



Responding To Risk

Enterprise Risk Management Seminar

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Actuaries Institute • Sydney



CRO Survey Results

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Risk Management Practice Committee (RMPC)

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Background

- Inaugural CRO survey
- Objectives
 - To understand practice in each industry, so CROs can benchmark their approach to their peer group
 - To compare practice across industries
- Survey was emailed to CROs of APRA regulated banks, general insurers, life insurers and private health insurers
 - One response per person
 - 20 questions



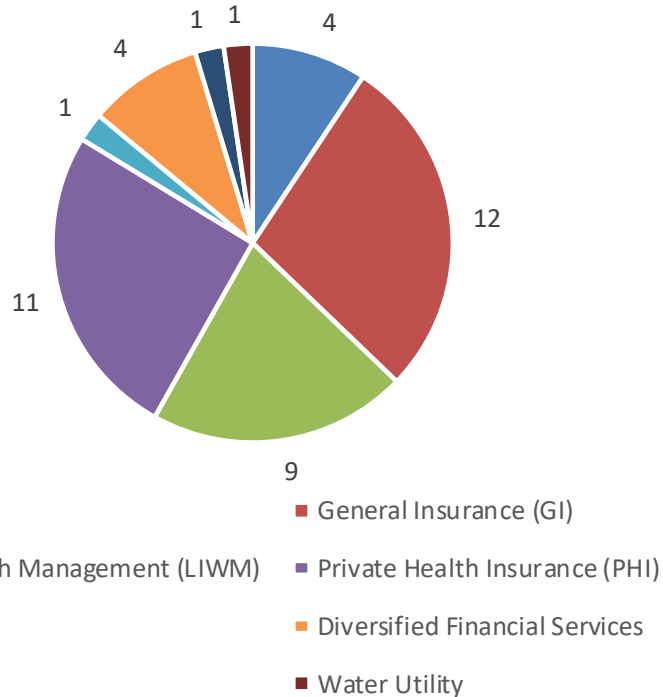
Coverage

Industry	% by Number of Entities	% by Value of Net Assets
Authorised Deposit-Taking Institutions	14%	84%
General Insurers	71%	95%
Life Insurers (including Friendly Societies)	59%	90%
Private Health Insurers	85%	79%
Total	44%	85%

- We will aim to improve coverage in future surveys, especially for ADIs



Profile – Industry



- Three quarters are from insurance
- 84% if diversified financial services are included
- Strong response from PHI
- “Superannuation” may be life insurance
- Unsure why one respondent answered “Water Utility”



Profile – Role

Area	CRO	Head of Op. Risk	Other Risk Mgt	Actuarial - Reserving	Chief Actuary	Consultant	General Manager	Internal Audit	Total
Banking	2	1	1	-	-	-	-	-	4
GI	10	-	1	1	-	-	-	-	12
LIWM	5	-	3	-	1	-	-	-	9
PHI	9	-	1	-	-	-	1	-	11
Superannuation	-	-	-	1	-	-	-	-	1
Diversified Financial Services	2	-	1	-	-	1	-	-	4
Government	-	-	-	-	-	-	-	1	1
Water Utility	1	-	-	-	-	-	-	-	1
Total	29	1	7	2	1	1	1	1	43

- 37 (86%) of responses were from specialist risk managers/CROs
- “Non-CRO” responses include:
 - a consultant acting as CRO
 - actuaries emailed in lieu of the CRO in a minority of cases, or
 - others not strictly bound by CPS 220 (PHI)



Profile – Company Size – Australian Staff

Area	Number of Australian staff				Total
	up to 20	21-75	76-250	251+	
Banking	-	1	-	3	4
GI	-	4	1	7	12
LIWM	-	1	2	6	9
PHI	3	2	4	2	11
Superannuation	1	-	-	-	1
Diversified Financial Services	1	-	1	2	4
Government	-	-	-	1	1
Water Utility	-	-	-	1	1
Total	5	8	8	22	43

- The ADIs (banks), life insurers and government insurers tend to be larger.
- The PHI's tend to be smaller than the other industries.



Profile – Ownership

Area	Australian				Foreign owned		Total
	Public	Private	Mutual	Government	Branch	Private	
Banking	2	-	1	-	1	-	4
GI	3	2	3	1	1	2	12
LIWM	4	-	1	-	-	4	9
PHI	1	3	7	-	-	-	11
Superannuation	-	-	1	-	-	-	1
Diversified Financial Services	2	1	-	-	-	1	4
Government	-	-	-	1	-	-	1
Water Utility	-	-	-	1	-	-	1
Total	12	6	13	3	2	7	43

- Most PHIs are mutually owned, consistent with being smaller
- LIWMs have a higher % foreign owned
- General insurers – fairly evenly spread



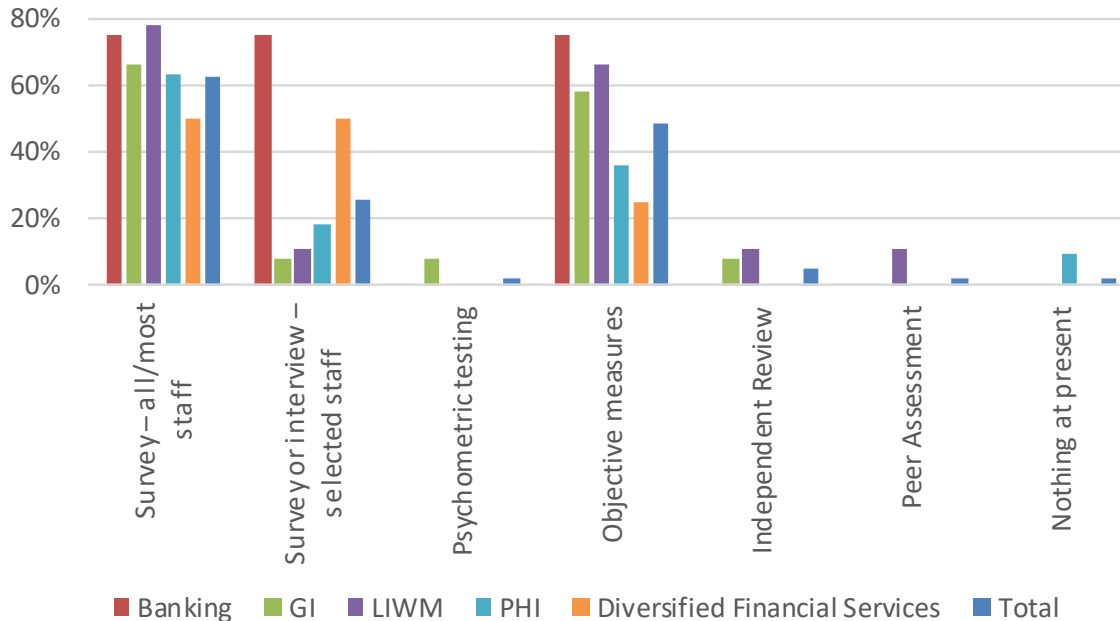
What do you consider to be the top three risks faced by your organisation in the coming year? (tick three only)

Risk	% of all respondents rating it a top risk (industries with high rating)
Regulatory or legislative change	40% (PHI, Banking, GI)
Increased industry competition / lower profitability	37% (PHI, LIWM, GI)
Cyber risks	33% (PHI, Banking, LIWM)
An economic slowdown / recession	26% (GI, Banking)
Fail to meet customer needs or to innovate	23% (PHI)
Damage to brand or reputation	14% (LIWM, Banking)



How do you assess your risk culture? (tick all that apply)

Percentage of respondents by industry

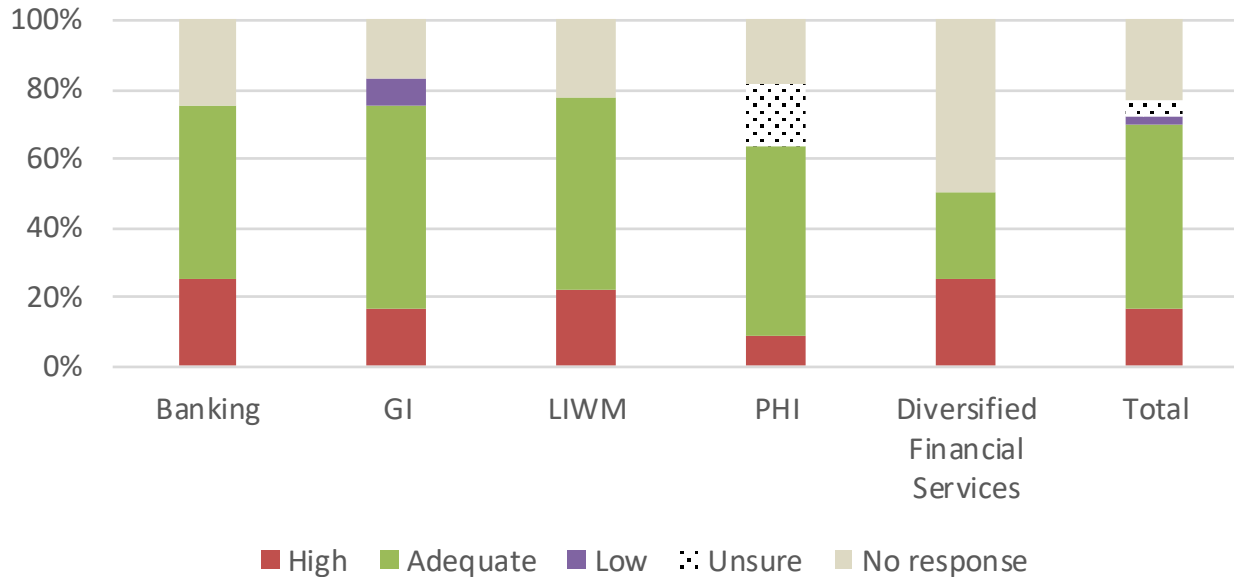


- Surveys of all / most staff remain most popular tool
- Banks also complete focused surveys / interviews
- A majority in LIWM, Banking and GI use objective measures (e.g. no. of compliance breaches)



How would you rate the behaviours and attitudes towards risk in your organisation?

Percentage of respondents by industry

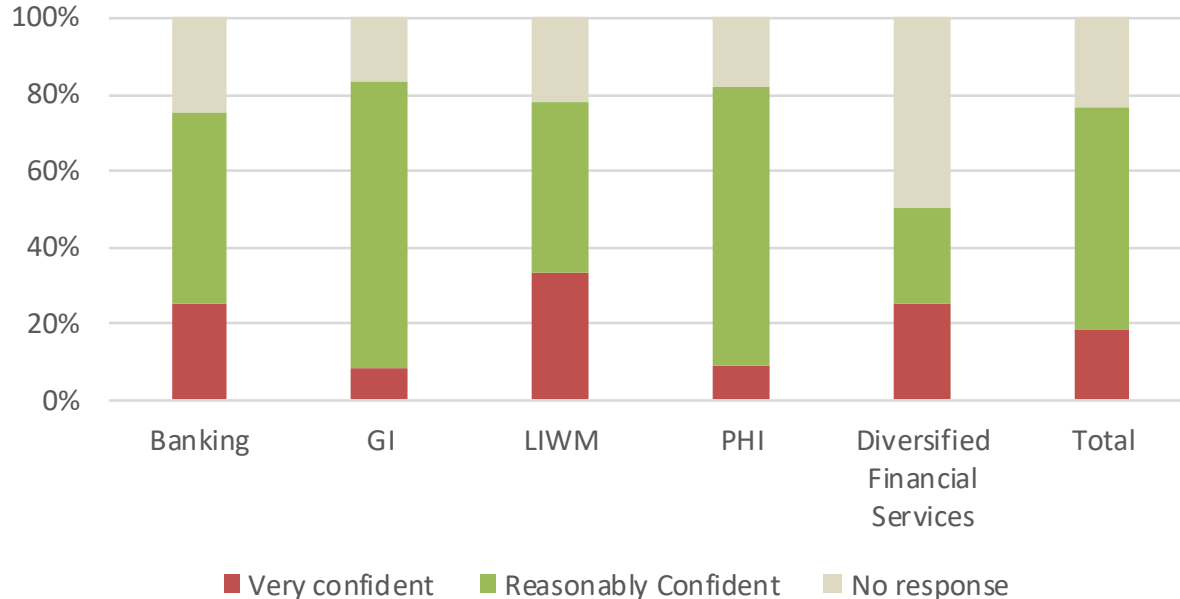


- Most think internal attitudes to risk are “adequate” but with room for improvement
- PHI has a smaller percentage with a “high” score, reflecting its earlier stage of risk management development



How confident are you in the ability of your organisation to respond to a serious business disruption?

Percentage of respondents by industry

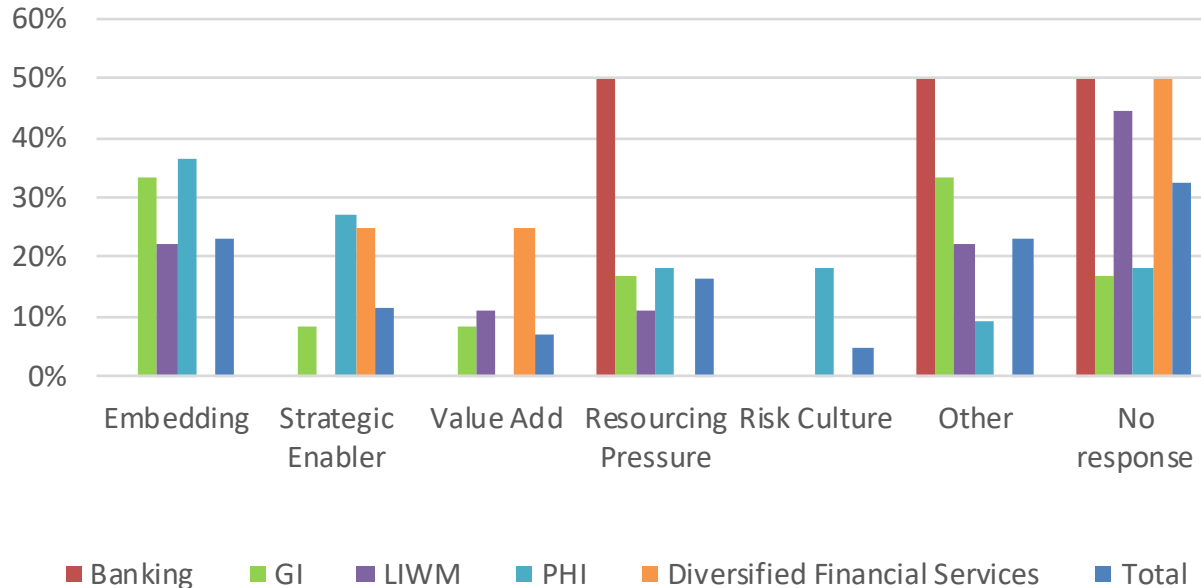


- LIWM and Banks are most confident
- GI and PHI are relatively less confident



In carrying out your role what are your biggest challenges?

Percentage of respondents by industry

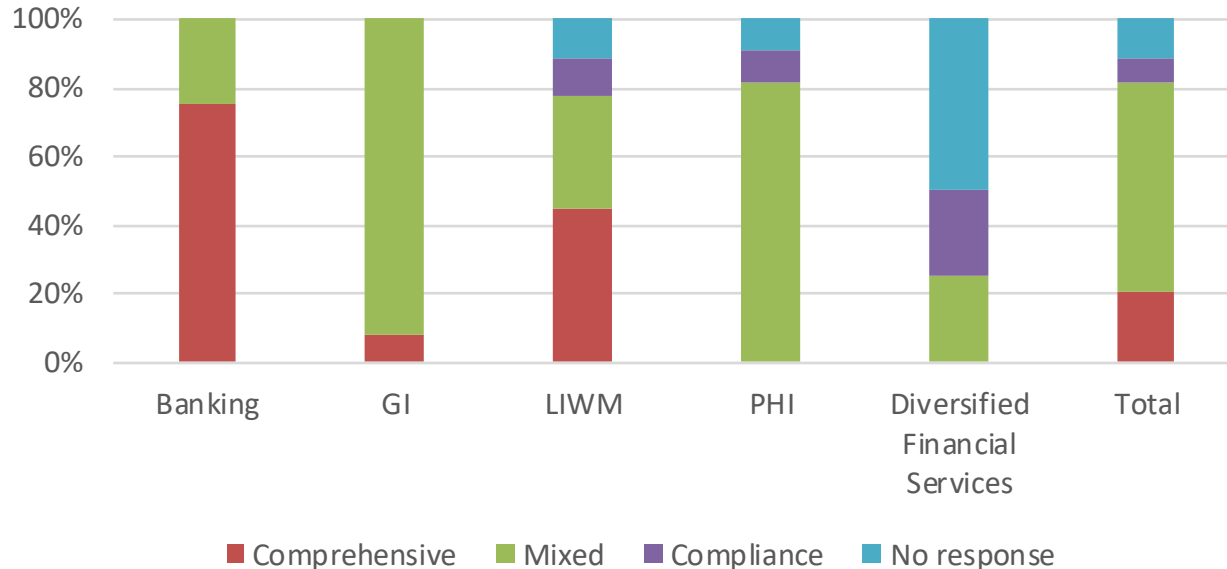


- Embedding risk management was common
- Resourcing pressure on risk function also rated highly
- Making risk management a strategic enabler and source of value add were also important



How embedded is the risk management function within your organisation?

Percentage of respondents by industry

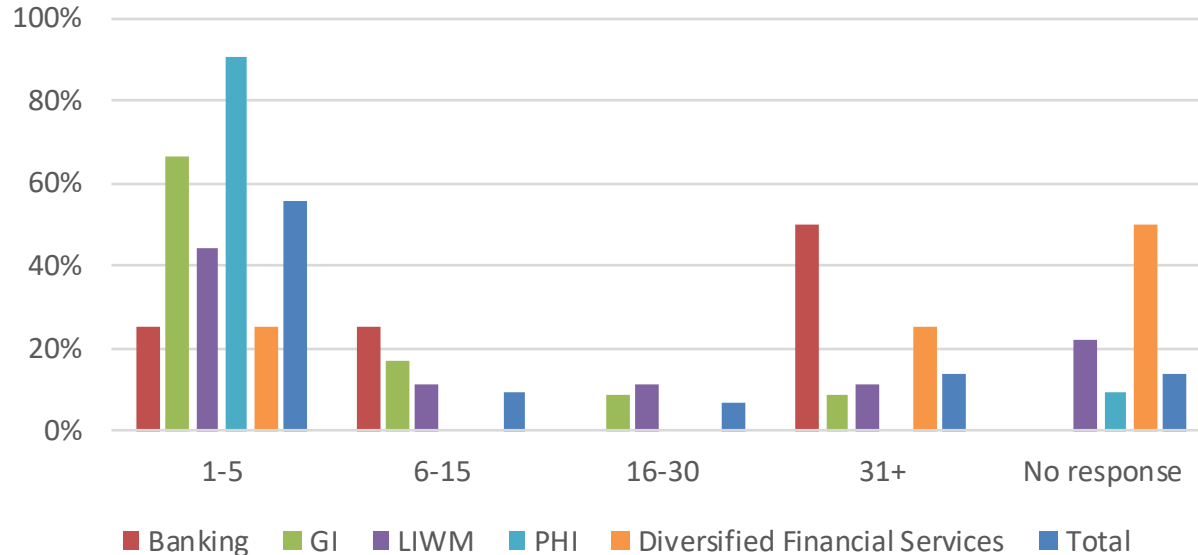


- Most said that the record on embedding was mixed – risk management is used, but with some room for improvement.
- Few from GI or PHI said its use was comprehensive



How large is your risk management function (full time equivalent, including the CRO and their team)?

Percentage of respondents by industry

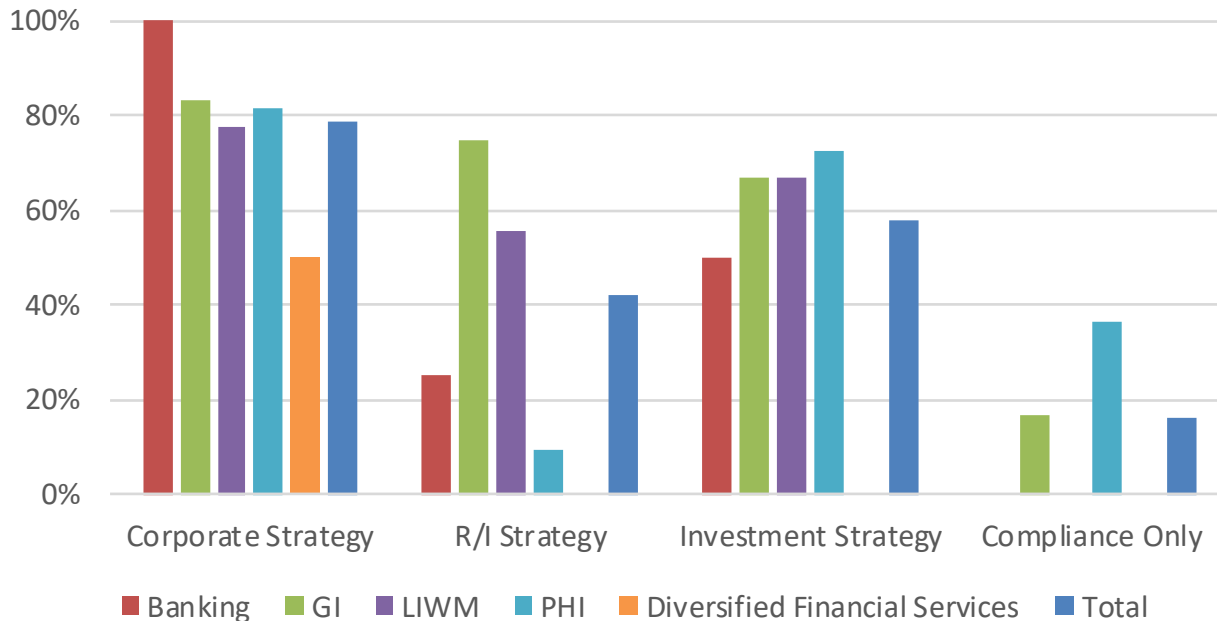


- Overall average is around 11
- Average size for banks (approx. 23)
- LIWM (12) is higher than GI (9)
- PHI average of about 3 staff is smallest group, reflecting smaller size of most PHIs



How do you use your RAS? (tick all that apply)

Percentage of respondents by industry

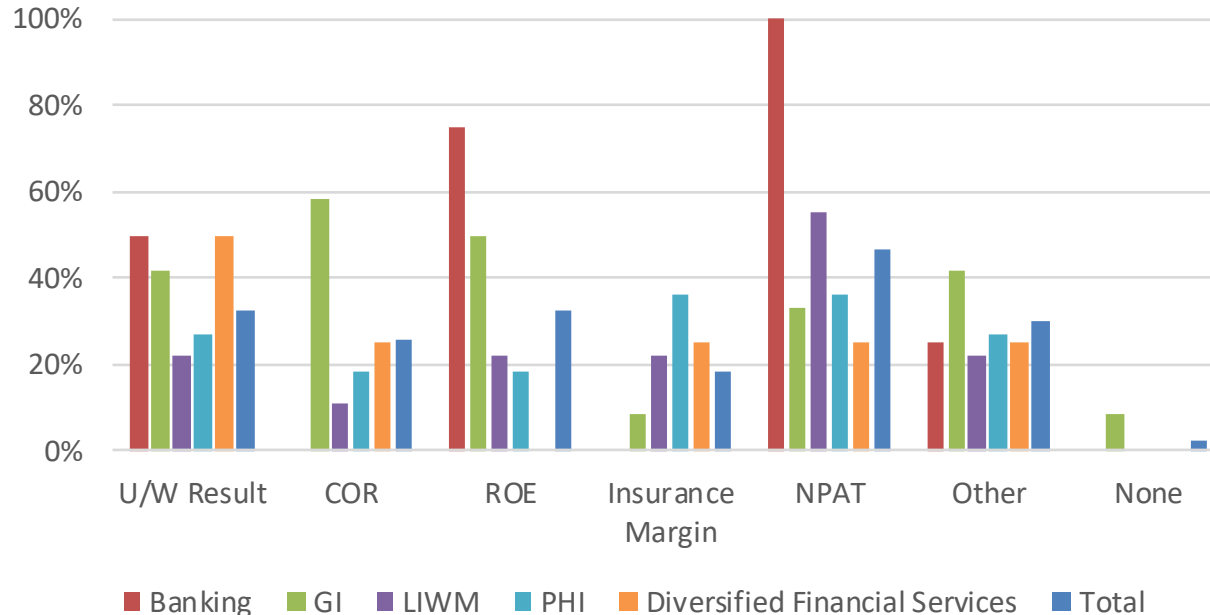


- Given there was only one response for each of “Superannuation”, “Government” and “Water Utility”, these are not shown.
- Most use for corporate strategy
- Most GI and LIWM use for reinsurance (R/I) as well



Which of the following return/performance metrics do you use in your RAS? (tick all that apply)

Percentage of respondents by industry

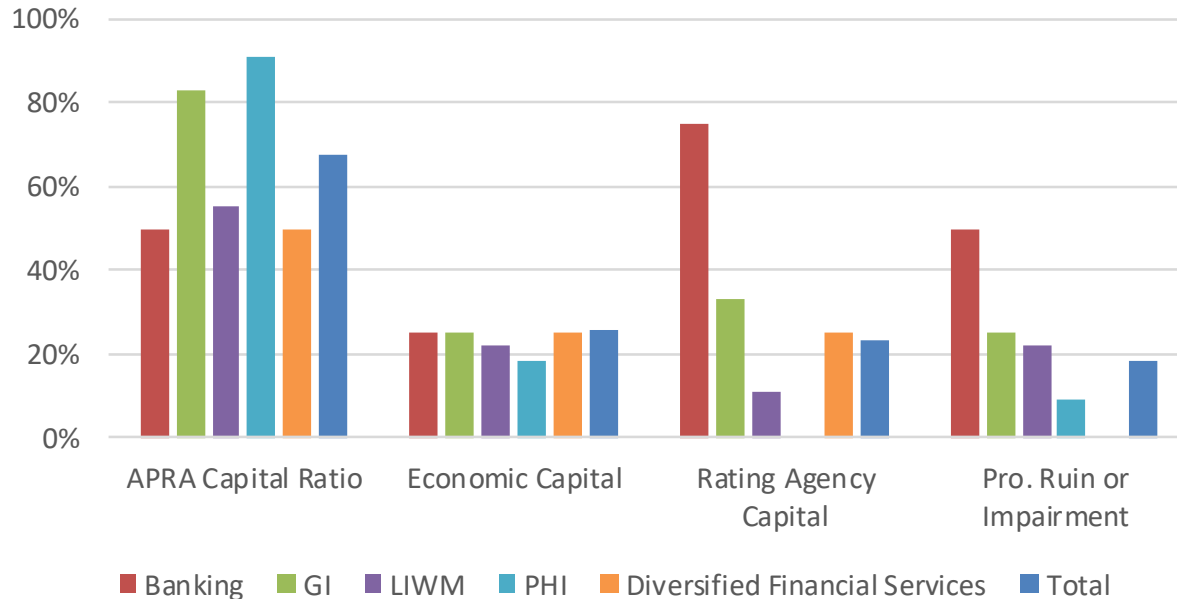


- Interestingly, two of the four banking respondents say they use underwriting result
- Only banks and GI tend to use ROE
- Net Profit After Tax is the most popular return/performance measure.
- Other includes a wide range of capital & operational measures



Which capital/solvency metrics do you use in your RAS? (tick all that apply)

Percentage of respondents by industry

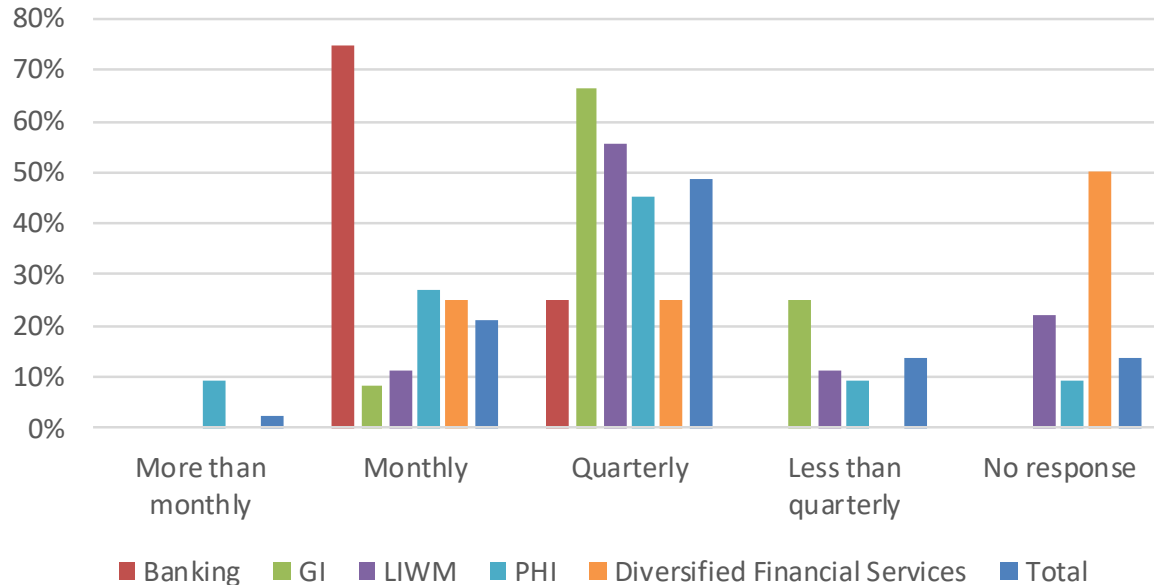


- APRA Capital Ratio is most common (e.g. Capital Base to PCR)
- GI and PHI make relative more use of APRA Capital Ratios
- Banks make greater use of Rating Agency and Probability of Ruin / Impairment measures
- About 20% of all groups use Economic Capital



How often do you compare your risk profile to your risk appetite/risk tolerances?

Percentage of respondents by industry



- Most review quarterly
- Three out of four banking respondents review monthly
- 36% of PHIs review monthly or more frequently



Further Detail

- Please refer to the full report (available via the Actuaries Institute website in coming days) for answers to all questions
- The full report also has results for each question split by
 - Industry
 - Company size (no. of staff)
 - Company ownership



Appendix – Full Results



Background

- Objectives
 - To understand practice in each industry, so CROs can benchmark their approach to their peer group
 - To compare practice across industries
- Inaugural survey
 - This is a trial to see if CROs and members value such an exercise
 - We would like to run this regularly (every 1-2 years)
 - Please provide your feedback to improve the survey in future (email the RMPC Convenor (Brett Riley) at briley@archlmi.com)



Background

- Many existing surveys focus on one industry, or have a wider scope (e.g. Asia Pacific or global coverage).
- This survey is focused on Australian entities regulated by APRA
 - But not superannuation, as regulation and governance of superannuation funds is different to banks and insurers. Superannuation funds are not currently or likely to be covered by CPS 220 in the near future; they are covered by a different risk management standard (SPS 220)



Approach

- Survey was emailed to CROs of APRA regulated banks, general insurers, life insurers and private health insurers
 - Survey sent where we had the name & email address for each CRO
 - One response per person (even if they have multiple CRO roles e.g. CRO for general insurer and life insurer in same corporate group)
 - **Coverage of each industry was better by company size (net assets) rather than a simple count of companies**
- In a small number of cases, Deputy CROs or others were contacted where they were more likely to respond
- Survey also sent to a small number of non-APRA regulated general insurers (e.g. government insurers)
- For several questions we gave respondents an option for “no response”



Approach – Percentage of Industry Contacted

Industry	% by Number of Entities	% by Value of Net Assets
Authorised Deposit-Taking Institutions	14%	
General Insurers	71%	95%
Life Insurers (including Friendly Societies)	59%	
Private Health Insurers	83%	
Total	44%	

- We will aim to improve coverage in future surveys, especially for ADIs



Disclaimer

- In total 43 survey responses were received
- This is a small group from which to draw firm conclusions, particularly when the response set is further segmented
- Nevertheless, the responses provide some indication of broad trends for the various factors analysed
- The statistical significance of the responses has not been tested

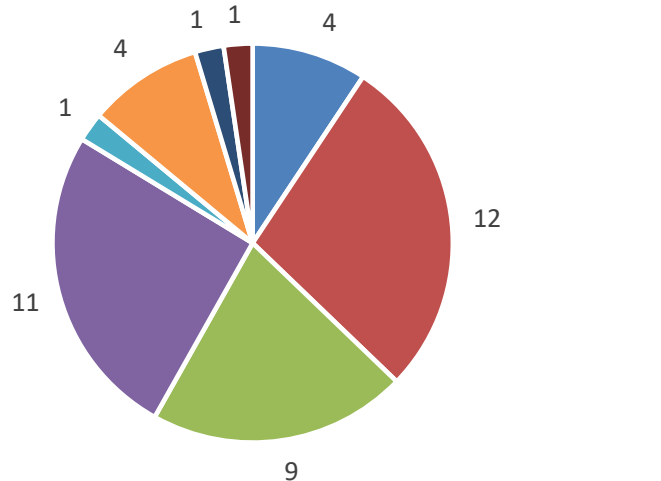


Profiling Questions

1. Which industry do you work in?
2. What is your role?
3. How would you characterise the size of your company (number of staff members) within your industry (Australia only)?
4. Please describe the ownership of your company



Profile – Responses by Industry



■ Banking

■ Life Insurance & Wealth Management (LIWM)

■ Superannuation

■ Government

■ General Insurance (GI)

■ Private Health Insurance (PHI)

■ Diversified Financial Services

■ Water Utility

- Three quarters are from insurance
- 84% if diversified financial services are included
- Strong response from PHI
- “Superannuation” may be from a life insurer
- Unsure why one respondent answered “Water Utility”



Profile – Responses by Role

Area	Head of Op.		Other Risk	Actuarial -	Chief		General	Internal	Total
	CRO	Risk	Mgt	Reserving	Actuary	Consultant	Manager	Audit	
Banking	2	1	1	-	-	-	-	-	4
GI	10	-	1	1	-	-	-	-	12
LIWM	5	-	3	-	1	-	-	-	9
PHI	9	-	1	-	-	-	1	-	11
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Diversified Financial Services	2	-	1	-	-	1	-	-	4
Government	-	-	-	-	-	-	-	1	1
Water Utility	1	-	-	-	-	-	-	-	1
Total	29	1	7	2	1	1	1	1	43

- 37 (86%) of responses were from specialist risk managers/CROs
- The non-CRO responses include a consultant acting as CRO, actuaries who were emailed in lieu of CRO in a minority of cases, or others not strictly bound by CPS 220



Profile – Responses by Company Size – Australian Staff

Area	Number of Australian staff				Total
	up to 20	21-75	76-250	251+	
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- The ADIs (banks), life insurers and government insurers tend to be larger.
- The PHI's tend to be smaller than the other industries.



Profile – Responses by Company Ownership

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PHI	1	3	7	-	-	-	11
Superannuation	-	-	1	-	-	-	1
Diversified Financial Services	2	1	-	-	-	1	4
Government	-	-	-	1	-	-	1
Water Utility	-	-	-	1	-	-	1
Total	12	6	13	3	2	7	43

- Most PHIs are mutually owned, consistent with being smaller
- LIWMs have relatively more foreign owned companies
- General insurers are fairly evenly spread across the groups



Q5. What is the length of Risk Appetite Statement (in pages)?

Industry	Length of RAS (in pages)				No response	Total
	1-5	6-15	15-30	31+		
Banking	1	1	1	1	-	4
GI	3	4	4	1	-	12
LIWM	3	2	2	-	2	9
PHI	-	4	5	1	1	11
Superannuation	-	1	-	-	-	1
Diversified Financial Services	-	1	1	-	2	4
Government	-	-	-	-	1	1
Water Utility	1	-	-	-	-	1
Total	8	13	13	3	6	43

- Average length – all industries - approx. 15 pages
- Banking and PHI longer (approx. 20 pages on average) vs LIWM (10 pages)



Length of RAS

Size (no. Australian staff)	Length of RAS (in pages)				No response	Total
	1-5	6-15	15-30	31+		
1-20	-	2	2	-	1	5
21-75	1	2	4	-	1	8
76-250	1	3	2	1	1	8
251+	6	6	5	2	3	22
Total	8	13	13	3	6	43

- No clear trend by size of company



Length of RAS

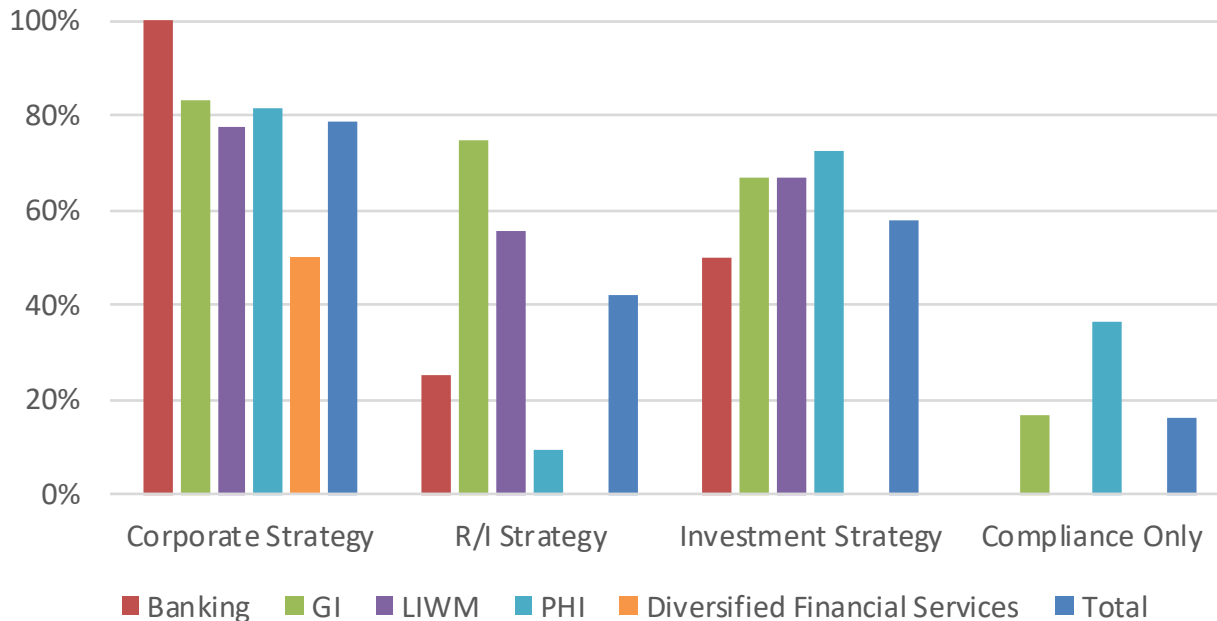
Size (no. Australian staff)	Length of RAS (in pages)				No response	Total
	1-5	6-15	15-30	31+		
AUS - Public	3	4	3	1	1	12
AUS - Private	1	1	3	-	1	6
AUS - Mutual	2	4	3	2	2	13
AUS - Government	1	1	-	-	1	3
Foreign - Branch	-	1	1	-	-	2
Foreign - Private	1	2	3	-	1	7
Total	8	13	13	3	6	43

- Mutuals tend to have longer risk appetite statements than others. As noted previously, more than half of mutual are PHIs



Q6. How do you use your RAS? (tick all that apply)

Percentage of respondents by industry



- Given there was only one response for each of “Superannuation”, “Government” and “Water Utility”, these are not shown.
- Most use for corporate strategy
- Most GI and LIWM use for reinsurance (R/I) as well



How do you use your RAS?

Percentage of respondents by size

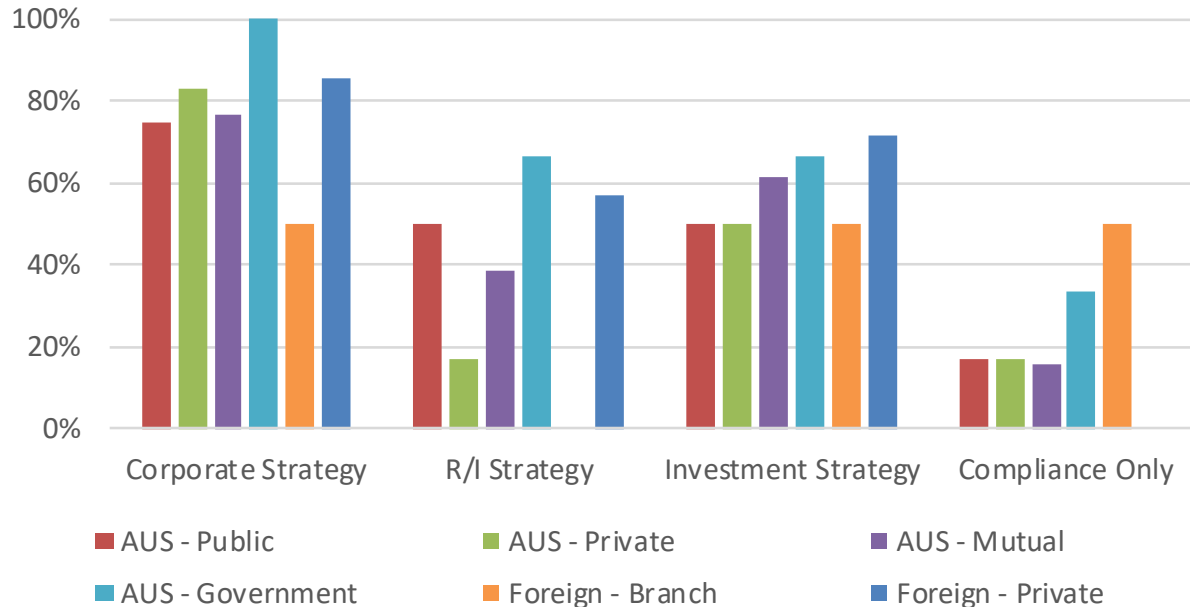


- Larger companies tend to make greater use of their RAS beyond compliance
- This is most likely to support their more diverse & complicated businesses



How do you use your RAS?

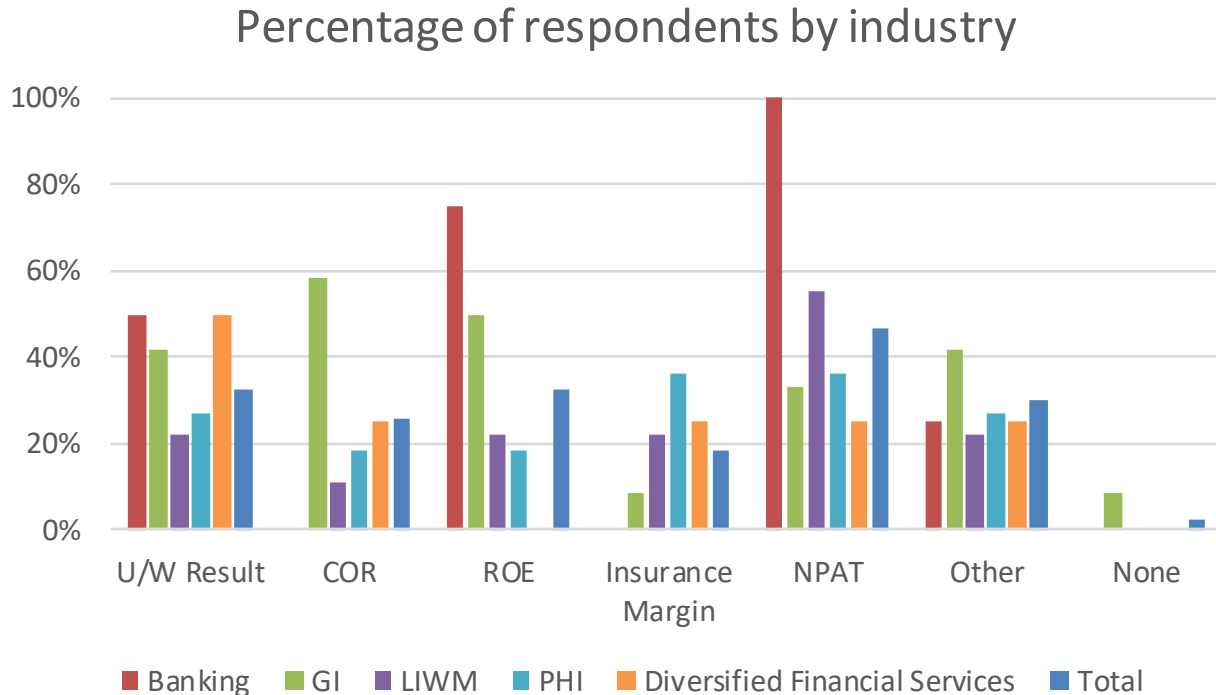
Percentage of respondents by ownership



- Foreign-owned entities tend to use their RAS for compliance only



Q7. Which of the following return/performance metrics do you use in your RAS? (tick all that apply)

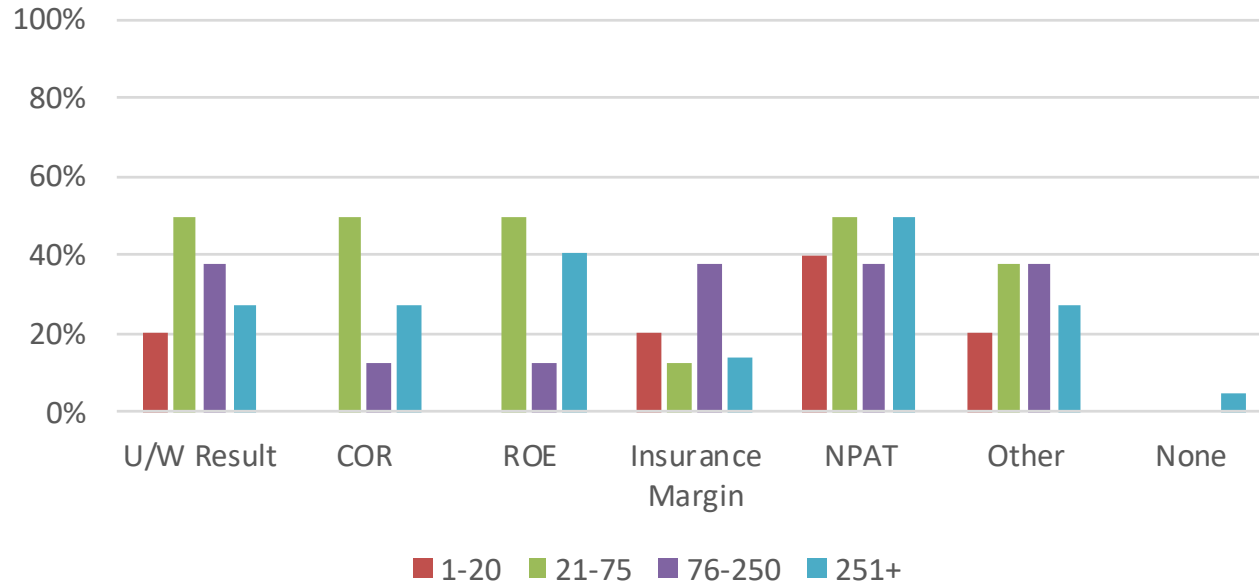


- Interestingly, two of the four banking respondents say they use underwriting result
- Only banks and GI tend to use ROE
- Net Profit After Tax is the most popular return/performance measure.
- Other includes a wide range of capital & operational measures



Return/performance metrics in RAS

Percentage of respondents by size

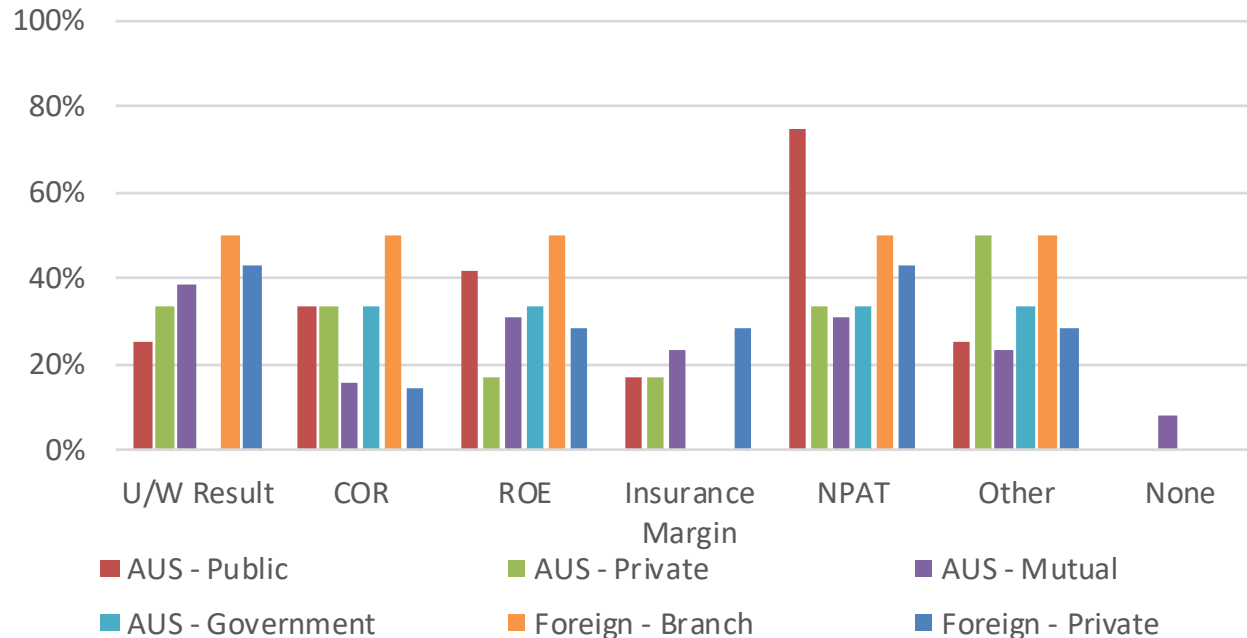


- The patterns for these measures by size of company most likely reflect the distribution by industry



Return/performance metrics in RAS

Percentage of respondents by ownership

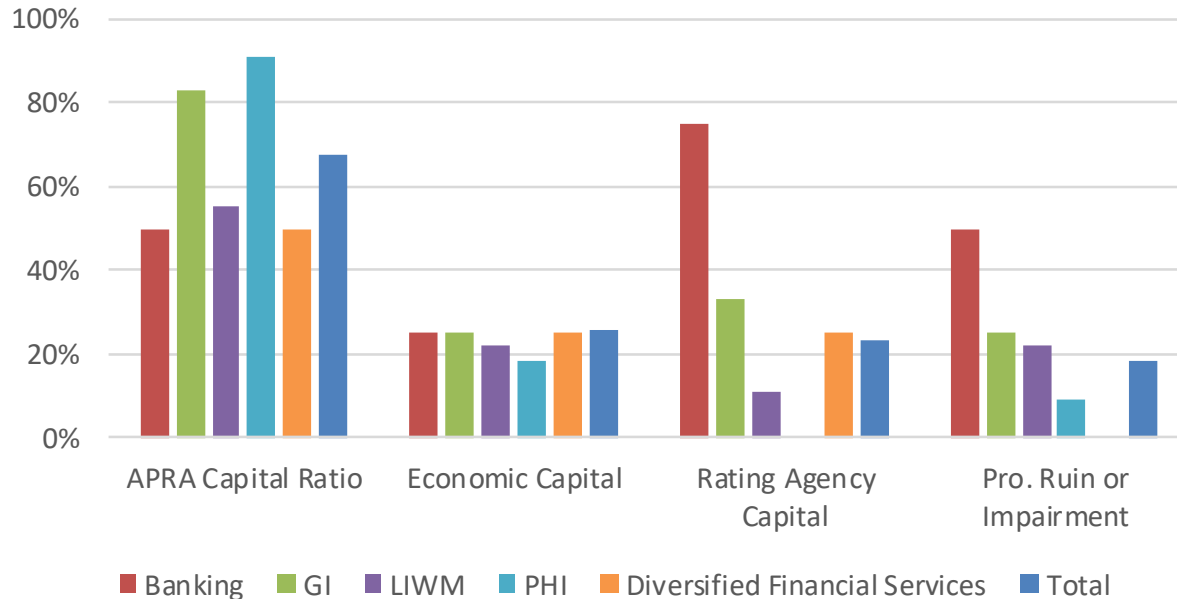


- The patterns for these measures by company ownership most likely reflect the distribution by industry



Q8. Which capital/solvency metrics do you use in your RAS? (tick all that apply)

Percentage of respondents by industry

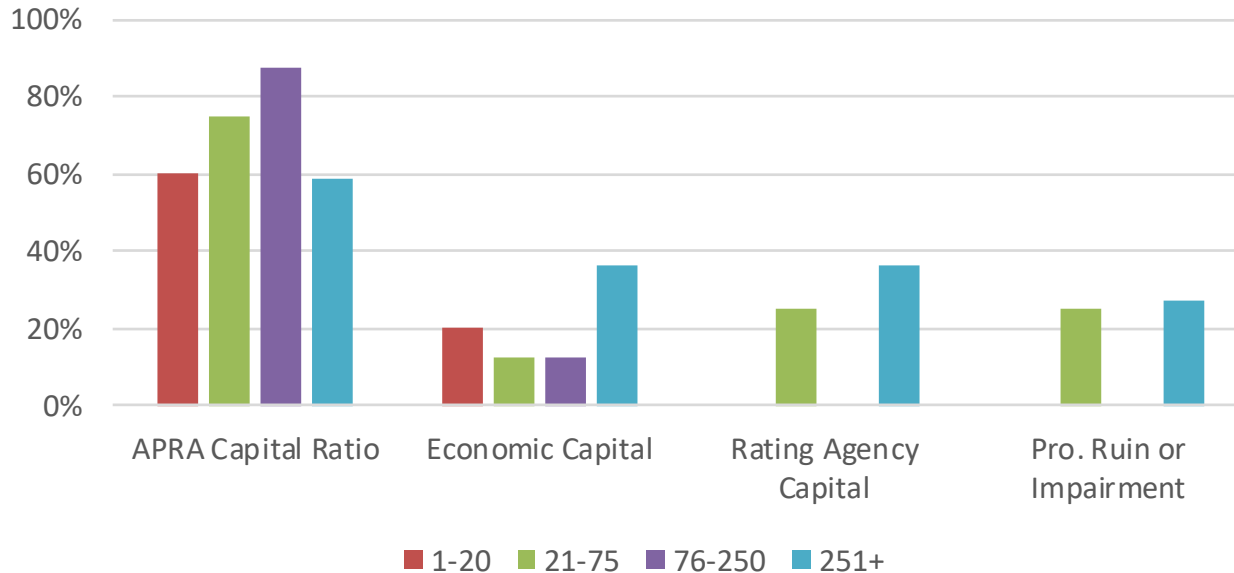


- APRA Capital Ratio is most common (e.g. Capital Base to PCR)
- GI and PHI make relative more use of APRA Capital Ratios
- Banks make greater use of Rating Agency and Probability of Ruin / Impairment measures
- About 20% of all groups use Economic Capital



Capital/Solvency metrics in RAS

Percentage of respondents by size

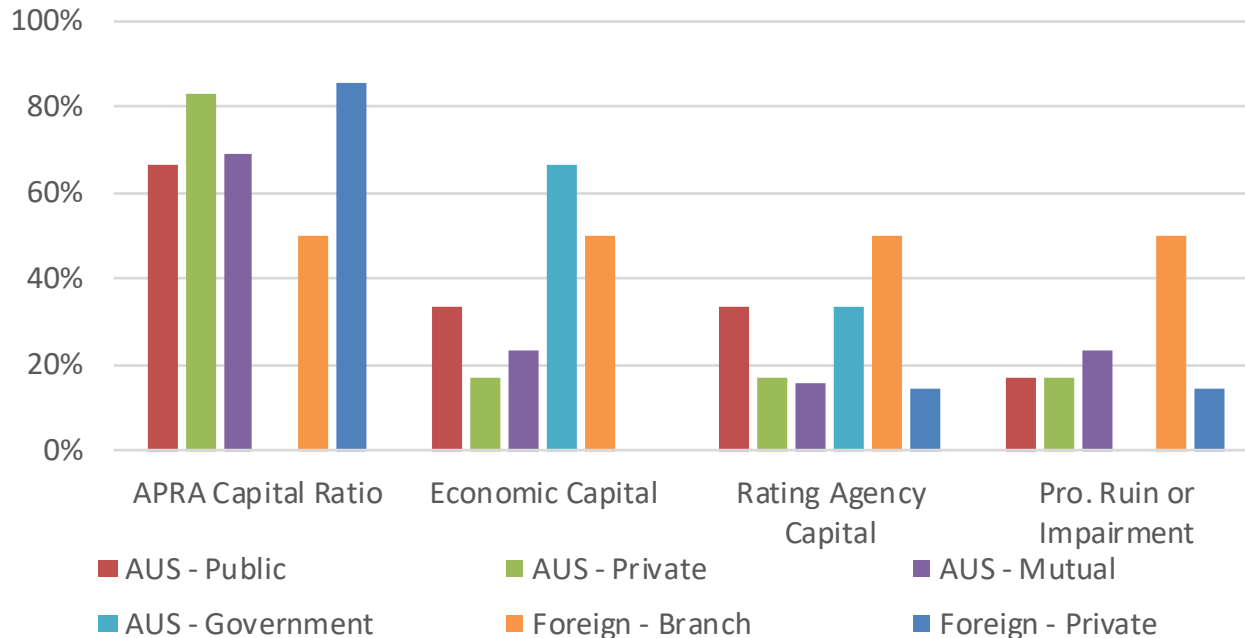


- Surprisingly, only 60% of small companies (1-20 staff) use a APRA capital ratio
- Larger companies make more use of Economic Capital and Rating Agency Capital measures.



Capital/Solvency metrics in RAS

Percentage of respondents by ownership

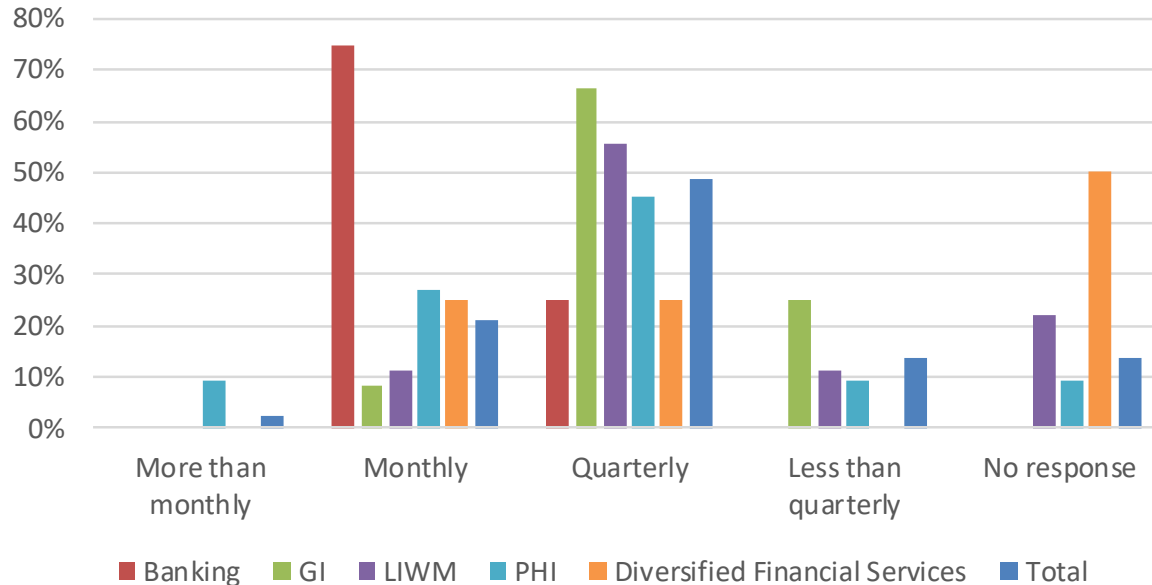


- Foreign branches tend to make more use of alternative measures (other than APRA Capital Ratio)



Q9. How often do you compare your risk profile to your risk appetite/risk tolerances?

Percentage of respondents by industry

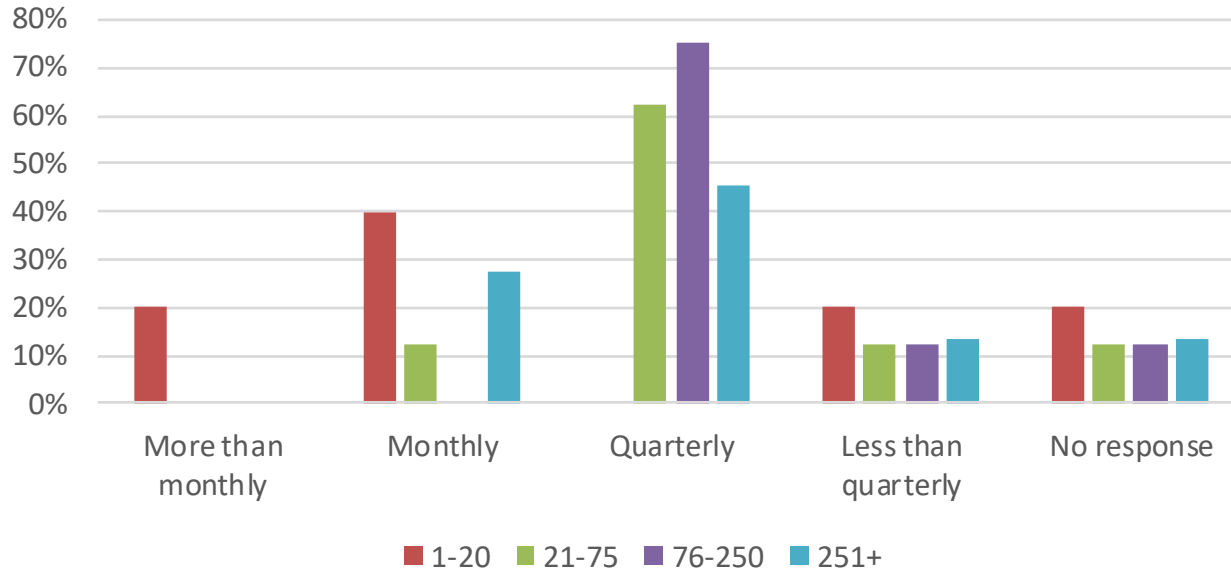


- Most review quarterly
- Three out of four banking respondents review monthly
- 36% of PHIs review monthly or more frequently



Frequency for reviewing risk profile against risk appetite/risk tolerances

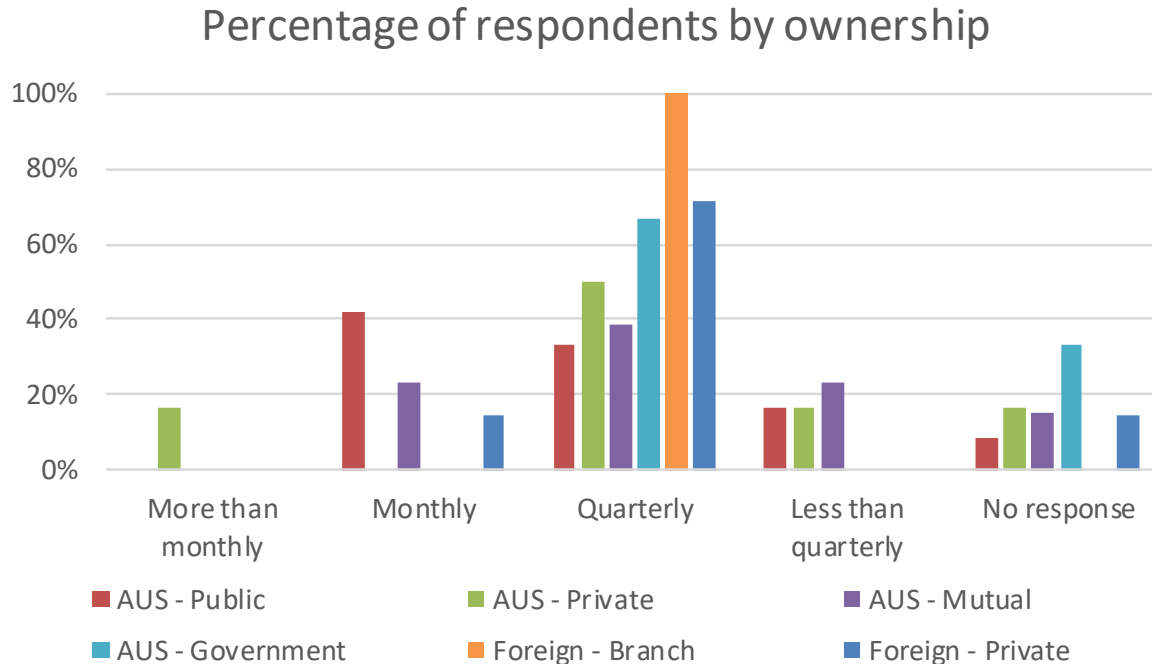
Percentage of respondents by size



- Based on the responses, the most frequent reviews tend to be done by the smallest and the largest companies



Frequency for reviewing risk profile against risk appetite/risk tolerances

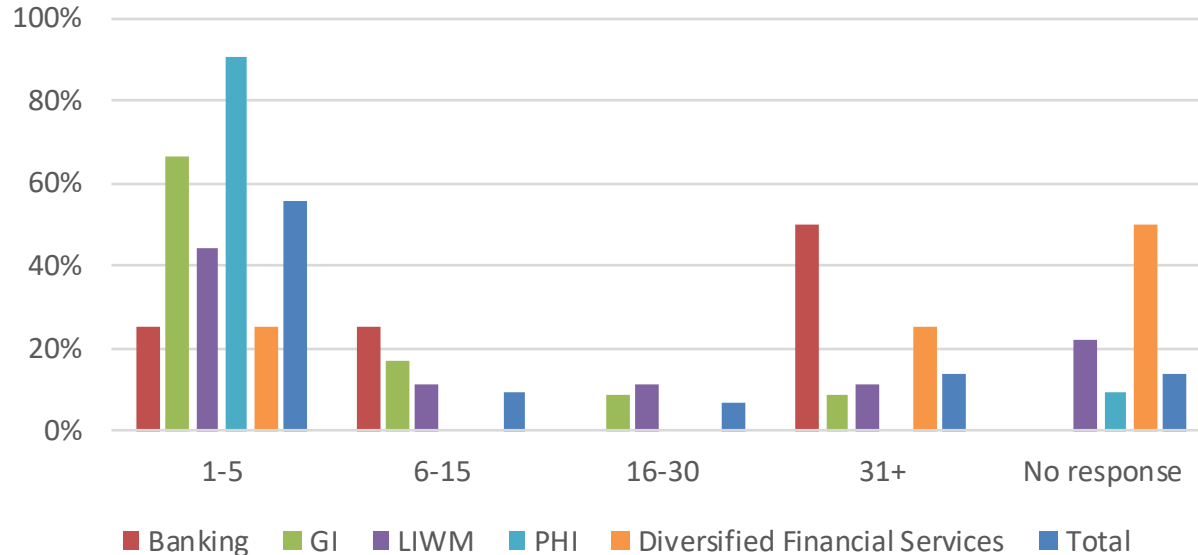


- All foreign branches represented formally review their risk profile on a quarterly basis



Q10. How large is your risk management function (full time equivalent, including the CRO and their team)?

Percentage of respondents by industry

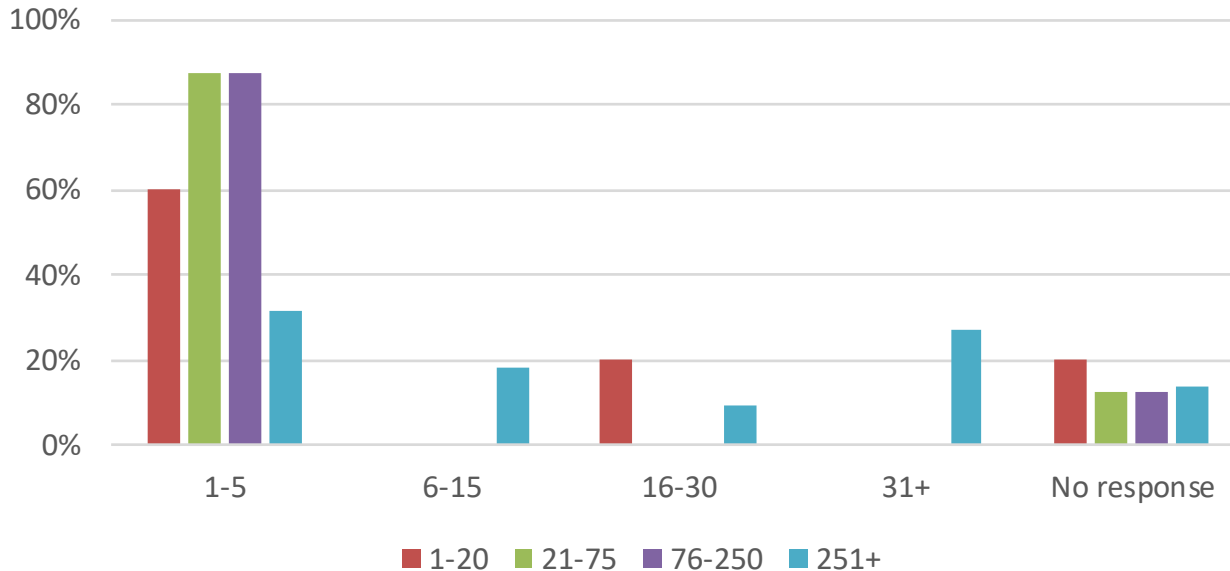


- Overall average is around 11
- Average size for banks (approx. 23)
- LIWM (12) is higher than GI (9)
- PHI average of about 3 staff is smallest group, reflecting smaller size of most PHIs



Size of risk management function (including CRO)

Percentage of respondents by size

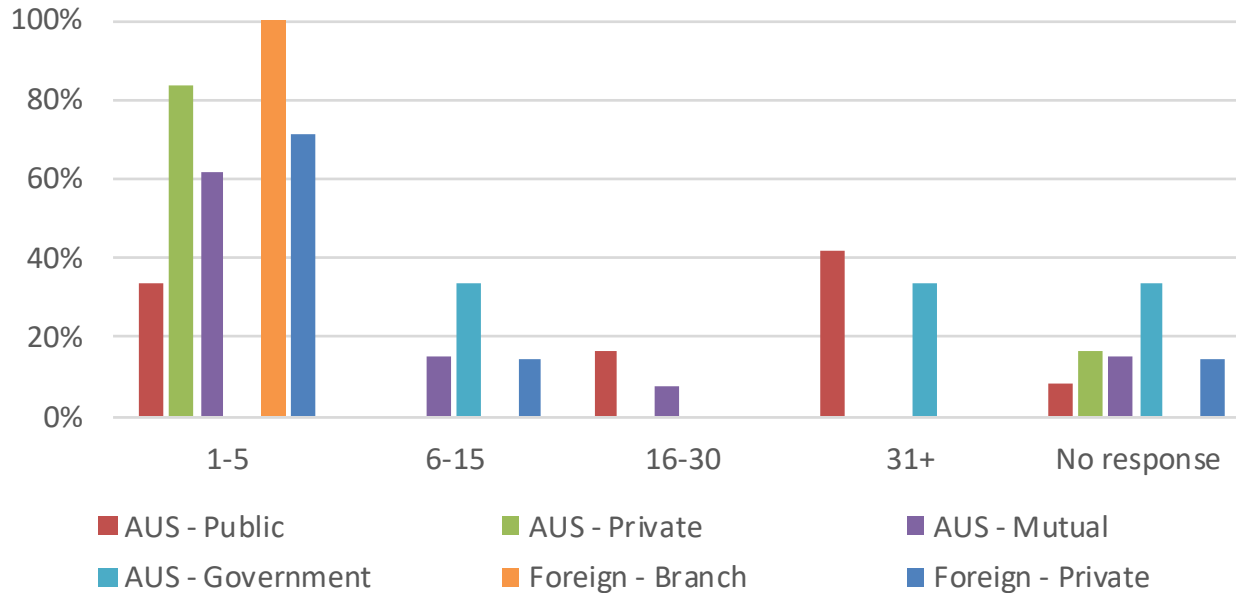


- Almost all who answered with up to 250 total staff had 1-5 in the risk management function
- Interestingly, one of the five respondents with 1-20 staff in total reported having more than 15 risk management staff!



Size of risk management function (including CRO)

Percentage of respondents by ownership

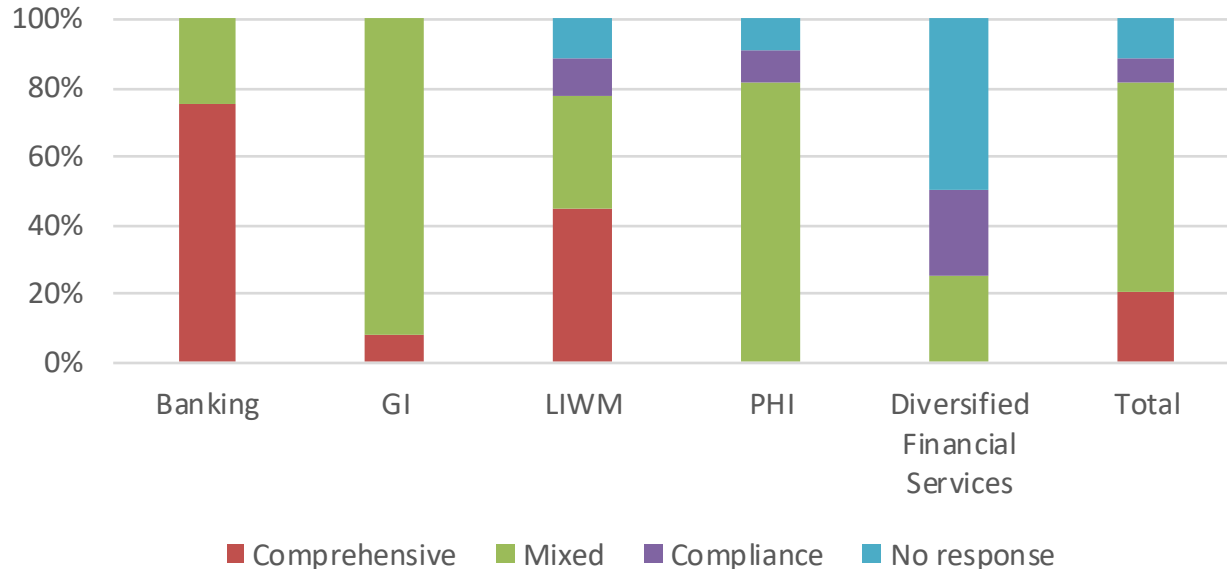


- Australian companies that are publicly listed, mutuals or Government owned tended to have the largest teams (> than five risk management staff)



Q11. How embedded is the risk management function within your organisation?

Percentage of respondents by industry

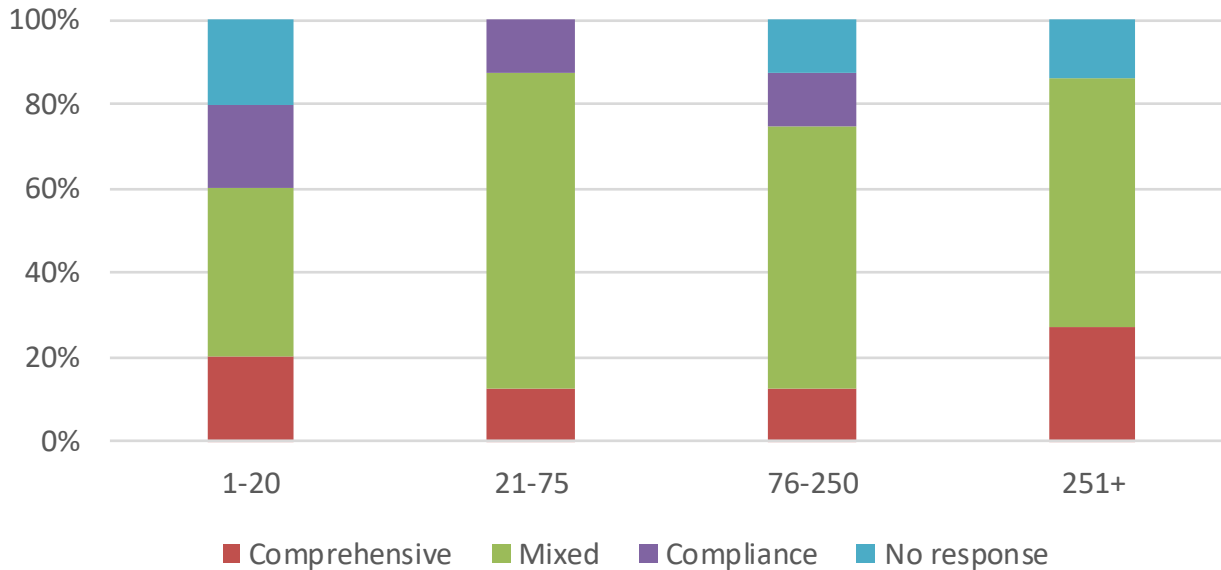


- Most said that the record on embedding was mixed – risk management is used, but with some room for improvement.
- Few from GI or PHI said its use was comprehensive



How embedded is risk management?

Percentage of respondents by size

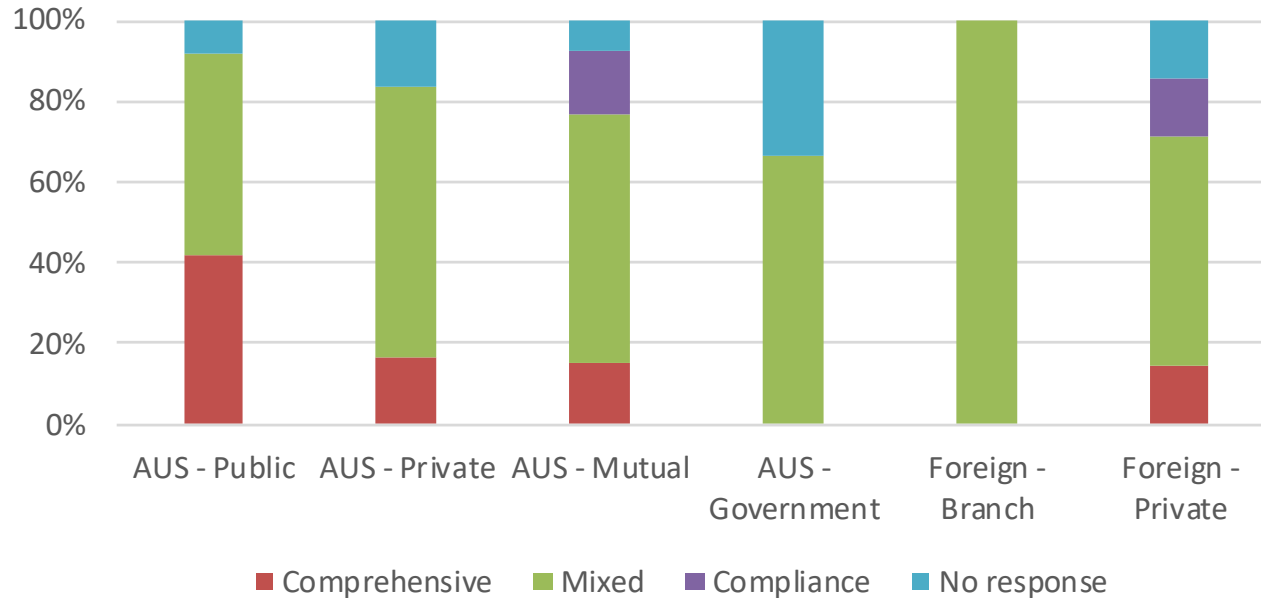


- The largest companies report the best overall levels of embedding risk management
- Smaller companies (up to 20 staff) report around 20% for both comprehensive embedding and minimal embedding (compliance only)



How embedded is risk management?

Percentage of respondents by ownership

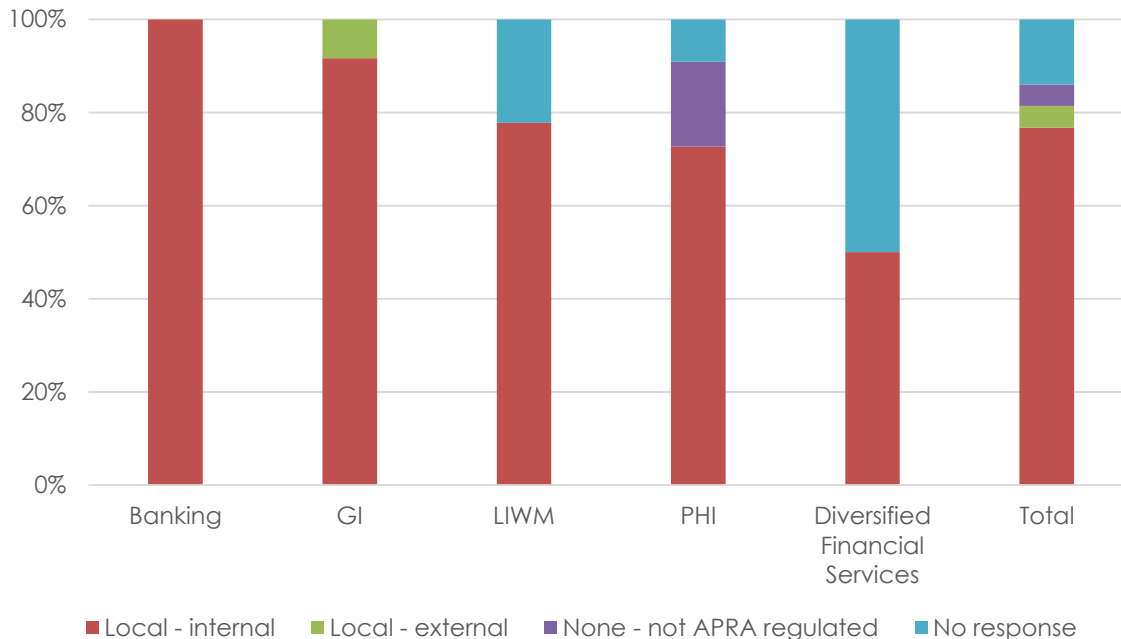


- Comprehensive embedding is reported as strongest in Australian public companies
- Compliance focused risk management is most prevalent in mutual and foreign private companies



Q12. Is your CRO based in Australia or overseas, as part of a foreign group?

Percentage of respondents by industry

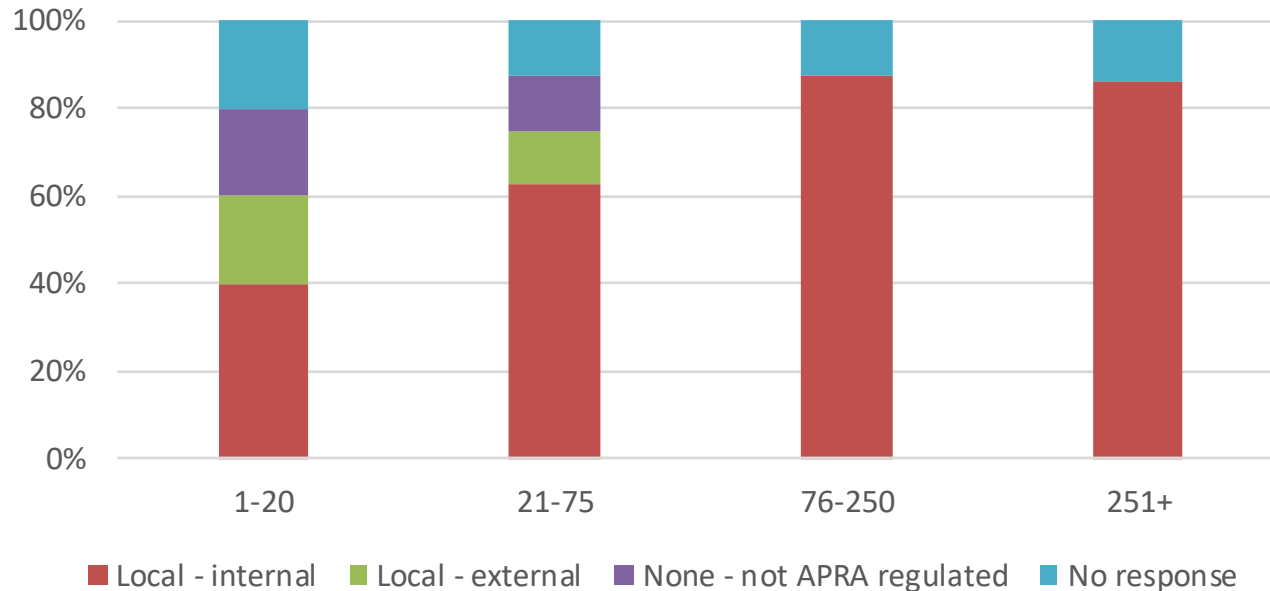


- Most CROs are local internal appointments
- Around 8% of GI CROs are local but external (consultants)
- Some PHIs are still developing their approach



Local or overseas based CRO?

Percentage of respondents by size

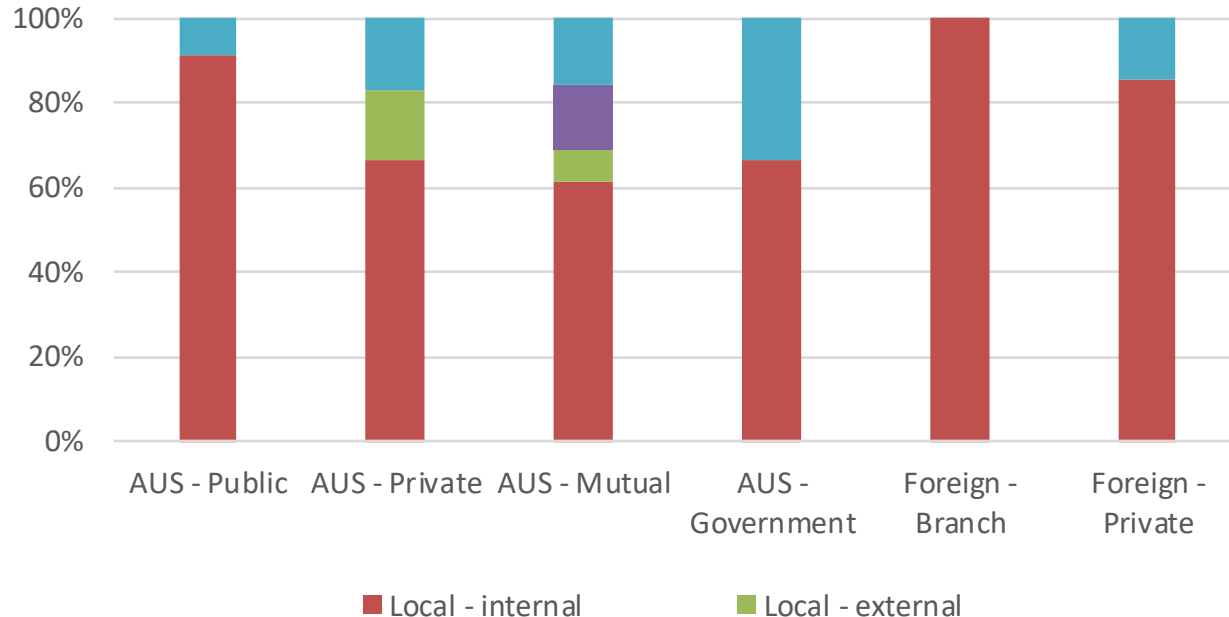


- Respondents had the option to select “overseas – a group CRO”, but none did
- Smaller companies are more likely to use consultants or are not bound by CPS 220 yet



Local or overseas based CRO?

Percentage of respondents by ownership

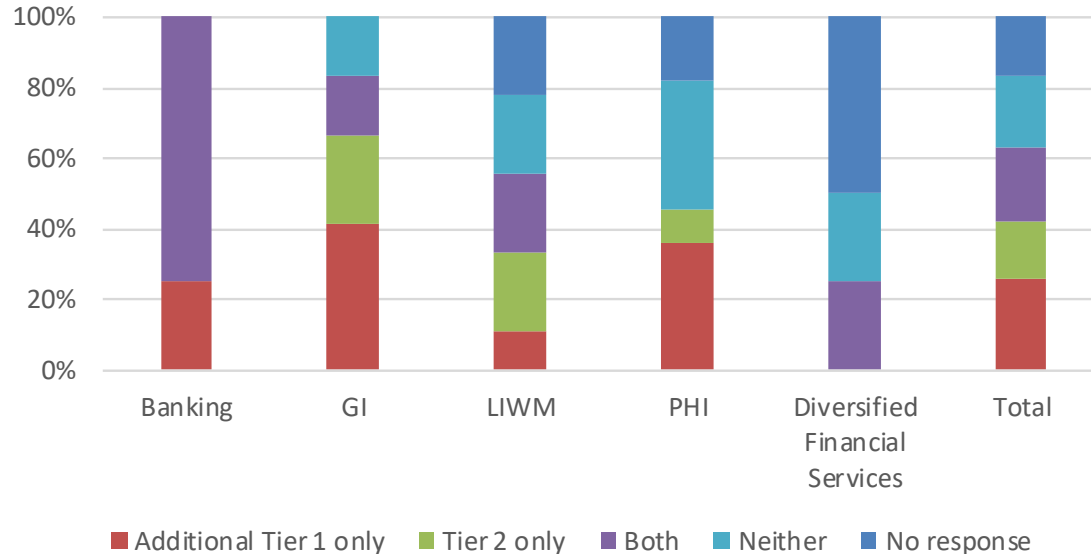


- The conclusions for Australian private and mutual companies are similar to those for the smaller companies on the previous slide



Q13. In addition to Common Equity Tier 1 capital, does your organisation use Additional Tier 1 or Tier 2 Capital? (tick those that apply)

Percentage of respondents by industry

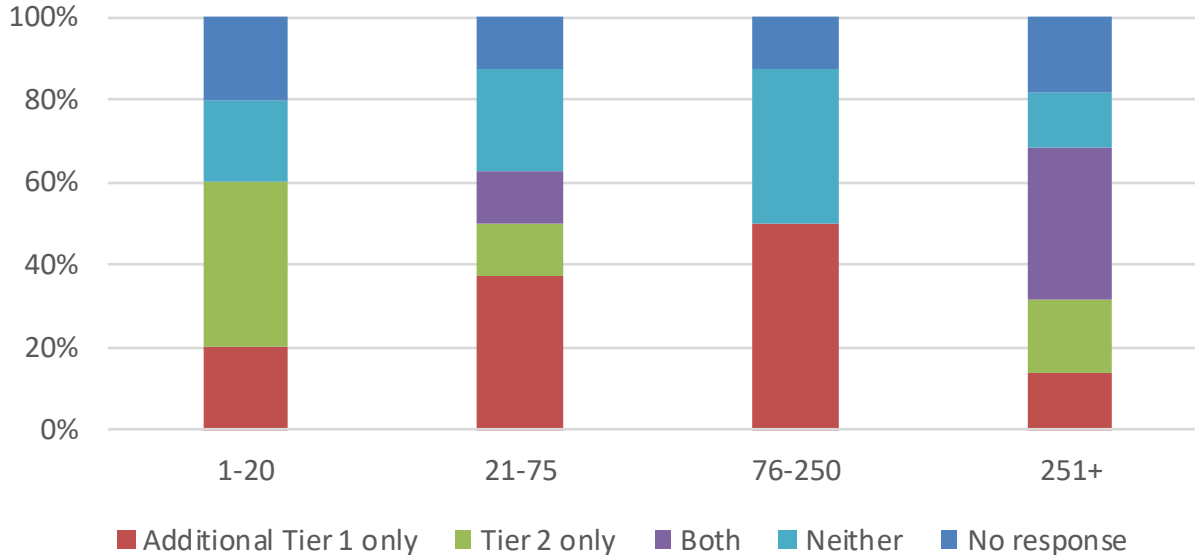


- Each of the banks responding uses Additional Tier 1 (and 3 of the 4 use Tier 2)
- More than 80% of GI use at least one (56% for LIWM and 45% for PHI)



Types of Capital Used (other than Common Equity Tier 1 Capital)

Percentage of respondents by size

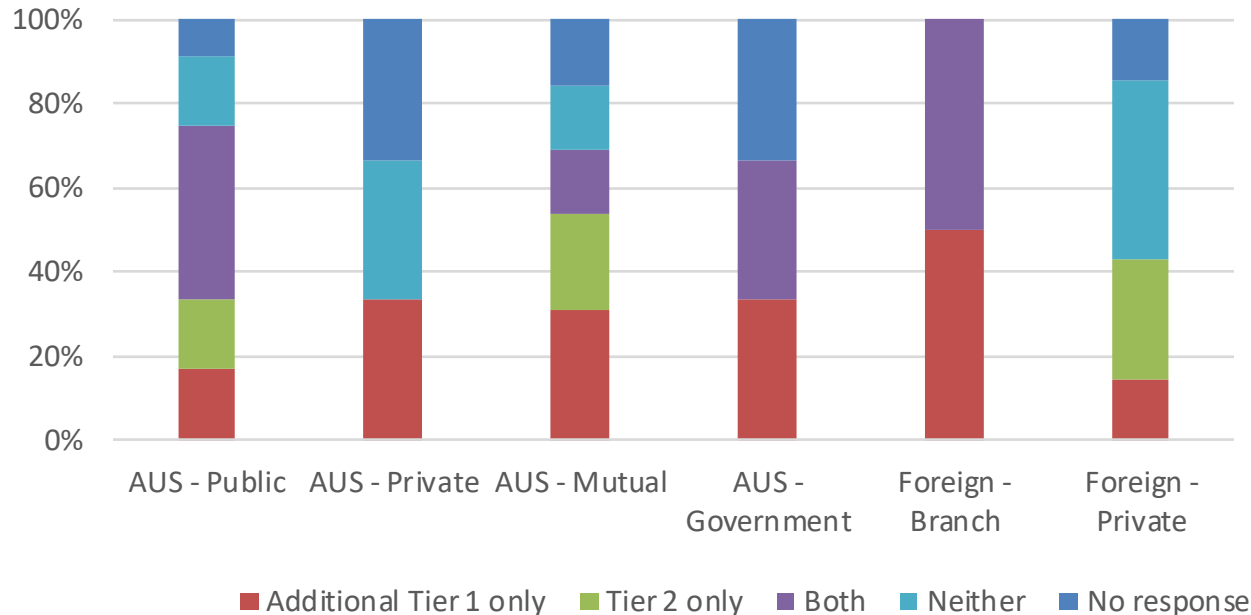


- When considering if a company uses at least one of Additional Tier 1 or Tier 2, there is little variation by size of entity
- Around 50-70% use one type (not adjusting for nil responses)



Types of Capital Used (other than Common Equity Tier 1 Capital)

Percentage of respondents by ownership

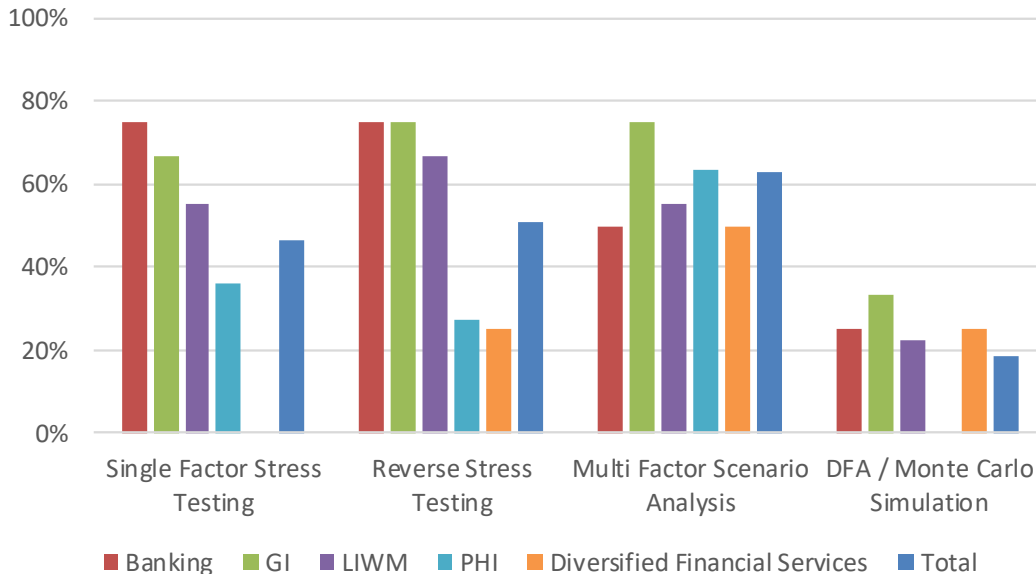


- Private companies (both Australian and foreign) are least likely to use one of these alternative sources of capital



Q14. Which of the following techniques does your company use to test its financial position? (tick all that apply)

Percentage of respondents by industry

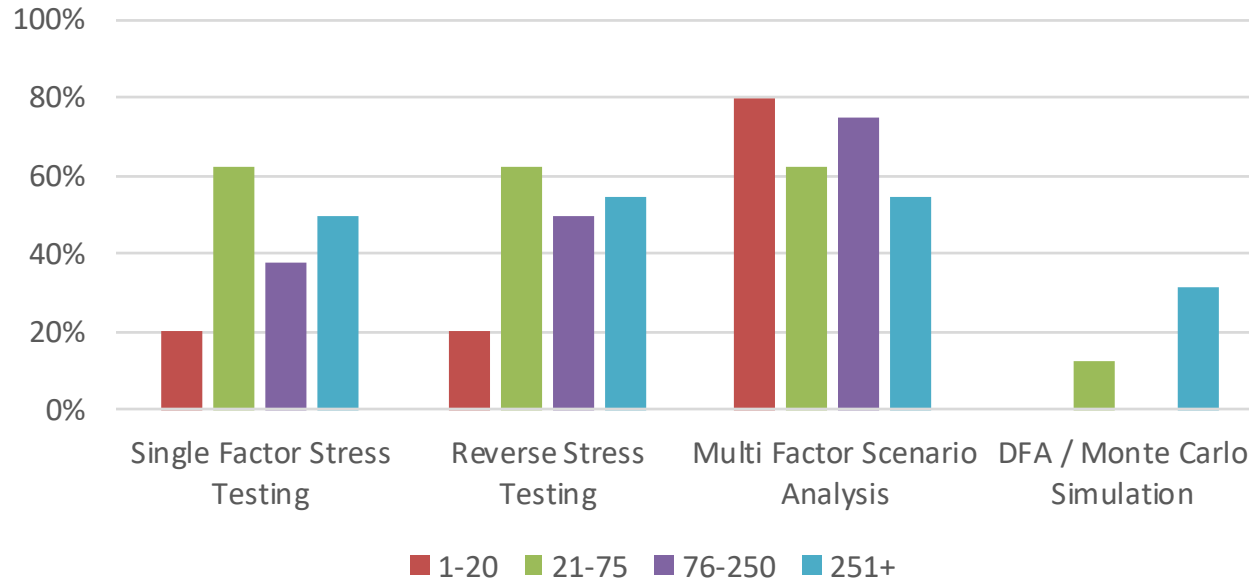


- 50% or more in most industries use single or multi factor analysis or reverse stress testing
- More than 60% of PHI use multi factor scenario analysis
- 25% of industry (excluding PHI) use DFA simulation approaches



Types of Risk Analysis

Percentage of respondents by size

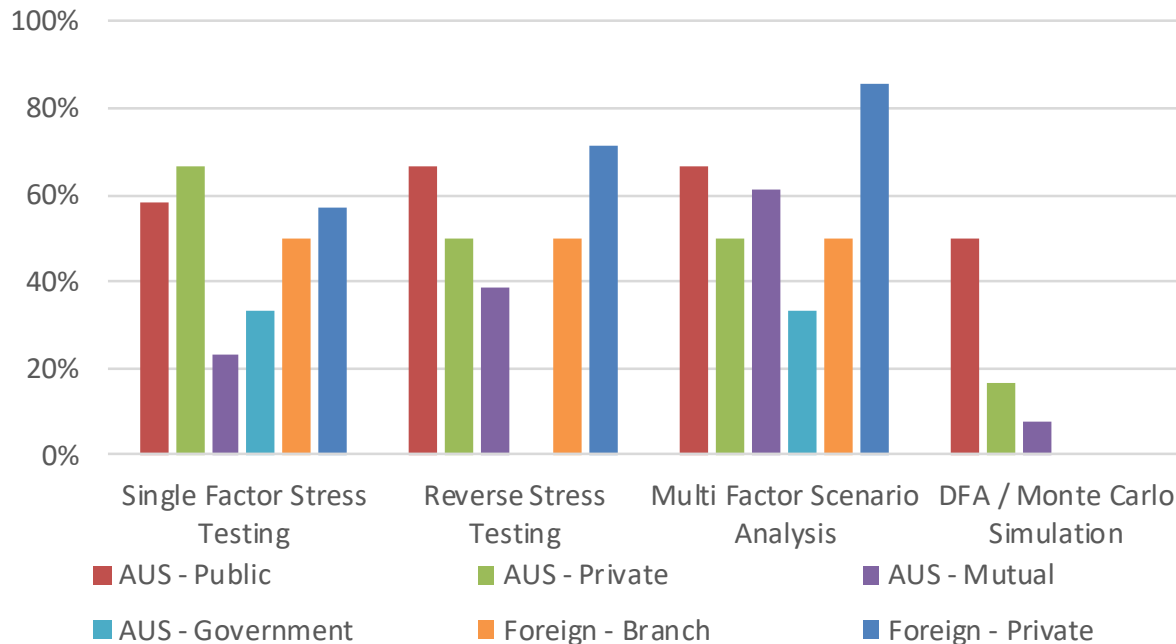


- For companies with >20 staff, similar proportions use single and multi factor analysis (including reverse stress testing)
- Most companies with 1-20 staff are PHI, explaining the low use of the first two tests shown
- Larger companies are also more likely to use DFA simulation



Types of Risk Analysis

Percentage of respondents by ownership

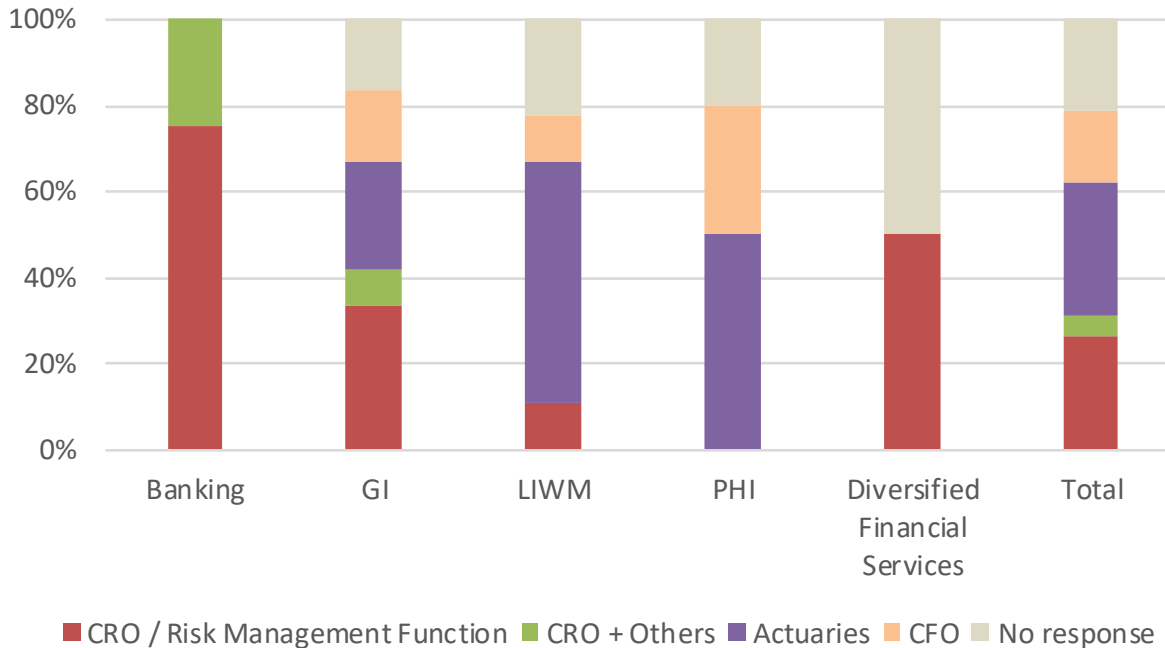


- Single and multi factor analysis (including reverse stress testing) are used by most company types
- Many PHIs are Mutuals, explaining the low usage of the first two types shown
- DFA is mostly used by publicly owned Australian companies



Q15. Who manages the risk analysis?

Percentage of respondents by industry

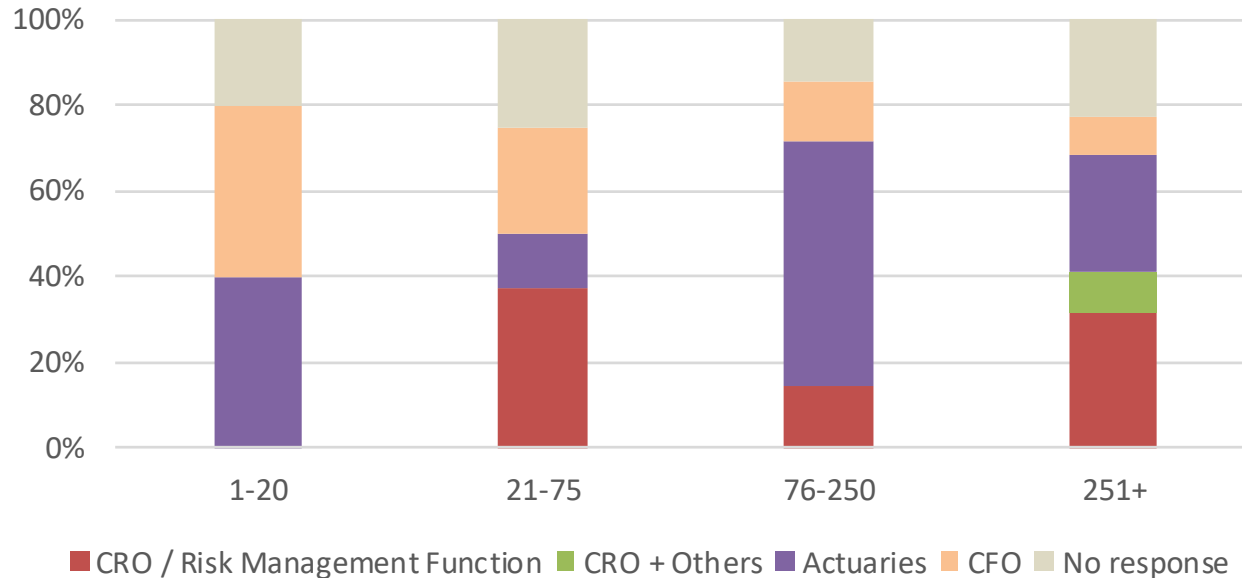


- Risk managers typically do the analysis in banks (often no actuary)
- Actuaries involved in around 50% of companies for LIWM, PHI. CRO takes smaller role.
- GI companies take a mixed approach



Who manages the risk analysis?

Percentage of respondents by size

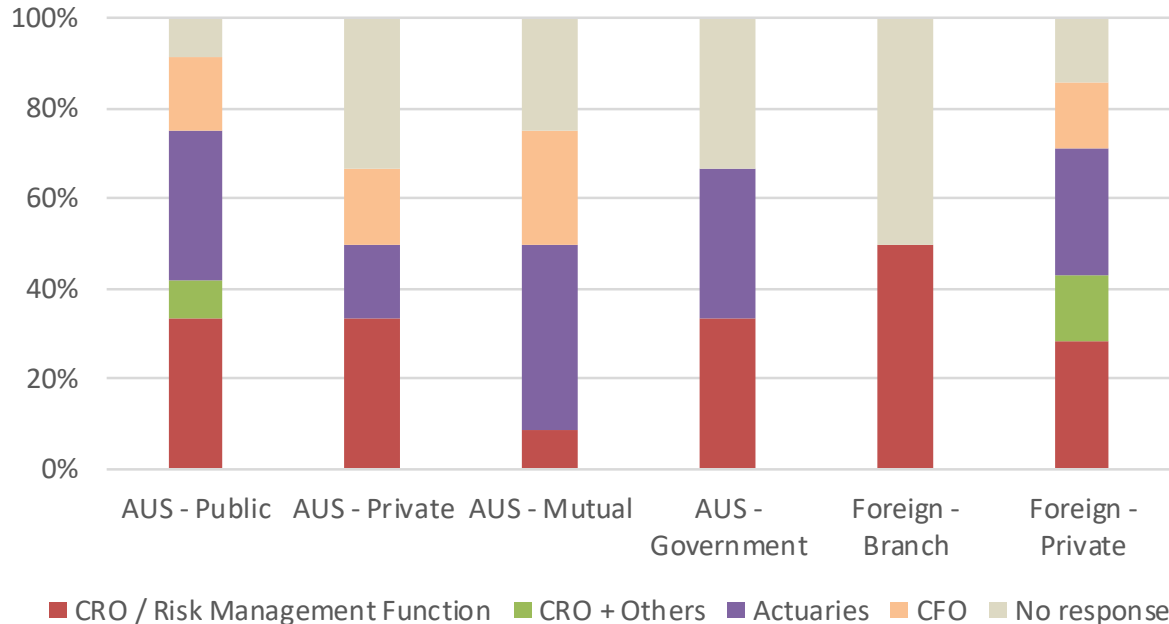


- Smaller companies tend to use the CFO more



Who manages the risk analysis?

Percentage of respondents by ownership



- Mutual companies mostly have actuaries or CFOs do the risk analysis
- For those who responded, foreign branches only use the CRO / risk function



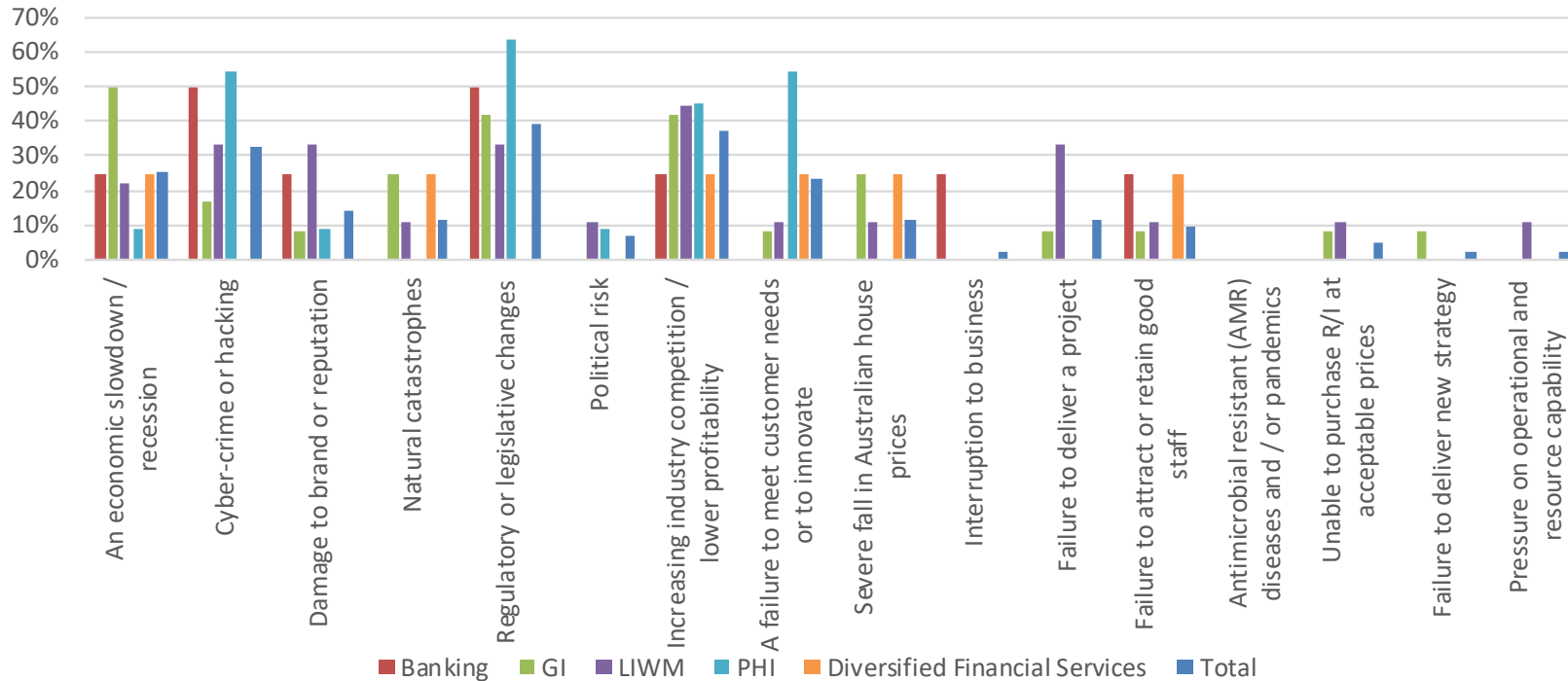
Q16. What do you consider to be the top three risks faced by your organisation in the coming year? (tick three only)

Risk	% of all respondents rating it a top risk (industries with high rating)
Regulatory or legislative change	40% (PHI, Banking, GI)
Increased industry competition / lower profitability	37% (PHI, LIWM, GI)
Cyber risks	33% (PHI, Banking, LIWM)
An economic slowdown / recession	26% (GI, Banking)
Fail to meet customer needs or to innovate	23% (PHI)
Damage to brand or reputation	14% (LIWM, Banking)



Top three risks in the coming year – detail by industry

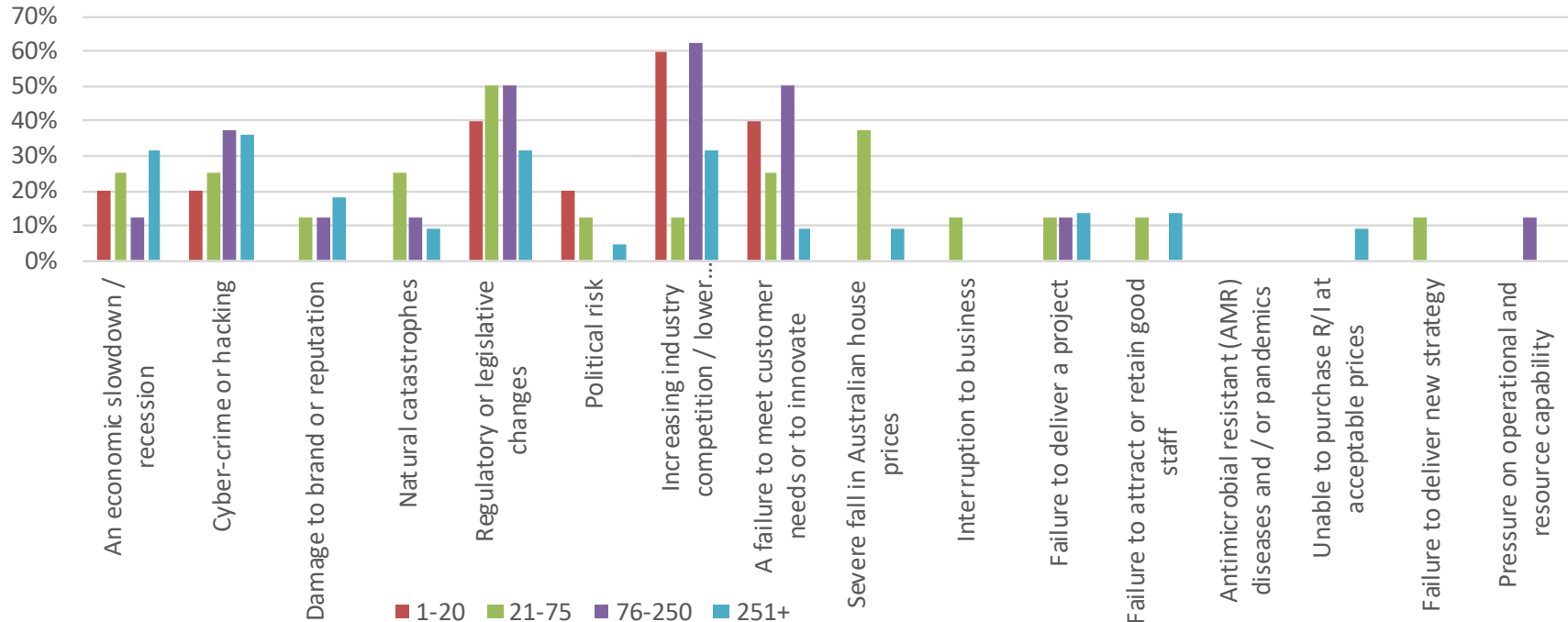
Percentage of respondents by industry





Top three risks in the coming year – detail by size

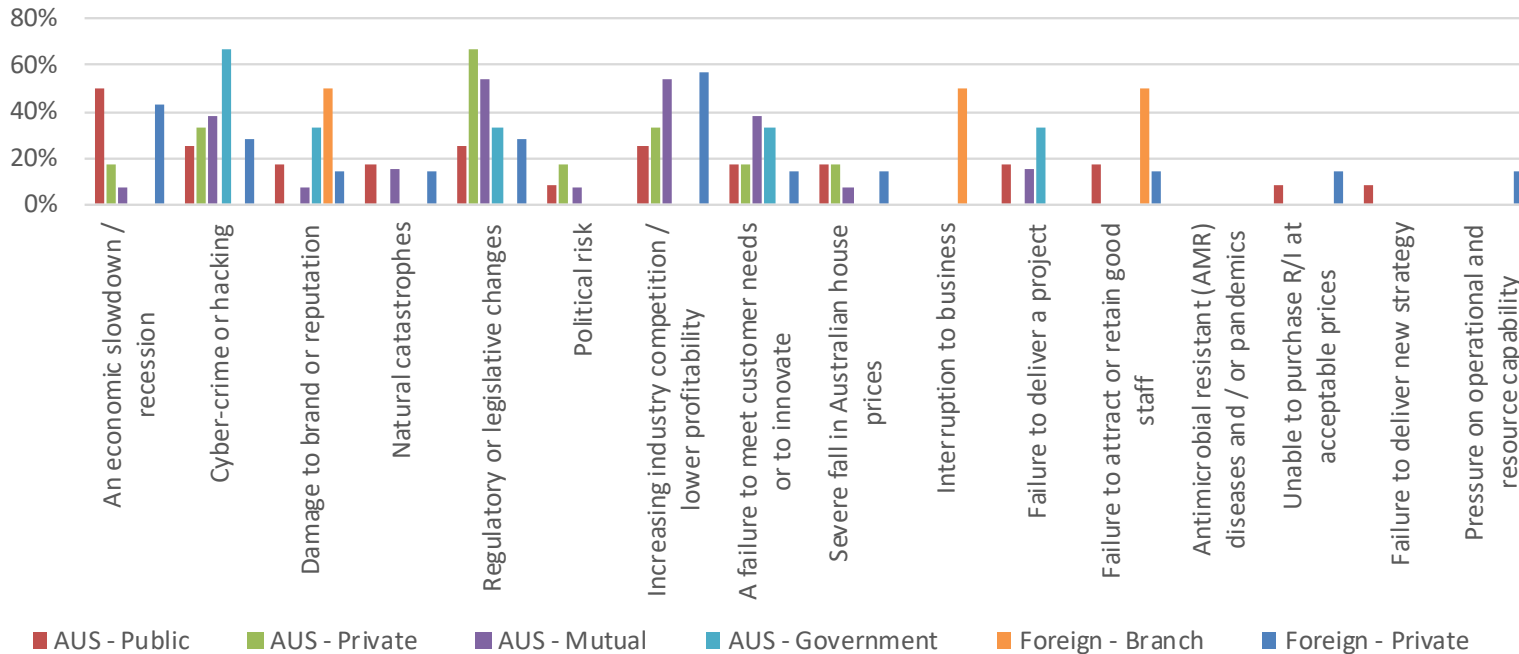
Percentage of respondents by size





Top three risks – detail by company type

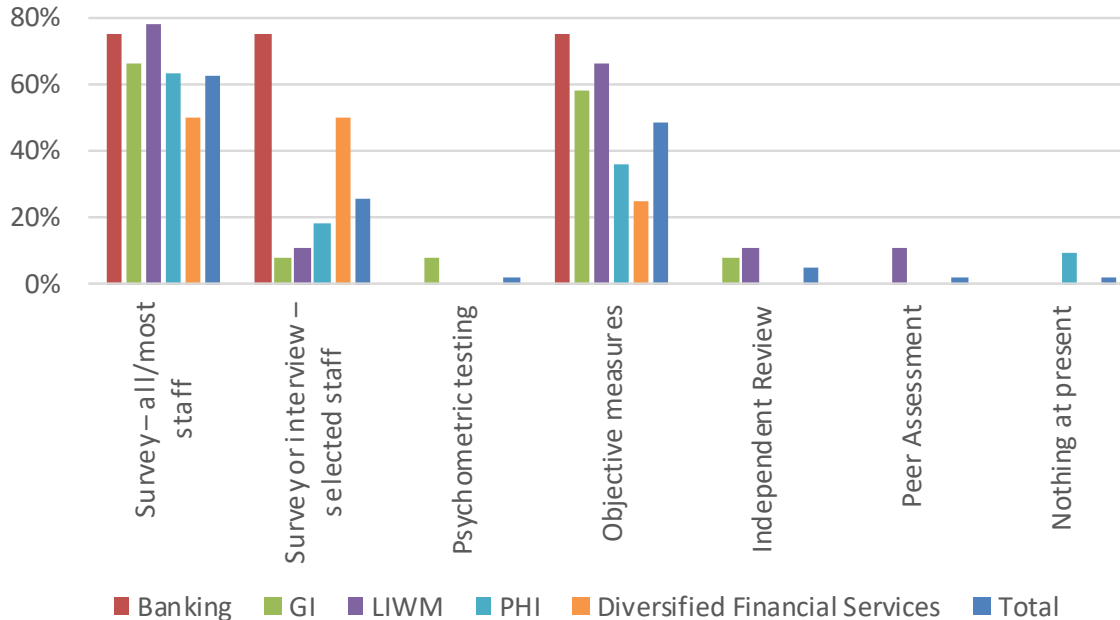
Percentage of respondents by ownership





Q17. How do you assess your risk culture? (tick all that apply)

Percentage of respondents by industry

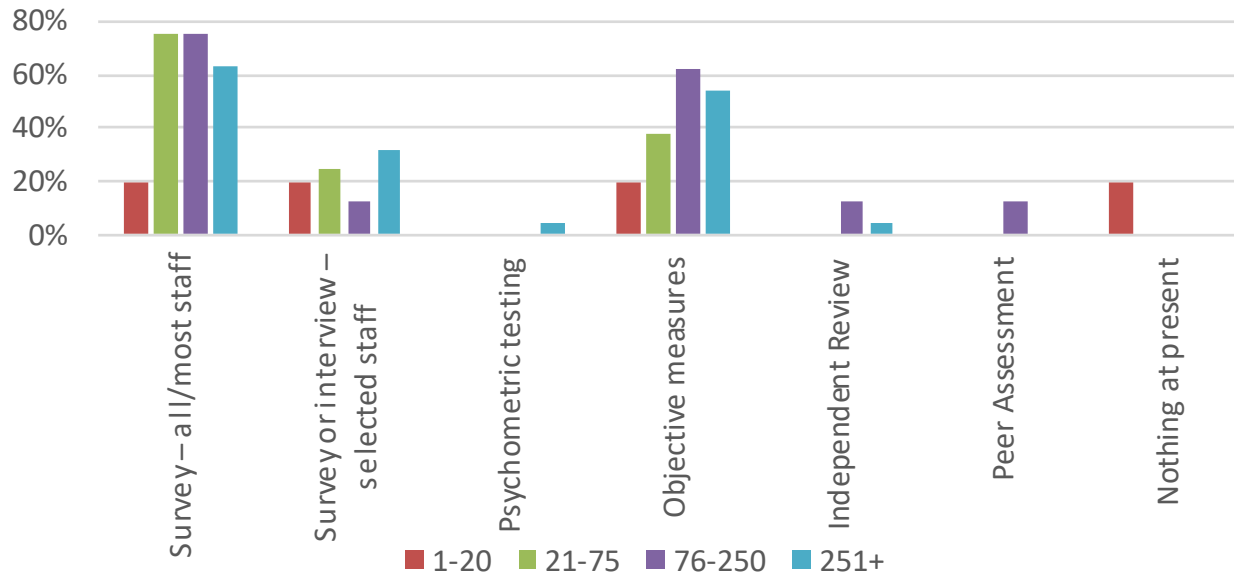


- Surveys of all / most staff remain most popular tool
- Banks also complete focused surveys / interviews
- A majority in LIWM, Banking and GI use objective measures (e.g. no. compliance breaches)



How do you assess your risk culture?

Percentage of respondents by size

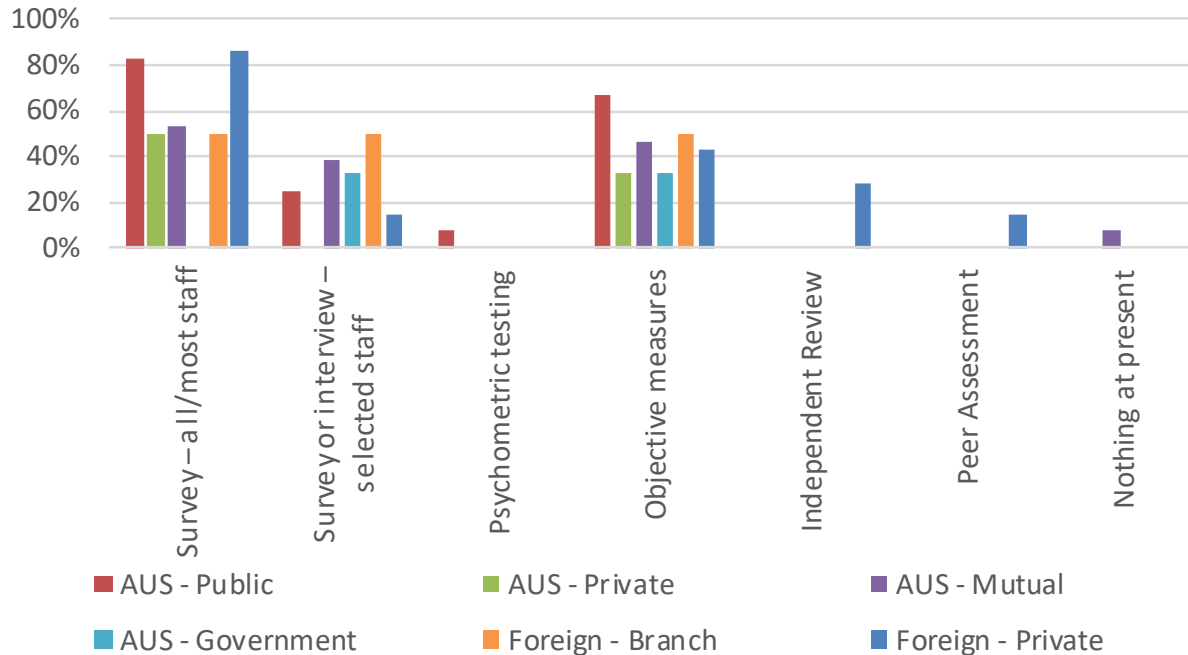


- Assessment of risk culture by smallest companies is low – higher representation of PHI in this segment
- Few use psychometric testing, independent reviews or peer assessments at present



How do you assess your risk culture?

Percentage of respondents by ownership

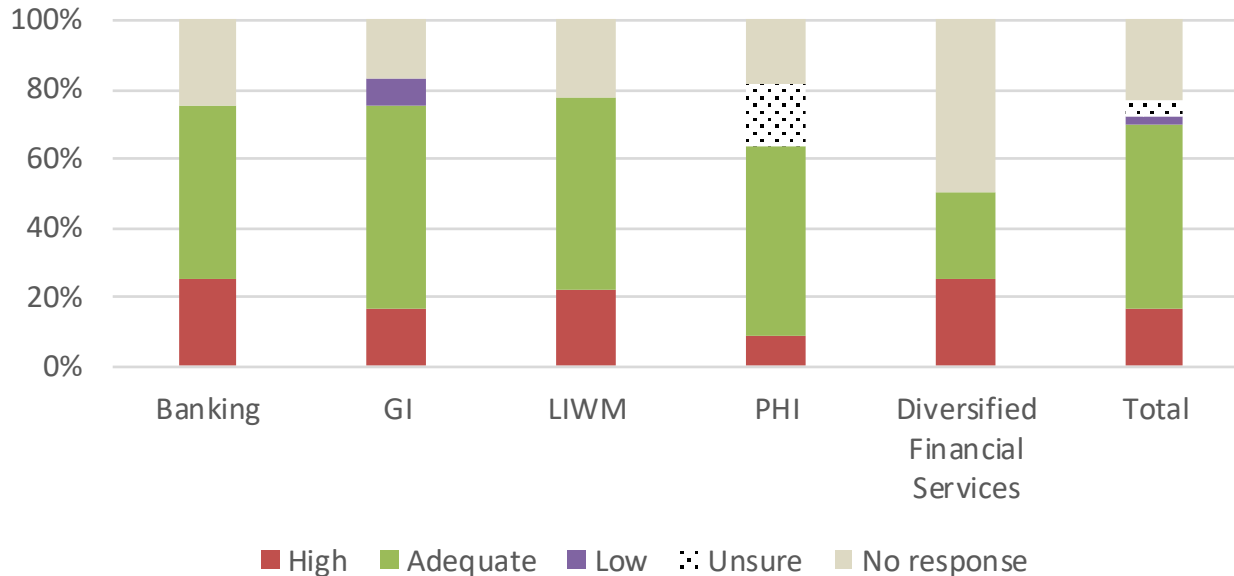


- Foreign private companies more likely to use “other” methods (independent review or peer assessment)



Q18. How would you rate the behaviours and attitudes towards risk in your organisation?

Percentage of respondents by industry

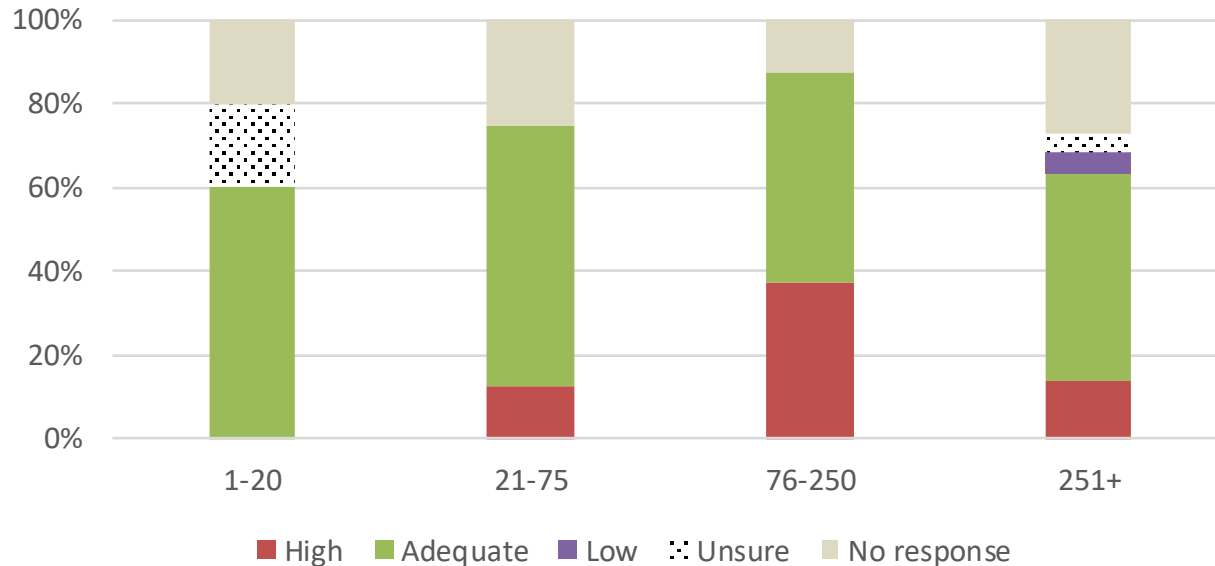


- Most think internal attitudes to risk are “adequate” but with room for improvement
- PHI has a smaller percentage with a “high” score, reflecting its earlier stage of risk management development



How would you rate the behaviours and attitudes towards risk in your organisation?

Percentage of respondents by size

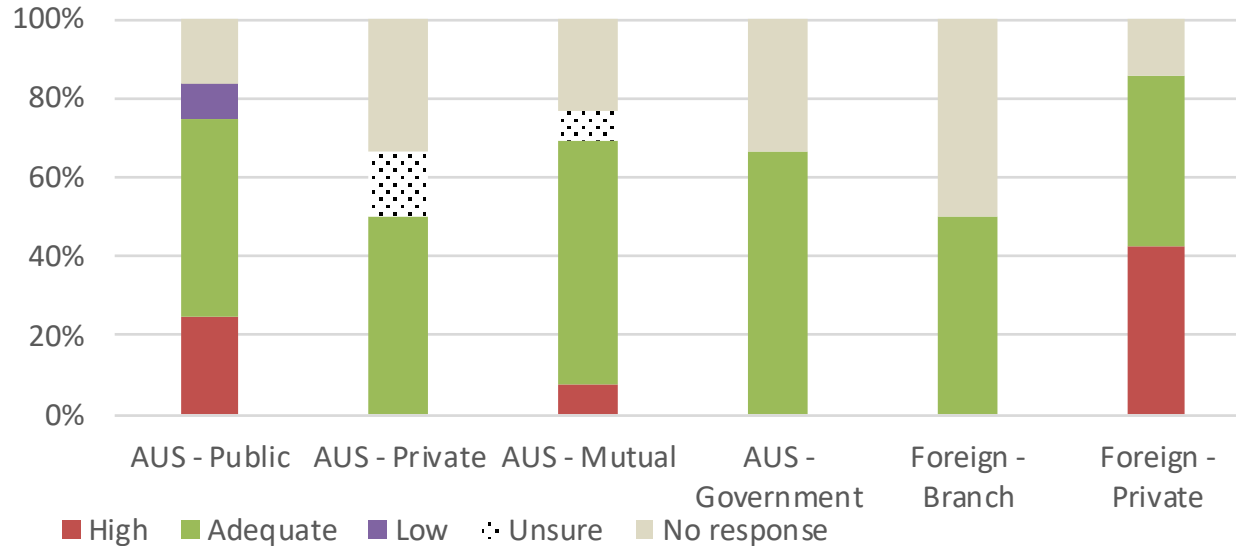


- The proportion rated as High rises with company size (though this then decreases for the largest group)



How would you rate the behaviours and attitudes towards risk in your organisation?

Percentage of respondents by ownership

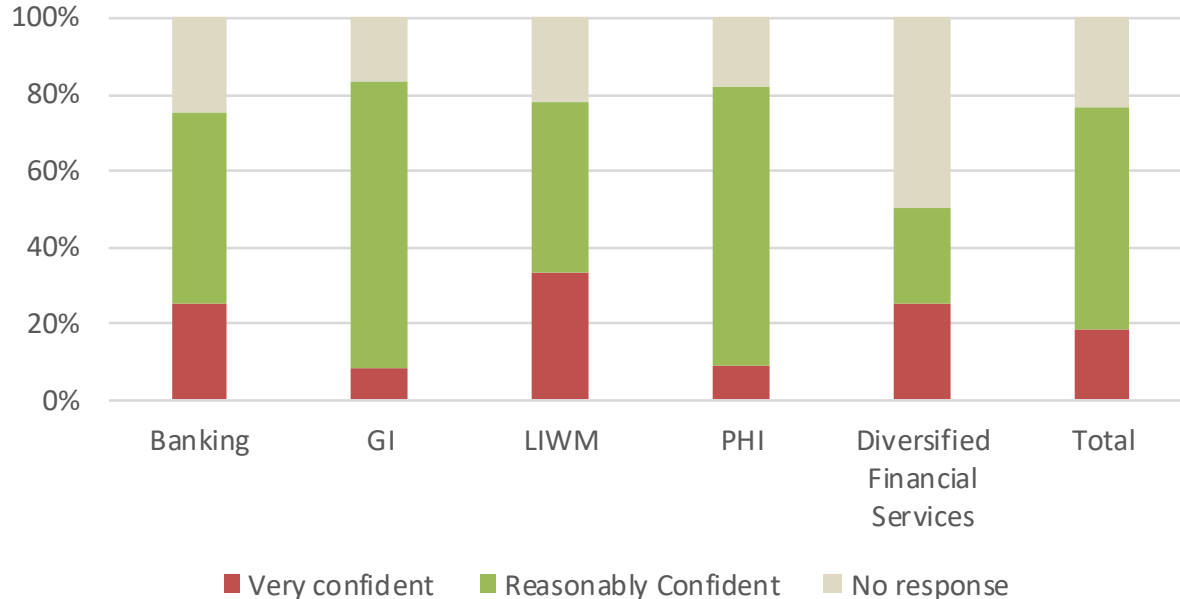


- Australian public companies have a large proportion (25%) rated High but also 8% rated Low
- 43% of foreign private companies have a rating of High



Q19. How confident are you in the ability of your organisation to respond to a serious business disruption?

Percentage of respondents by industry

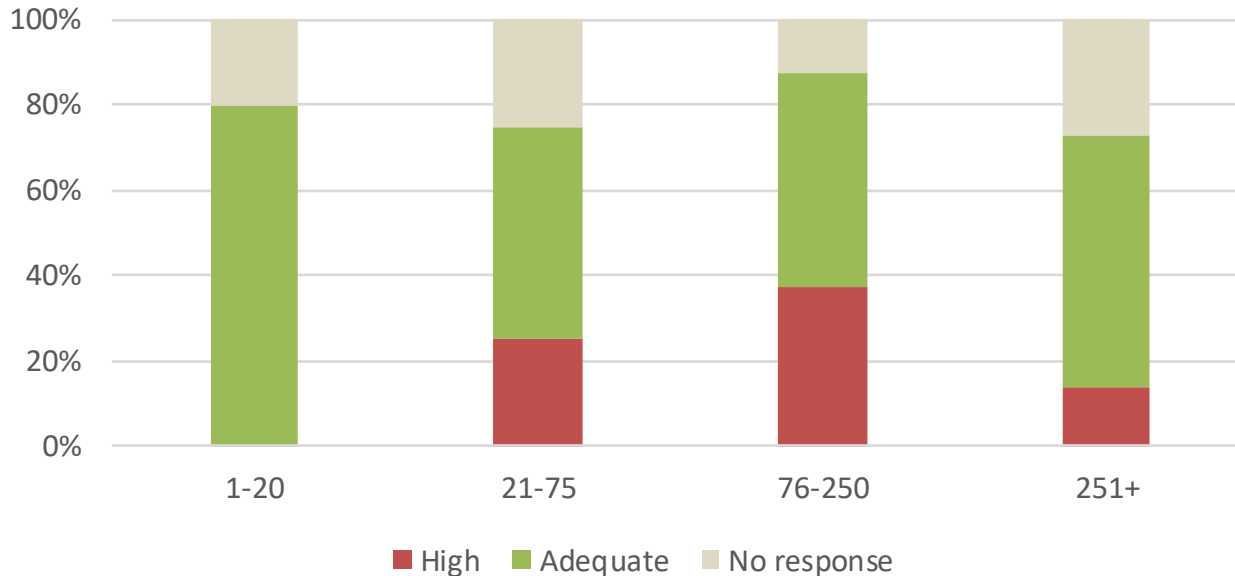


- LIWM and Banks are most confident
- GI and PHI are relatively less confident



How confident are you in the ability of your organisation to respond to a serious business disruption?

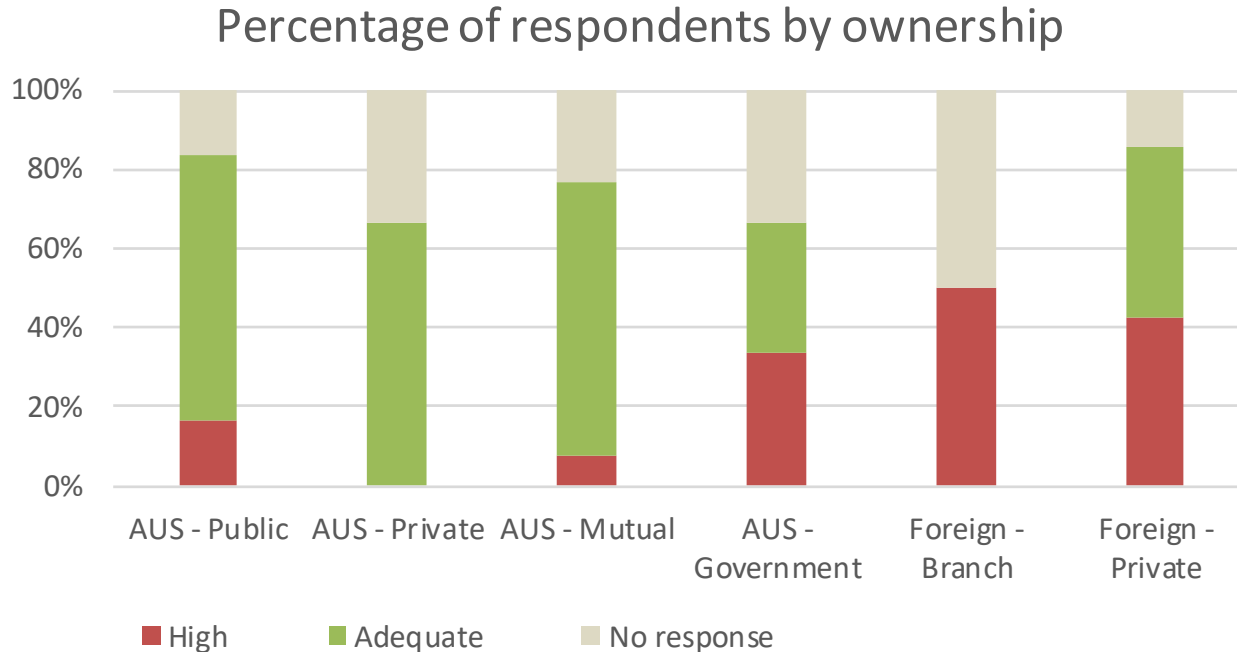
Percentage of respondents by size



- Confidence in the business resilience mostly rises with company size



How confident are you in the ability of your organisation to respond to a serious business disruption?

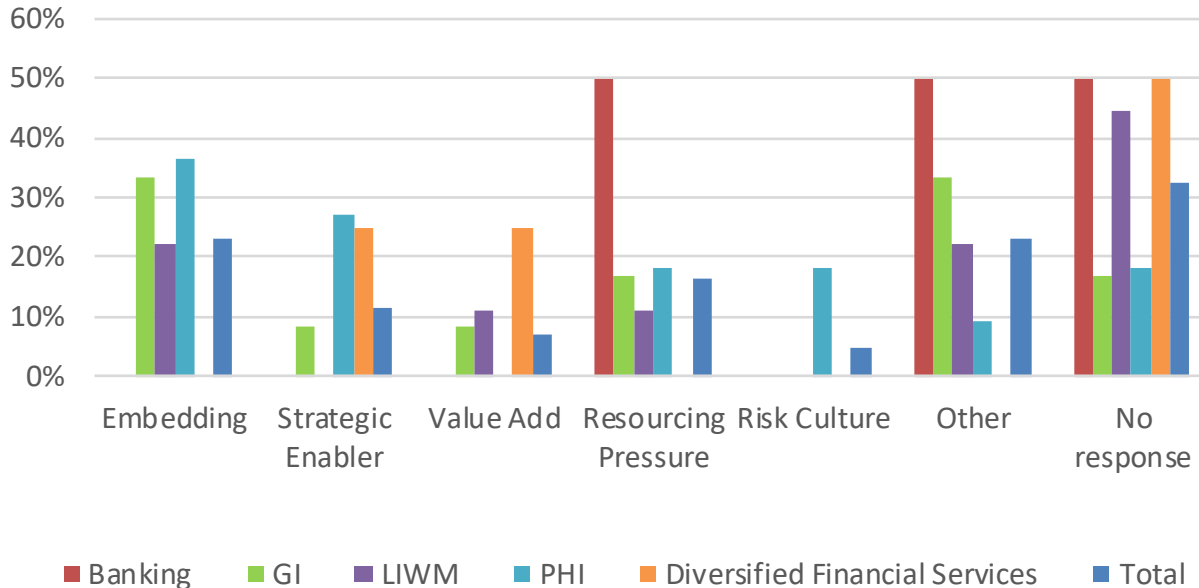


- The highest confidence levels are found with foreign companies and government insurers



Q20. In carrying out your role what are your biggest challenges?

Percentage of respondents by industry

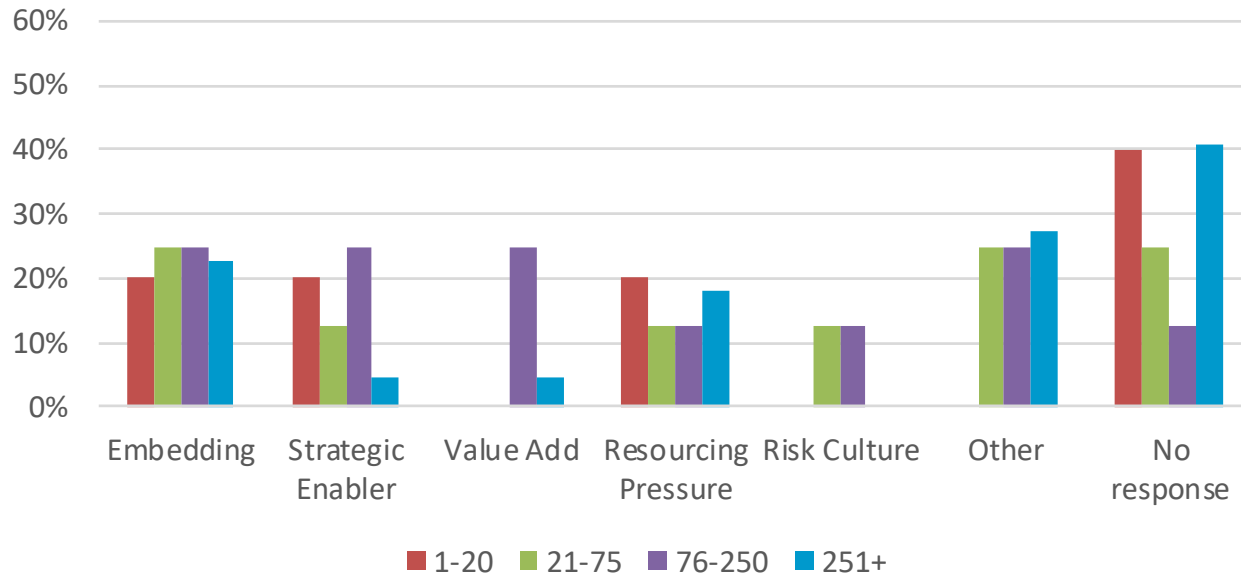


- Embedding risk management was common
- Resourcing pressure on risk function also rated highly
- Making risk management a strategic enabler and source of value add were also important



In carrying out your role what are your biggest challenges?

Percentage of respondents by size

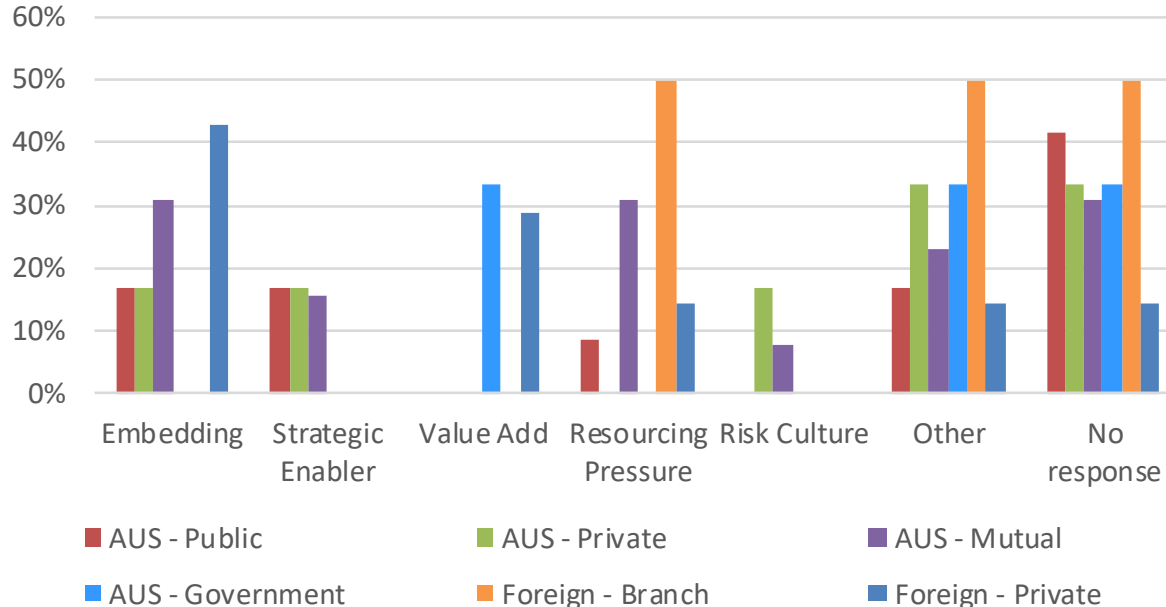


- Gaining more strategic value from risk management mattered more to smaller companies (up to 250 staff)
- Resourcing pressure was common to all



In carrying out your role what are your biggest challenges?

Percentage of respondents by ownership



- Embedding was important to foreign private companies
- Resourcing pressure was key for branches
- Getting strategic benefit from risk management mattered most to Australian companies