



QUANTIFYING RISK, ENABLING OPPORTUNITY

Lynette Calitz, Clive Hogarth, Sajiv Issuree
ASSA STIC Reserving & Capital Working Party

Risk & Capital Management Survey

Introduction

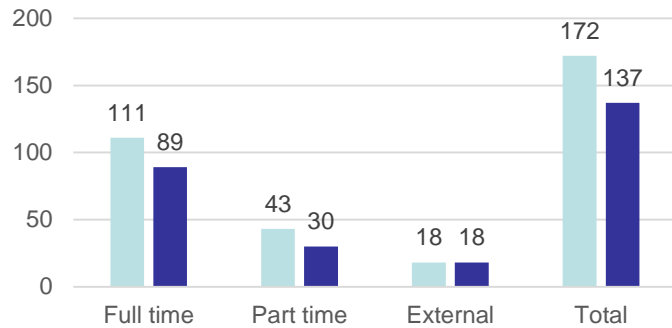
- Purpose: produce useful research
- Suggested topics from the industry
- Provide topics to University students
- Technical Provisions survey – coming soon!
- Call for new members

Overview

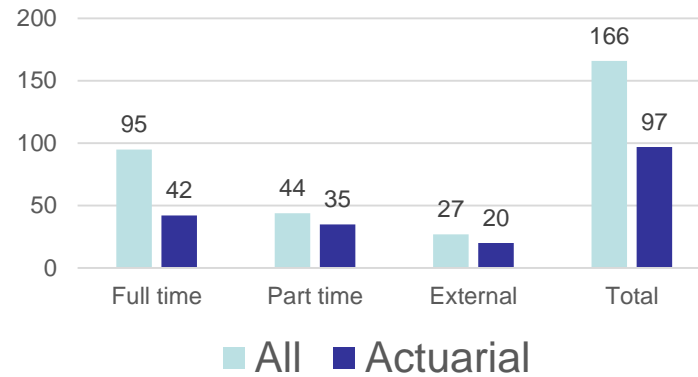
- Thank you for participating in the survey
- 34 responses overall.
- 80% employees of General Insurance companies
- 20% respondents from Consultancies.
- 76% of respondents - Part of a Group which contains a Life Insurance company.
- 21% Outsources Risk Function.

Resources

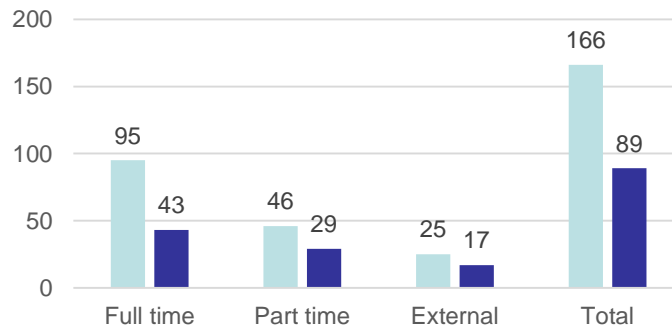
Pillar 1



Pillar 3



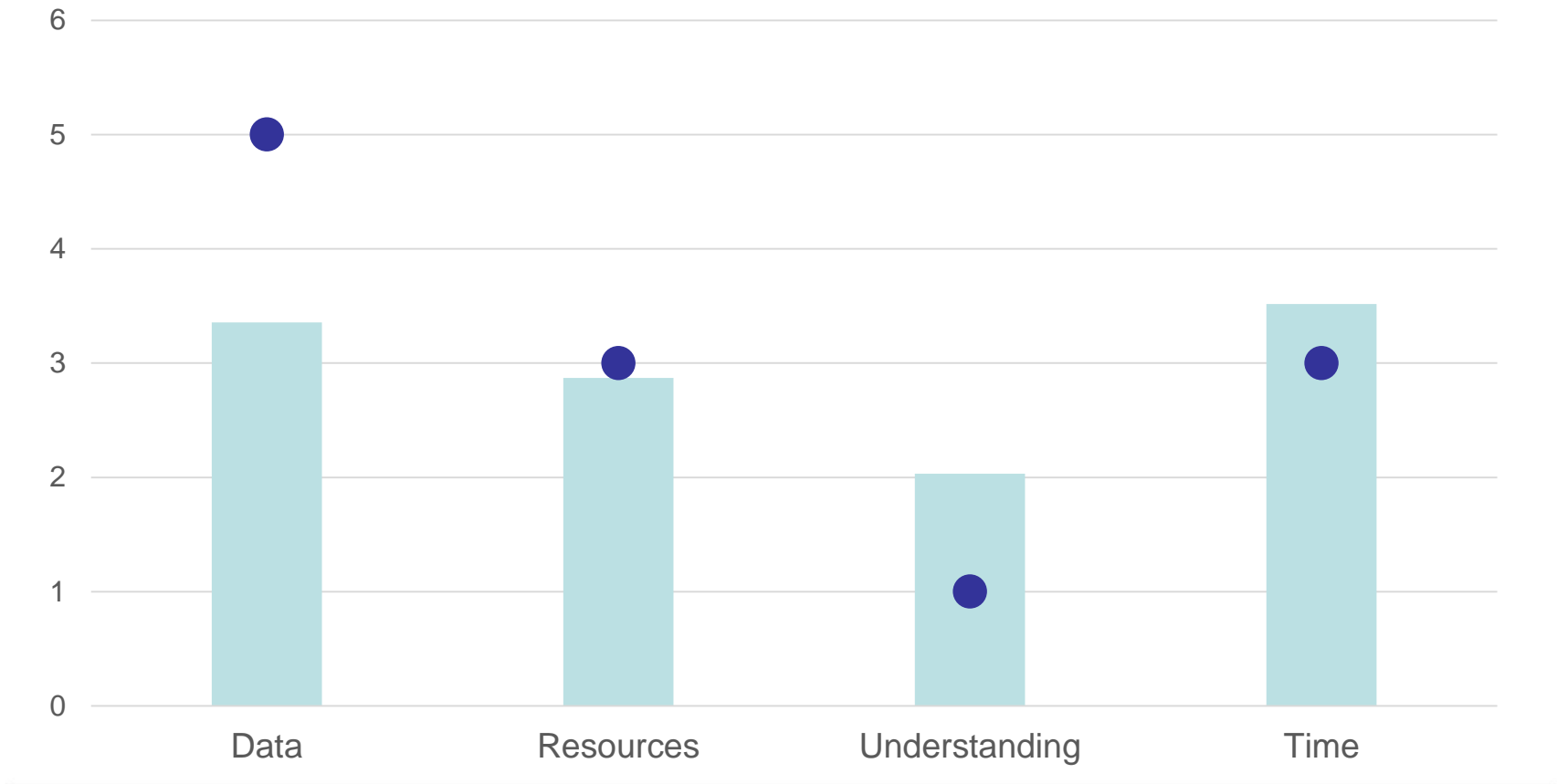
Pillar 2



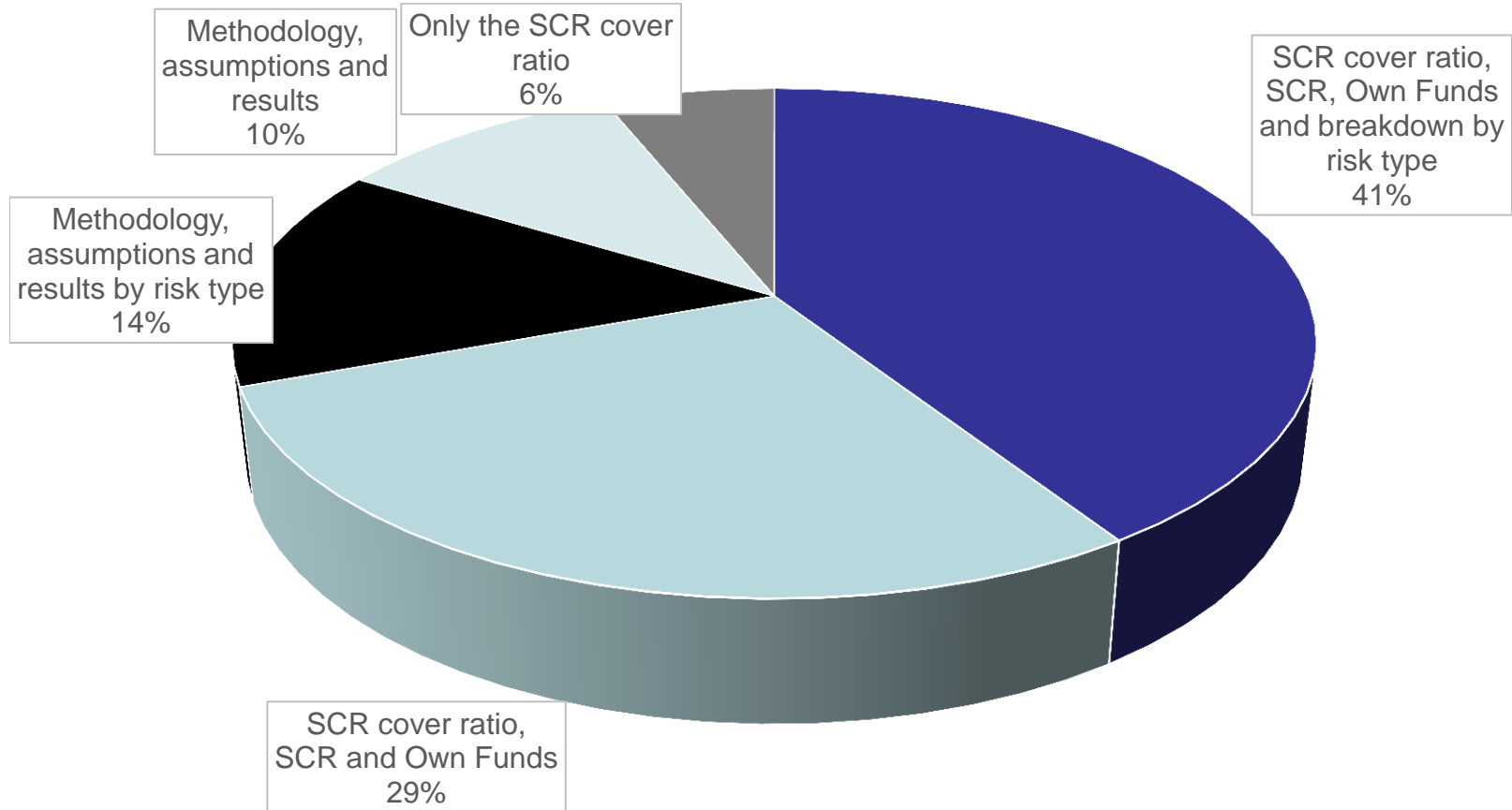
SCR Timelines



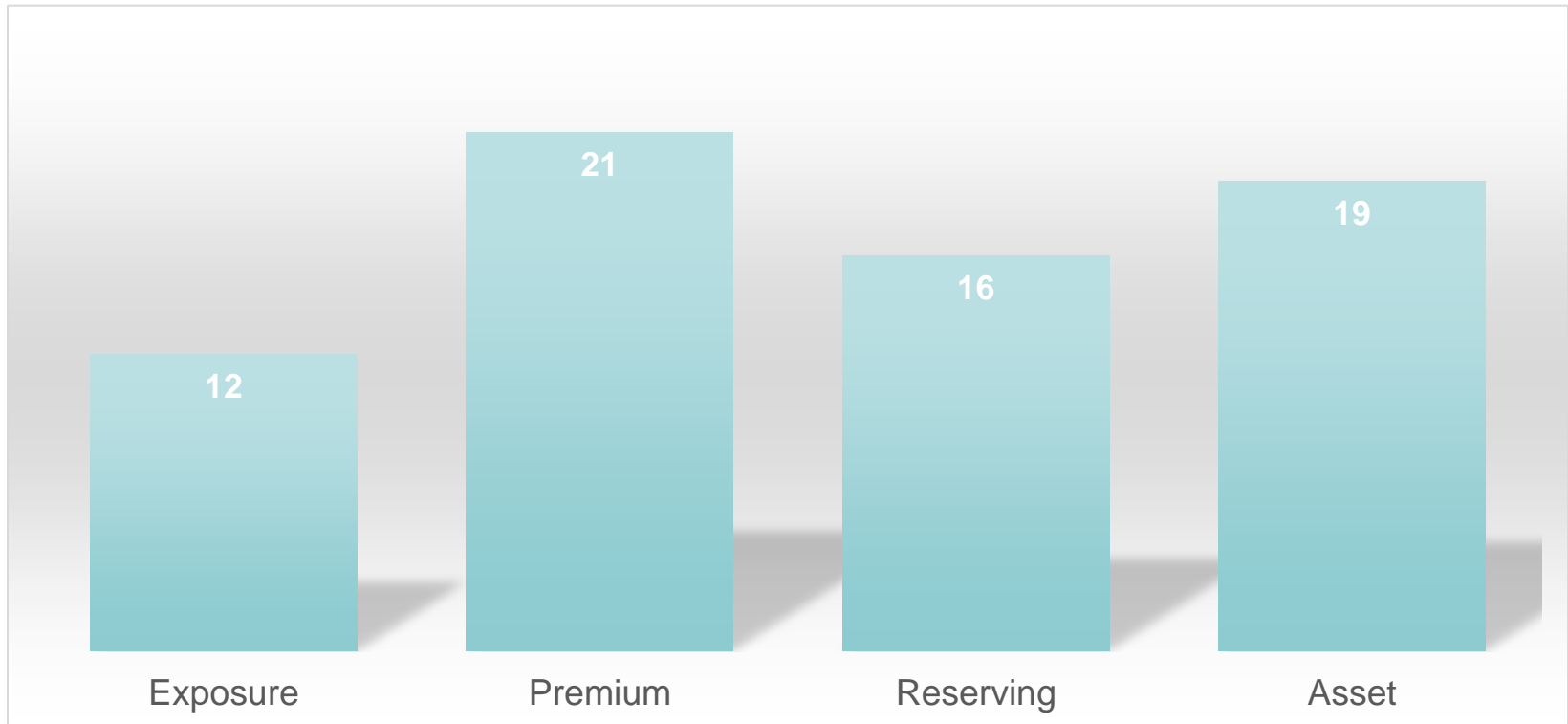
Challenges Experienced



Information given to the Board

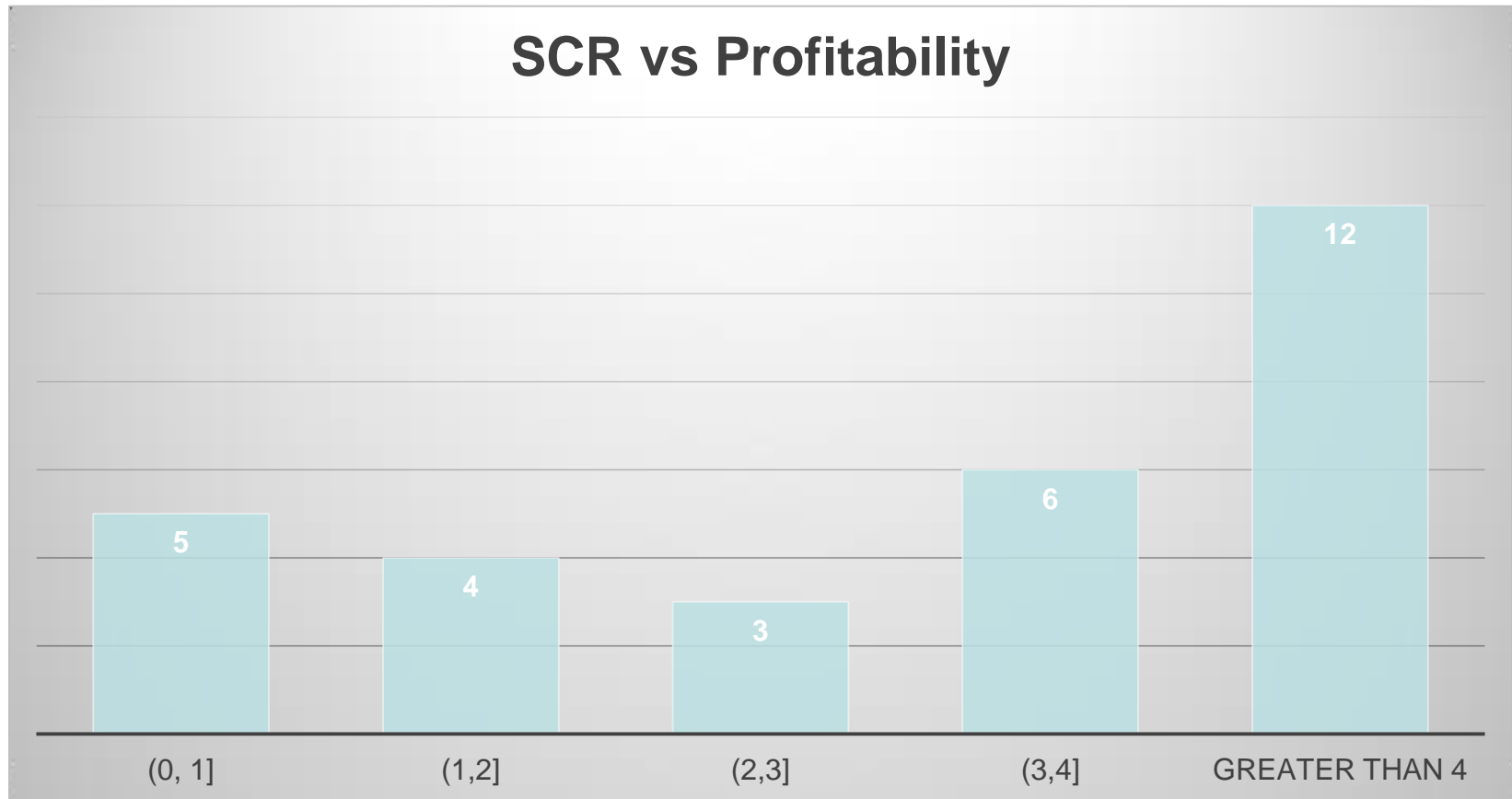


Estimating the SCR

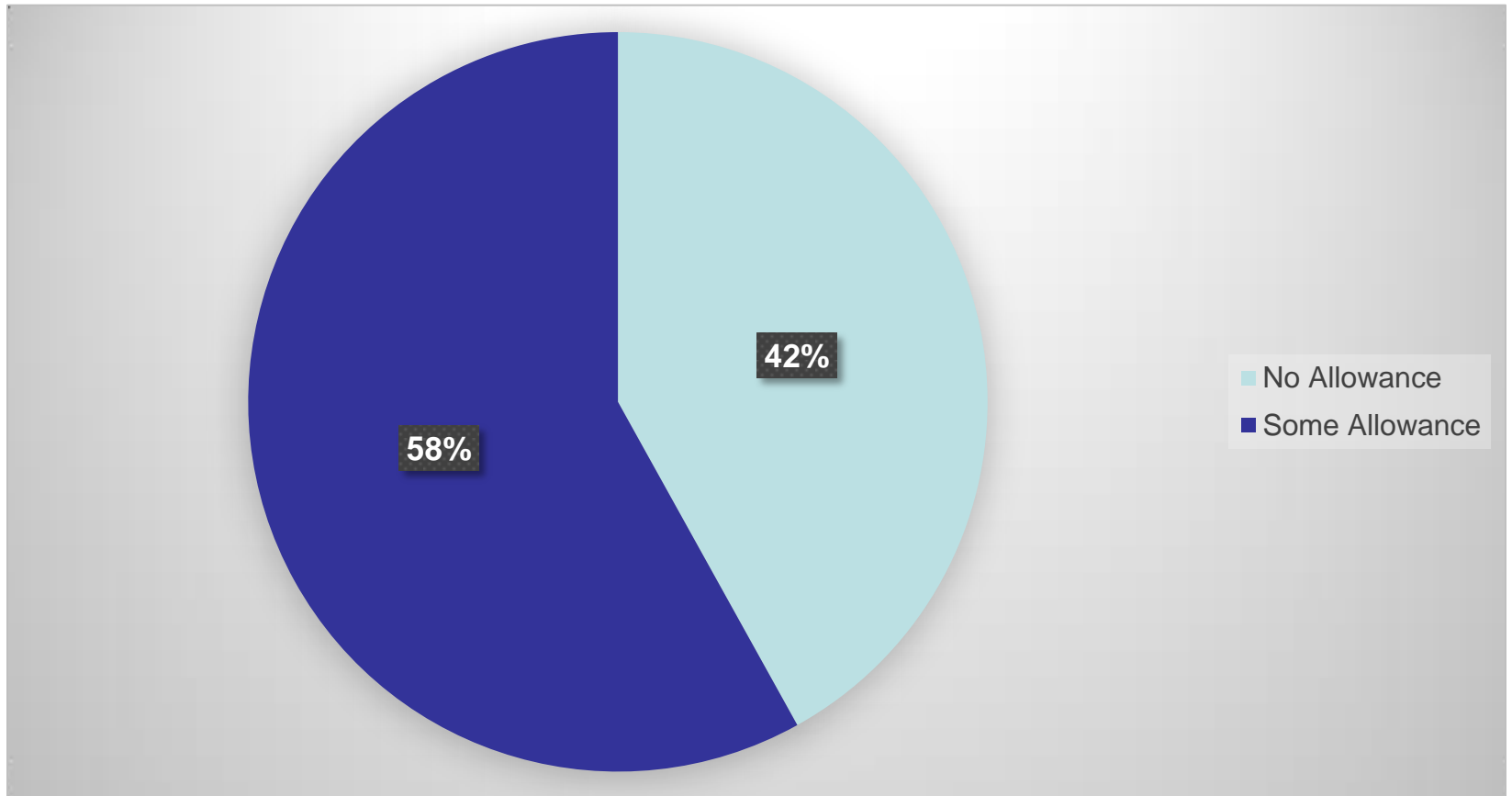


- Most respondents use the last quarter as starting point.

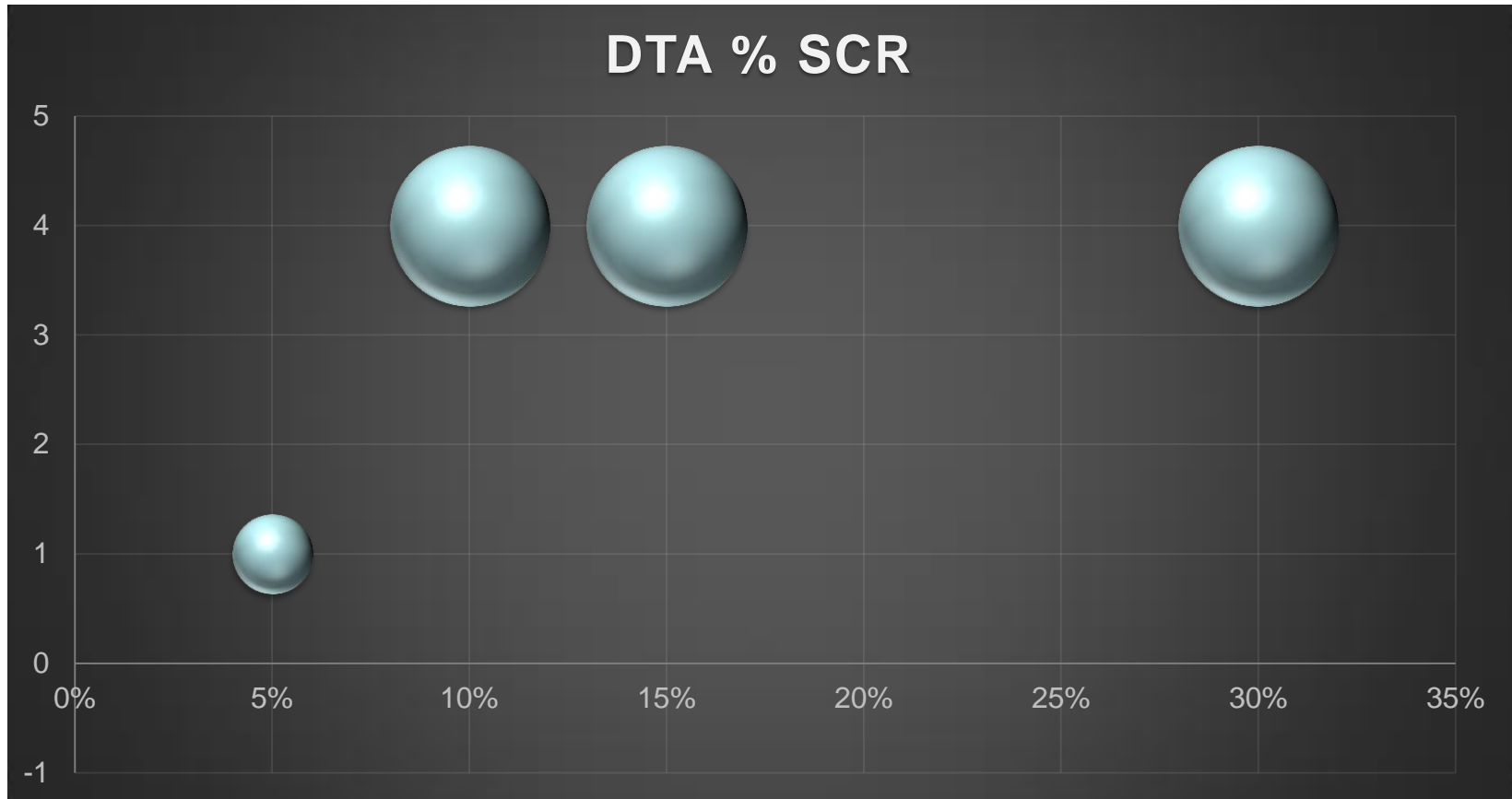
SCR in profits



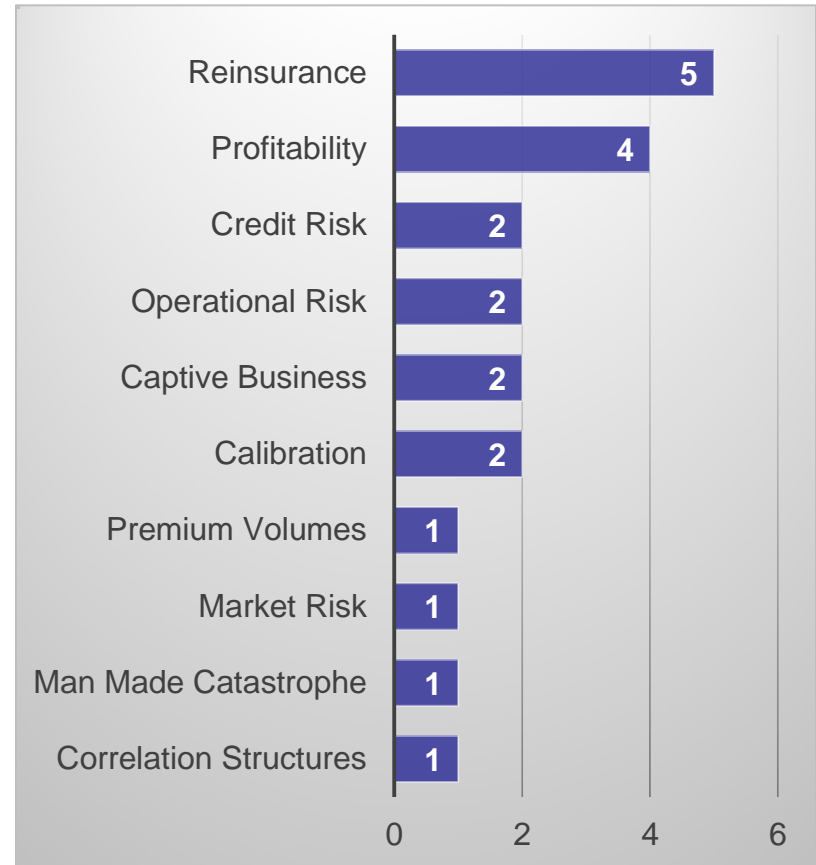
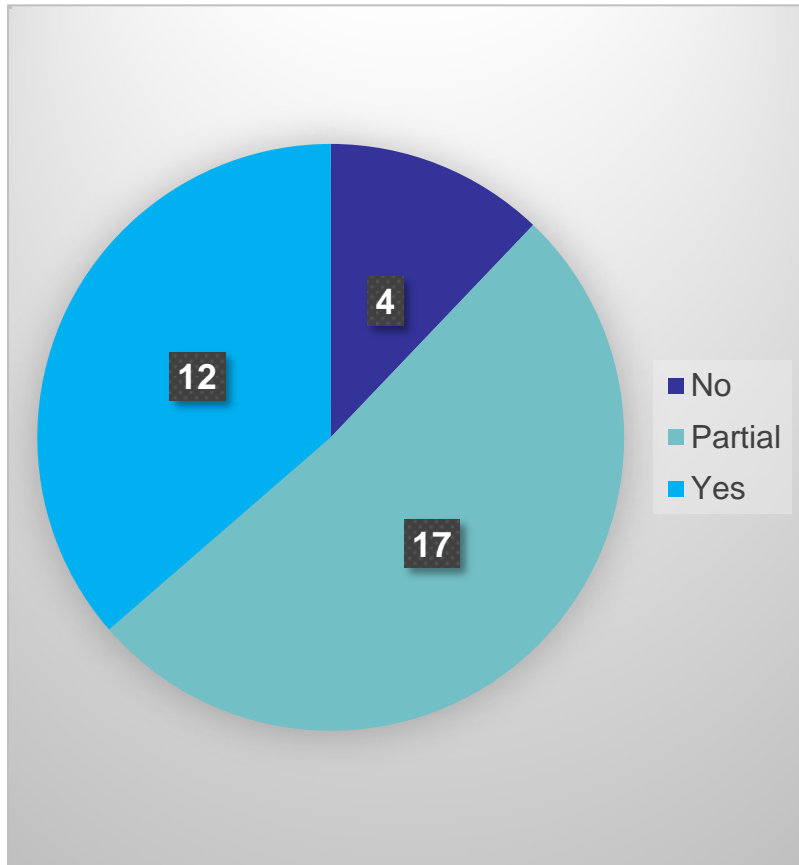
Tax Impact



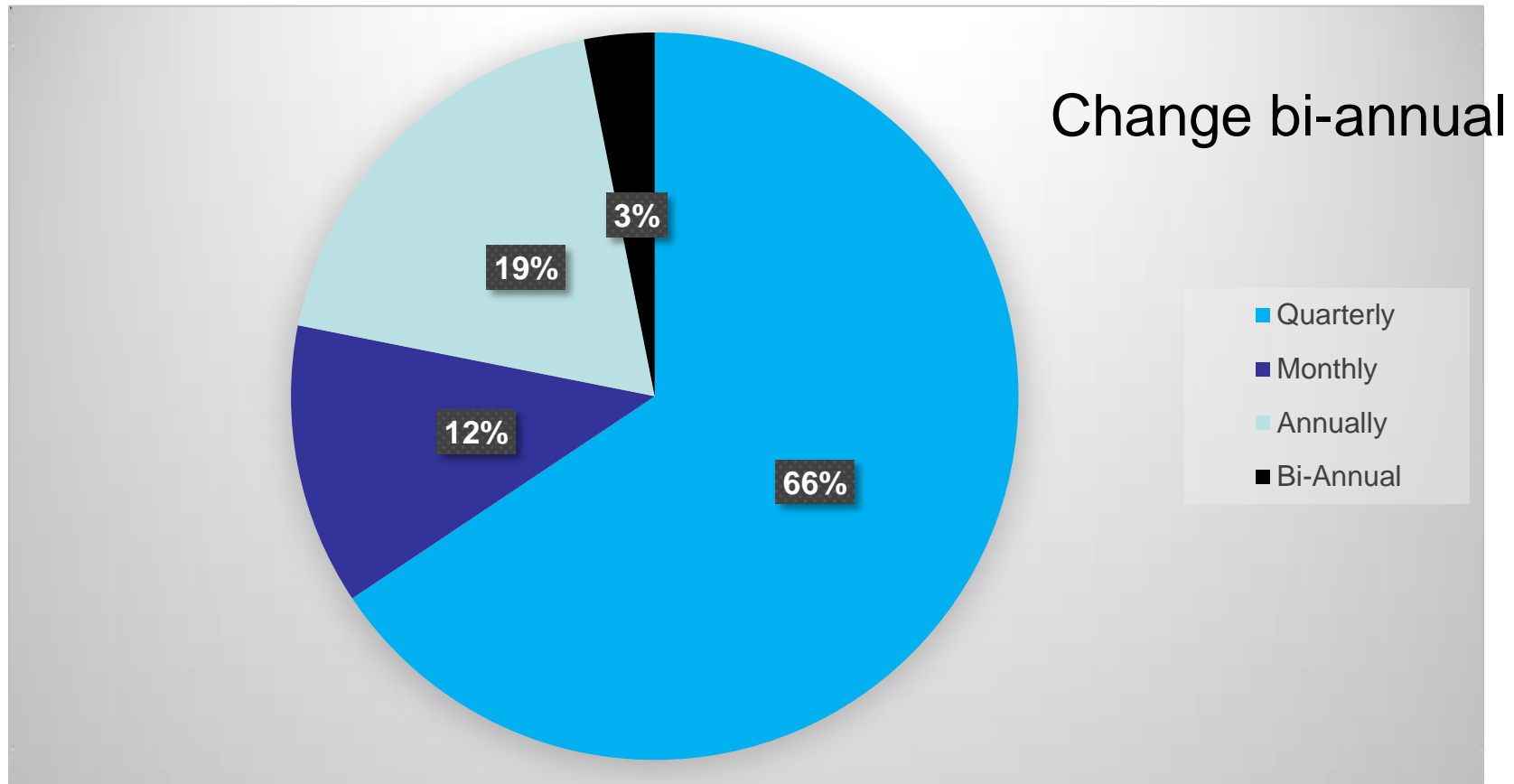
Deferred Tax Impact



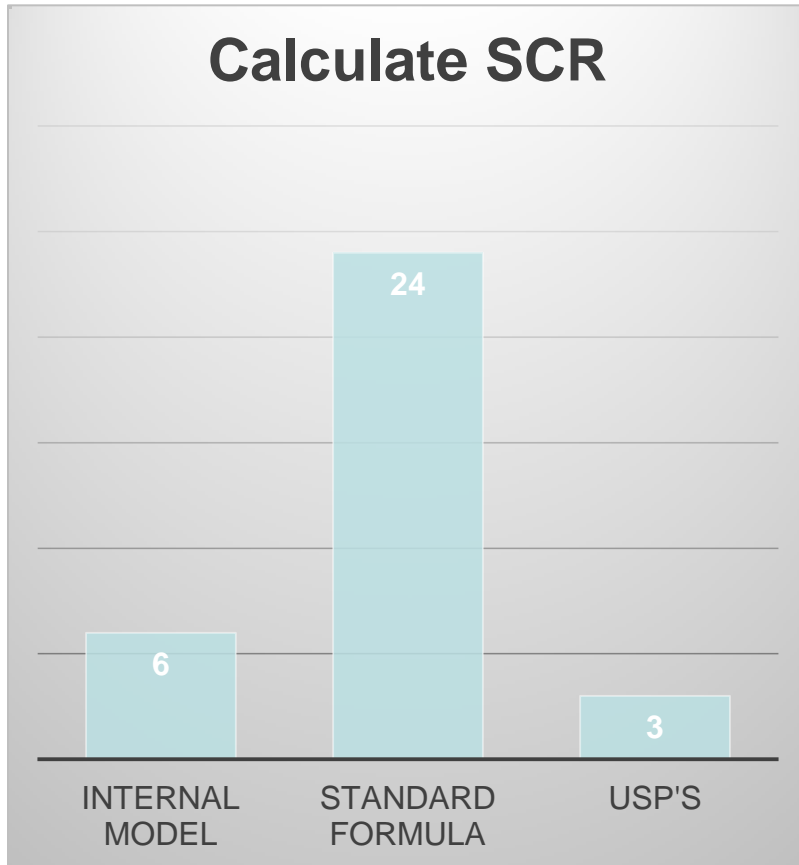
Standard formula fit?



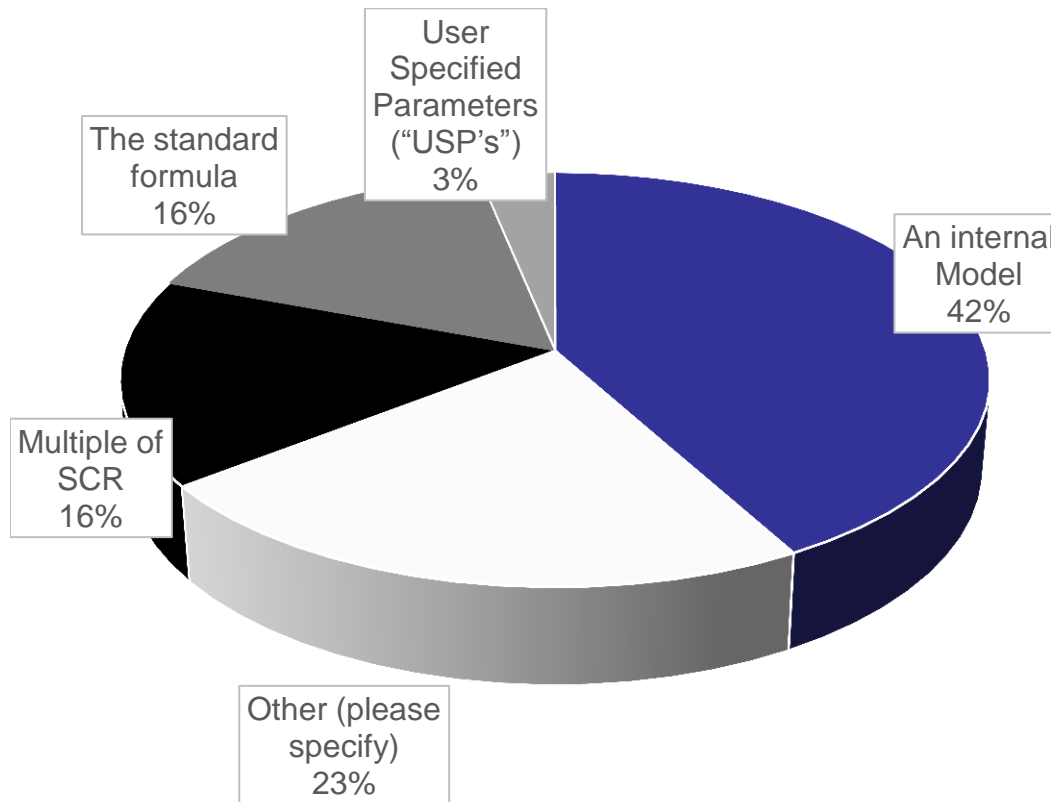
Full Calculation of the SCR



Use of 'internal models'



Economic Capital



Other

- Combination of Internal model and standard formula (SF).
- SF with adjustments for deficiencies in SF
- SCR with adjustments to reflect reality more accurately (e.g. UW risk at actual combined ratio levels).

Software used to calculate...

	SCR - standard formula	SCR - internal model	ECaR
Excel	56.4%	12.3%	35.7%
FSB published workbooks	24.9%	1.8%	15.6%
FSB published workbooks with modification	9.9%	0.0%	2.4%
Prophet	5.3%	0.0%	0.8%
Matlab	0.0%	0.0%	0.0%
Igloo	0.7%	0.0%	6.2%
R	0.0%	0.0%	0.0%
ReMetrica	0.1%	49.5%	25.2%
SAS	0.7%	0.0%	1.7%
N/A	1.9%	36.4%	12.5%
	100.0%	100.0%	100.0%

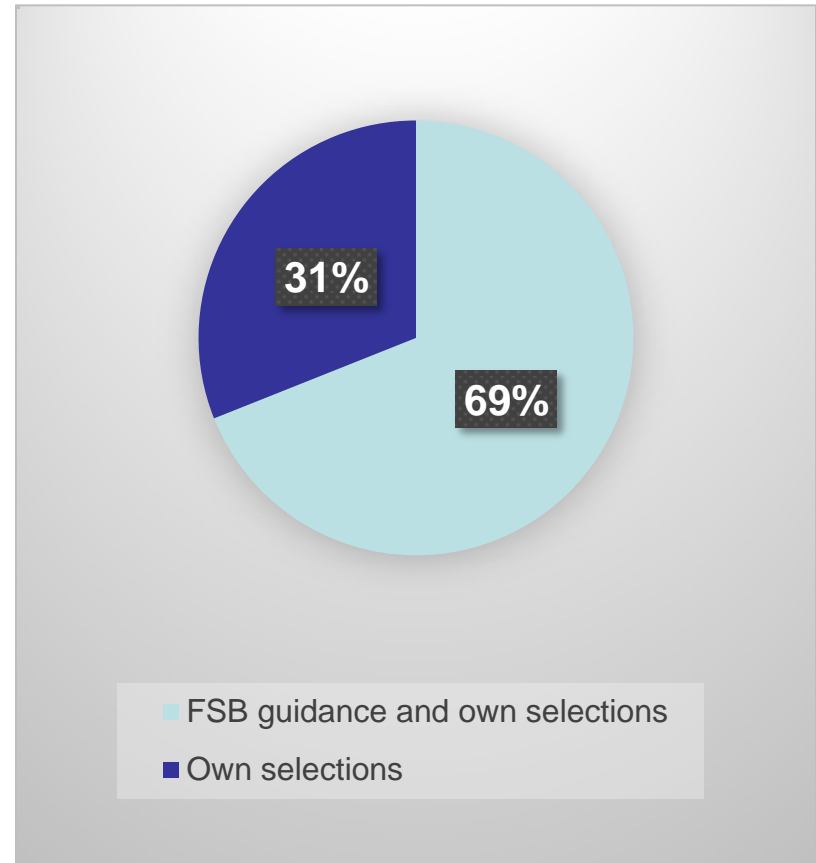
Stress testing

How Conducted?

- Capital models

Or:

- Considering specific events
- Using SAM SCR
- Deterministic Excel scenarios



Reporting

Board Reporting

- ORSA
- Risk metrics
- Capital Report
- Actuarial Function Report
- Internal Risk Report

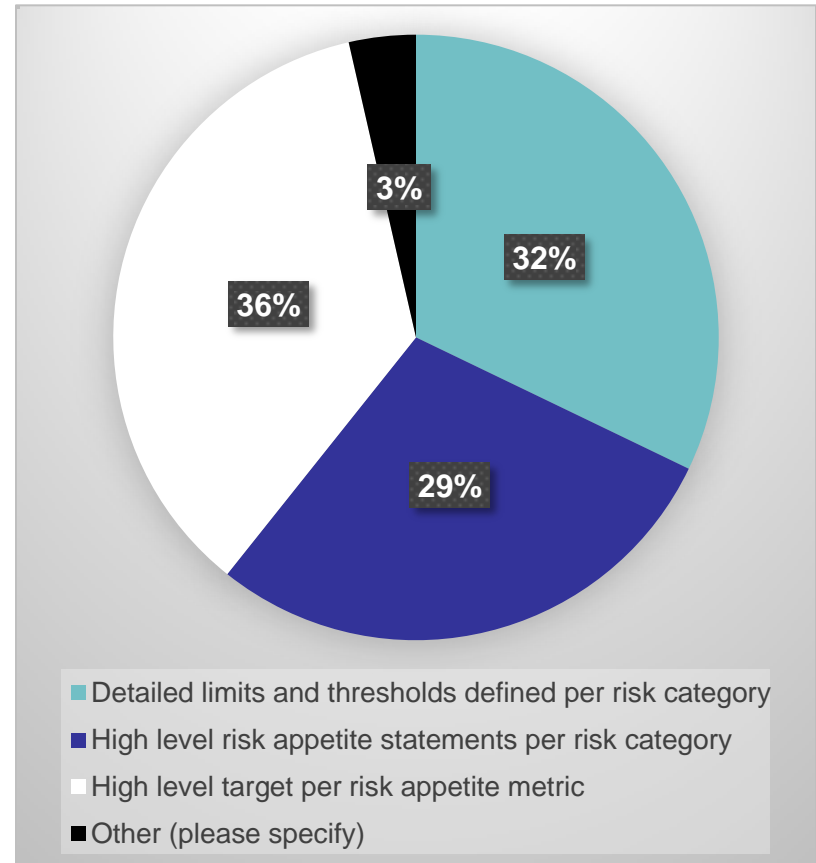
ORSA

- Updated annually, semi-annual and quarterly in some cases.

Pages	%
(10,50]	38%
(50,100]	48%
Greater than 100	14%

Risk Appetite

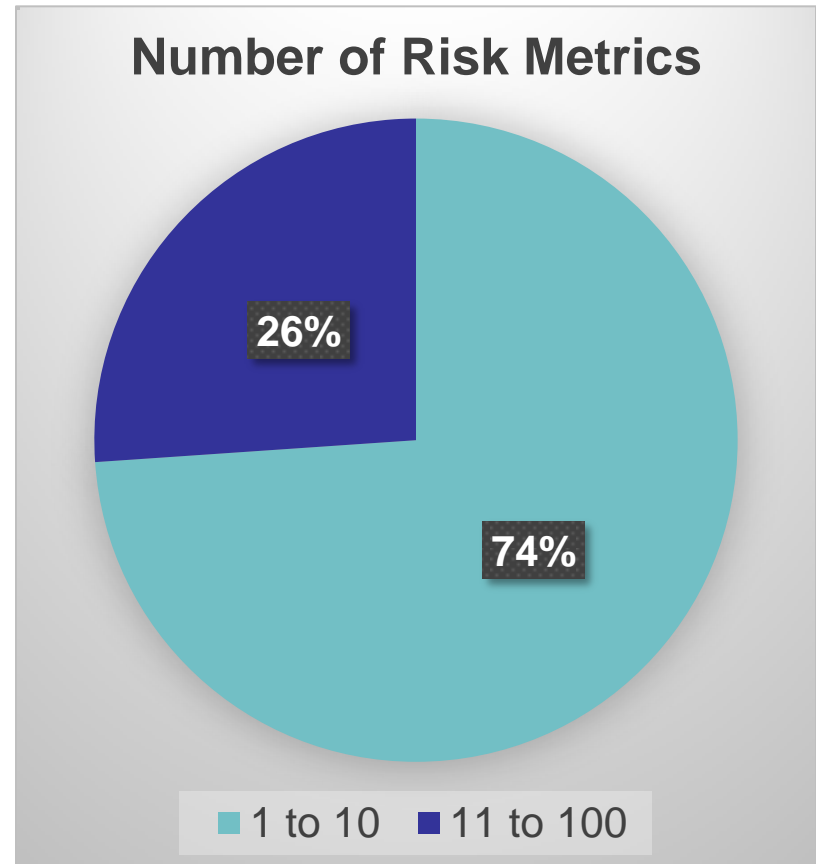
- Majority has a defined Risk Appetite
- Generally included in the ORSA
- 80% updates it annually, the remainder updates it quarterly & semi-annually



Risk Metrics

Limits & Thresholds

Frequency	Updated	Monitored
Annually	71%	11%
Monthly		7%
Quarterly	14%	68%
Semi-annually	7%	11%
Other (please specify)	As needed	Annual /Monthly /as required



Conclusions

- Majority uses SAM Standard Formula
 - Deferred Tax Asset
- Use Internal Models in managing business
- ASSA involvement: Reinsurance Allowance under the Standard Formula.
- Different approaches Risk Management: frequency and level of detail.

Working party members

- Lynette Calitz
- Sajiv Issuree
- Clive Hogarth
- Saajida Gathoo
- Jeanine Wilson
- Kevin Ross
- Michael Meyer
- Ilze Booyse

Thank you



Clive.Hogarth@milliman.com



Sajiv.Issuree@renasa.co.za



Lynette.Calitz@mf.co.za