign and large financial institutions credit risk models and credit provisioning. The results are strongly correlated with the number of actuaries working in these areas and are seen as a response to the weaknesses revealed during the 2008-2009 financial crisis.

Outside of capital management, one interviewee said no profession has stepped forward to “claim the liquidity risk space”, which dominates the Basel III standard. This area could make up a new and distinct branch of the profession, as it requires a deep understanding of the data, products, systems and processes behind all bank products and services.

Some expressed a concern in relation to “over-regulation”, balance and reliance on rating agencies, which speaks to the historical challenges between internal disciplines and frameworks and less risk-sensitive regulatory constraints in the insurance sector.

In other areas, several members highlighted the opportunity to apply quantitative pricing models to banking products for the first time. This coincides with the availability of rich data sets available across some banking groups and an emerging ambition to leverage the data for competitive purposes.

5 Conclusion

The survey results support in many ways our own intuitive and basic assumption that actuaries would be working in a range of banking roles, with a slight bias towards credit risk modelling. In the absence of a banking specific qualification and the wide range of banking roles, no one profession or qualification suite dominates the banking sector – with the possible exception of the ubiquitous accountant. As there are fewer actuaries generally, there are naturally fewer actuaries working in the banking sector today. Nevertheless, an average participation rate of 7% of Institute members¹,

¹ Actuaries Institute, 2013 Year in Review
in a sector vastly larger than insurance (in people and capital resources) is something that should be the subject of further research and discussion.

The diversity of banking roles occupied by actuaries is healthy and a sign of the wide applicability of the actuarial skill-set, experience and ambition of its members. Actuaries are active in client-facing investment banking roles as well as the wide array of risk and product management roles. The continuous increase in levels of both modelling sophistication and regulatory oversight across banking activities can only be bullish sign for the profession. The experience of actuaries in areas of economic capital, credit risk and treasury risk management suggest an increasing “professionalisation” of these areas, which lends itself to support from the “collective wisdom” of the actuarial profession; as opposed to deep but isolated levels of actuarial penetration in these roles.

We look forward to hearing further discussion around the points raised in this paper over the coming months and using this to further shape the progress of actuaries in banking.

Lastly, we would like to sincerely thank all our survey respondents and interviewees, as this paper would not exist without your commitment of time and openness.
6 Appendix A: Survey Questions

6.1 Preamble

The purpose of this survey is to build a data set capturing activities and career profiles of actuaries working in banking-related roles. The results of this survey will be used anonymously and presented in summary data format in a presentation for the 2014 Financial Services Form. All data and comments will be kept confidential by the authors, unless specific permission is sought of and provided by a respondent.

6.2 Questions

6.2.1 Background

1. Please indicate the general area of Banking Practice you currently work in:
   <A> Finance (Report into CFO division)
   <B> Treasury
   <C> Credit Risk – Models and Frameworks
   <D> Credit Risk – Decisioning
   <E> Other Risk (e.g. Market Risk, Operational Risk, and other areas that report into the CRO)
   <F> Markets
   <G> Investment Banking / Corporate Finance
   <H> Corporate Banking
   <I> Retail / SME Banking
   <J> Product Management and Pricing
   <K> Other
   If you selected other please fill in the box below
   <Freeform Box>

2. Please input your title:
   <Freeform input>

3. Please briefly describe your current role.
   <Freeform input>

4. Where did you work before
   <Freeform input>
What attracted you to a role in banking?

- A particular practice area (e.g. treasury risk management)
- The variety of work
- More money than traditional practice areas
- Broader career opportunities
- International opportunities
- No particular reason
- Other

If you selected other please fill in the box below

<Freeform Box>

5. How long have you worked in the banking sector?

- 0 - 2 years
- 2 - 5 years
- 5 - 10 years
- Over 10 years

6. Which practice area(s) did you work in before your first banking role?

- Life Insurance
- General Insurance
- Investments
- Superannuation
- Other
- I have worked in banking since graduation

If you would like to provide additional comments please fill in the box below

<Freeform Box>

6.2.2 Current Opportunities

7. Would you consider that you apply any specifically actuarial skill set in your current role? Please describe.

<Freeform Box>

8. Which of the following best describes how your colleagues perceive the relevance of your actuarial background for your current role?
Actuaries are conventionally hired for my role.

Actuaries have strong quantitative skills, and alongside other professionals, this formed the basis of my role in banking.

Actuaries are perceived as highly competent problem solvers.

Actuaries are perceived as skilled financial modellers.

Actuaries are perceived as skilled risk managers.

My actuarial background is largely irrelevant as I have proven myself through initiative, application and success in areas specific to my role.

My actuarial background is generally perceived negatively, which I have worked hard to overcome.

Please include any additional comments in the box below.

9. Which areas of banking do you believe are currently best suited for actuaries?
   - Finance (Report into CFO division)
   - Treasury
   - Credit Risk – Models and Frameworks
   - Credit Risk – Decisioning
   - Other Risk (e.g. Market Risk, Operational Risk, and other areas that report into the CRO)
   - Markets
   - Investment Banking / Corporate Finance
   - Corporate Banking
   - Retail / SME Banking
   - Product Management and Pricing
   - Other
   If you selected other please fill in the box below.

10. Which areas do you believe an actuarial training provides competitive advantages in banking? [Multiple selections allowed]
   - Finance (Report into CFO division)
   - Treasury
   - Credit Risk – Models and Frameworks
   - Credit Risk – Decisioning
Other Risk (e.g. Market Risk, Operational Risk, and other areas that report into the CRO)

Markets
Investment Banking / Corporate Finance
Corporate Banking
Retail / SME Banking
Product Management and Pricing
Other
If you selected other please fill in the box below

6.2.3 Future Opportunities

11. Which skills and knowledge areas need to be most urgently addressed for actuaries to flourish in Banking Practice [Multiple selections allowed]

Credit analysis and modelling
Financial modelling
Financial accounting
Derivatives
Quantitative risk measurement and management
Capital markets
Treasury
Banking and commercial law
Banking regulation
Communication and influencing skills
Other
If you selected other please fill in the box below

12. Which emerging areas do you believe are best suited for actuaries?

13. Which current issues and challenges faced by the banking sector are best suited for actuaries to respond to?
6.2.4 Follow Up

14. Would you like to participate in a follow up interview to explore your responses in more depth? If so please provide your name and contact details in the box below.

<Freeform Box>

6.2.5 Conclusion

Thank you for taking the time to participate in this survey and helping to improve the understanding of how and where actuaries are working in banking.
7 Appendix B: Survey Refinements

Were the authors to undertake a similar survey in future, there are several different actions they would take. These include:

- Sourcing overall demographic information for the institute membership base as a whole as well as potential Banking Practice respondents.
- Inclusion of an identifier to link the Banking Practice respondent demographic information to the survey responses.
- Testing the survey with the peer reviewer ahead of time to ensure it has been thought about broadly.
- In relation to Q1 (“Please indicate the general area of Banking Practice you currently work in:”) it would be valuable to provide more detailed definitions to those responding at this would likely improve the consistency of results. Particularly since these categories are used several times throughout the survey.

Almost all respondents (90%) actioned the survey within 3 days of it being sent out. This suggests that a shorter time period between data request and data collection (say a one week window) could be successfully used in future surveys.
Appendix C: Background Comments on Analysis

8.1 Survey Pool

Reviewing the survey pool provides some useful background on actuaries in working in Banking Practice. Due to the nature of survey collection, the underlying data cannot be readily aligned between the pool and the survey, as such discussion related to the pool will be largely independent of the survey findings below.

As the figure below shows within the pool is a strong weight towards 25-34 year old respondents, with the next largest category being in the 35-44 year old grouping.

![Figure 14. What was the age makeup of the survey pool?](image1)

The figure below categorises survey pool members based on their company. Encouragingly, excluding those that did not note their current employer, just over half of banking practitioners identified themselves as working for a bank of some sort. There was also a significant group of consultants that identified their practice area as banking. Major Australian Bank was identified as one of ANZ, Commonwealth Bank of Australia, National Australia Bank, or Westpac. Bank was any bank (on or offshore) that was not primarily an investment bank. Investment Bank included the likes of Macquarie, Morgan Stanley, UBS, etc.

![Figure 15. What companies do individuals making up the survey pool work in?](image2)
8.2 General Role Categories

The figure below shows the general categories of roles that the authors placed the data provided into.

The general approach to categorisation was based on the nature of the title. Generally titles including words such as Manager, Director, Vice President, Partner, were classed as “Manager”. Titles including words such as Quantitative, Analyst, Associate, Modeller were placed in the “Quant / Analyst” category. As discussed above, there was a stronger weighting towards management to those who have spent longer in the sector, which suggests that the division is acceptable.