São Paulo 2025

ASTIN's Working Party on IFRS 17 Actuarial Best Practices

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Introduction

In Q1 2023, for the first time, (re)insurance companies submitted their financial statements under the new IFRS 17 accounting framework.
Even though this was certainly a great achievement, many questions still remain in relation to the understanding of this new framework.
In the non-life area, for example, the discounting impacts on the liabilities under the current and locked-in interest rate bases are still, to a large extent, difficult to understand by financial analysts.

In this context, the aim of this ASTIN working party was to design a survey showing the current best practices applied to the different areas of the IFRS 17 accounting standard for non-life insurance, from the point of view of actuaries.

Introduction

The **IFRS Foundation** is a not-for-profit, public interest organisation established to develop high-quality, understandable, enforceable, and globally accepted accounting and sustainability disclosure standards. IFRS stands for International Financial Reporting Standards.

The IFRS Standards are developed by the IFRS Foundation's two standard-setting boards, the International Accounting Standards Board (IASB) and the International Sustainability Standards Board (ISSB).

For more information, consult: https://www.ifrs.org/.

Introduction

IFRS 17 is an IFRS standard issued by the IASB in May 2017 and effective for annual reporting periods beginning on or after 1 January 2023 with earlier application permitted as long as IFRS 9 is also applied.

IFRS 17 replaces IFRS 4 and sets out principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of IFRS 17.

For more information, consult: https://www.ifrs.org/issued-standards/list-of-standards/ifrs-17-insurance-contracts/#about.

Introduction

The **IAA (International Actuarial Association)** is the worldwide association of professional actuarial associations, with a number of special interest sections for individual actuaries.

The IAA was founded in 1895 to encourage the development of a global profession, acknowledged as technically competent and professionally reliable, which ensures that the public interest is served.

For more information, consult: https://www.actuaries.org/iaa/.

Introduction

ASTIN (Actuarial Studies in Non-Life Insurance) is a well-established worldwide leading forum of risk and actuarial professionals of the non-life insurance industry.

ASTIN was created as the first section of the IAA in 1957.
ASTIN membership is open to actuaries who belong to a professional actuarial association member (full or associate) of the IAA.

For more information, consult:
https://www.actuaries.org/iaa/IAA/Sections/ASTIN_NEW/IAA/Sections/ASTIN_NEW/ASTIN_HOME.aspx.

Introduction

Actuaries are called to participate in the implementation of IFRS 17 mainly by the need to estimate future reserves to be reported in the balance sheet and P&L produced under IFRS 17.

The intention of the survey proposed by ASTIN is to define a practical framework for actuarial best practices under the IFRS 17 Standard, mainly considering the experiences and opinions of actuaries working in (re)insurance companies and performing internal IFRS 17 valuations or actuaries working in consulting companies who perform IFRS 17 valuations on behalf of (re)insurance companies, operating all over the world.

Introduction

All over the world in this context means the jurisdictions the IFRS Foundation considers for the adoption of IFRS Accounting Standards, as per IFRS - Who uses IFRS Accounting Standards?.

To assess the progress towards the global adoption of IFRS Accounting Standards, the IFRS Foundation monitors the application of those standards in each jurisdiction. Updates are made on an ongoing basis.

The Working Party

On 16 November 2023, the IAA launched a call for volunteers to participate in ASTIN's working party on IFRS 17 Actuarial Best Practices.

The final constitution of the team is:

Champion: Joana Gregório Raposo

Jurisdiction: Luxembourg, Portugal, Ireland

The Working Party

Other Members:

Member (by alphabetical order)	Jurisdiction (by relevance order)
Alma Qamo	Albania
Cristina Cantanhede Mano	Brazil
Darlington Chamburuka	South Africa
Eric dal Moro	Switzerland, France, Japan
Eva Šraj	Slovenia
Francis Beens	Australia
Hantie van Heerden	South Africa
Irena Kulikova	Denmark
Julia Feld	Switzerland
Lance Moroney	South Africa, Canada
Luciana Soares	Brazil
Mats Sollie	Norway
Matthew Arishibowa	South Africa, UK
Mohamed Benkhalfa	France
Mongezi Mngqibisa	South Africa
Pierre Miehe	France
Rajesh Sahasrabuddhe	USA, Canada
Rocco Roberto Cerchiara	Italy
Ronald Richman	South Africa
Shivash Bhagaloo	UAE, Saudi Arabia, South Africa, UK
Sias Esterhuizen	South Africa
Timothy Lee	Australia
Wee Jian Er	Singapore, Australia, China, UK
William Weiland	Canada

The Survey - Structure

The following sections of this presentation outline the questions, the analysis of the results, as well as the conclusions obtained.

This presentation is only meant to provide an overview of the results, not entering into details on the specifics of the survey's structure, each question and the responses obtained.
Detailed information is available via the links in the following slide.

The Survey - Important Links

LinkedIn Post:
ASTIN's Survey on IFRS 17 Actuarial Best Practices | International Actuarial Association

Terms of Reference:
https://www.actuaries.org/IAA/Documents/ASTIN/Working%20Groups/ASTINWorkingPartyIFRS17ActuarialBestPractices.pdf

Instructions to Participate (with link to download the survey):
https://www.actuaries.org/IAA/Documents/ASTIN/Working%20Groups/ASTIN%20IFRS17%20WP/ASTIN_WP_on_IFRS_17_Actuarial_Best_Practices_Instructions.pdf

Report with Results: (upcoming)

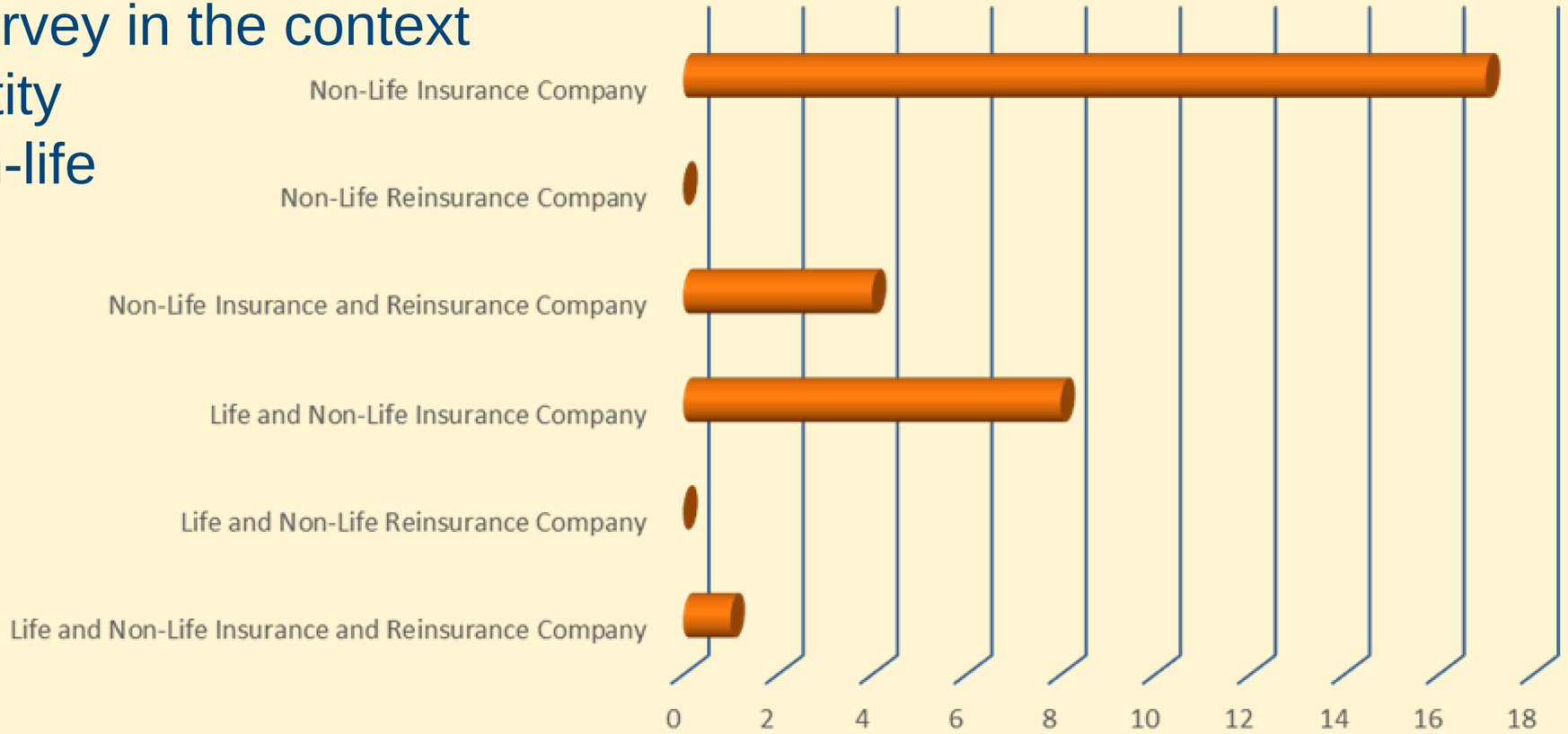
Questions, Analysis of Results and Conclusions

Introduction

Introduction - Question 1

Type of Entity

The majority (83%) of responses to this survey comes from sole insurers and all entities indicate having business in the non-life area (naturally, since this is a survey in the context of ASTIN, an entity dedicated to non-life (re)insurance).

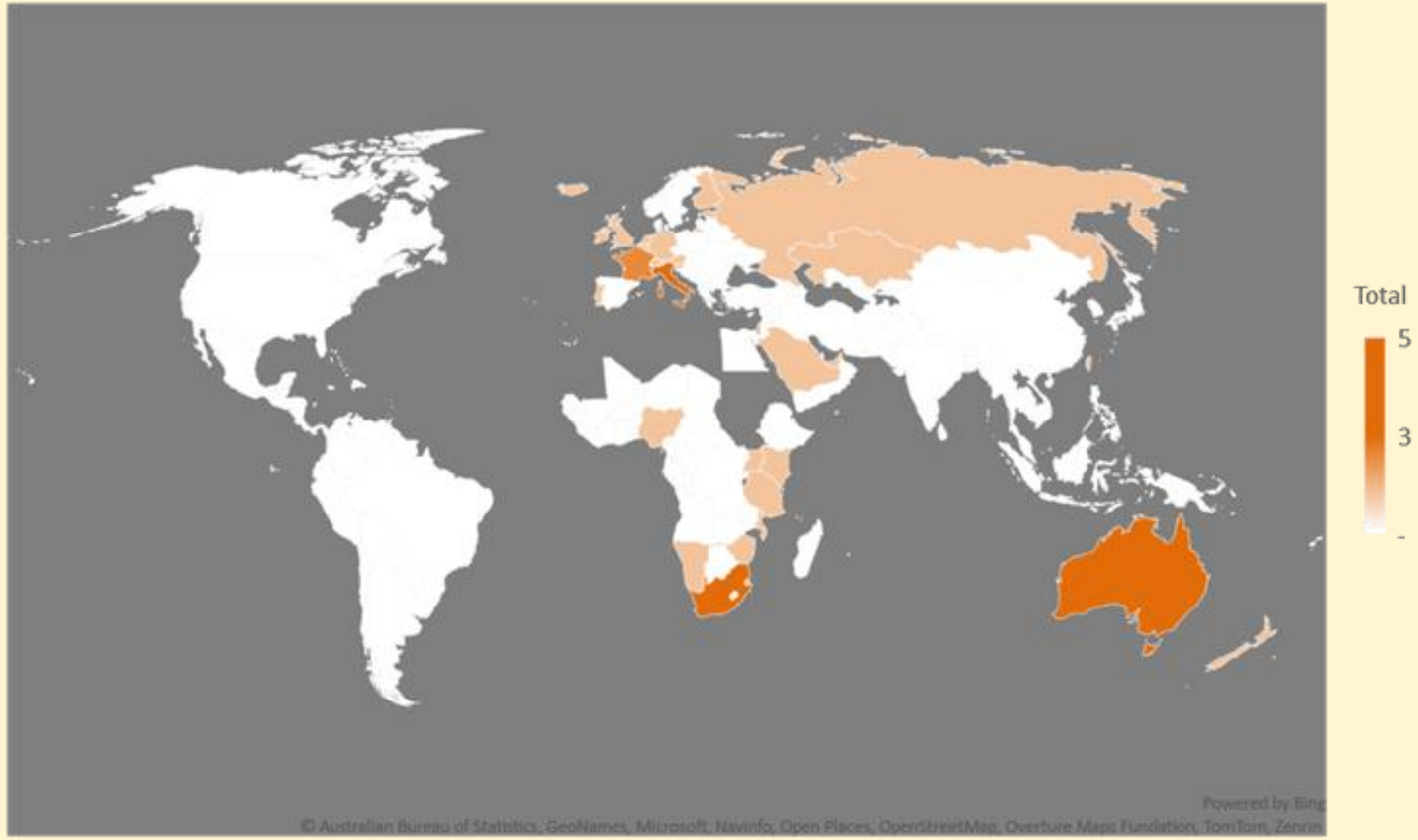


Introduction - Question 2 (1/2)

Jurisdiction

Since some entities are operating in more than 1 country, the 30 responses result in 34 different countries from all continents, except America, with emphasis on European countries, as well as Australia (5) and South Africa (4).

Continent	Count
Africa	14
America	-
Asia	7
Europe	19
Oceania	6
Total	**46**

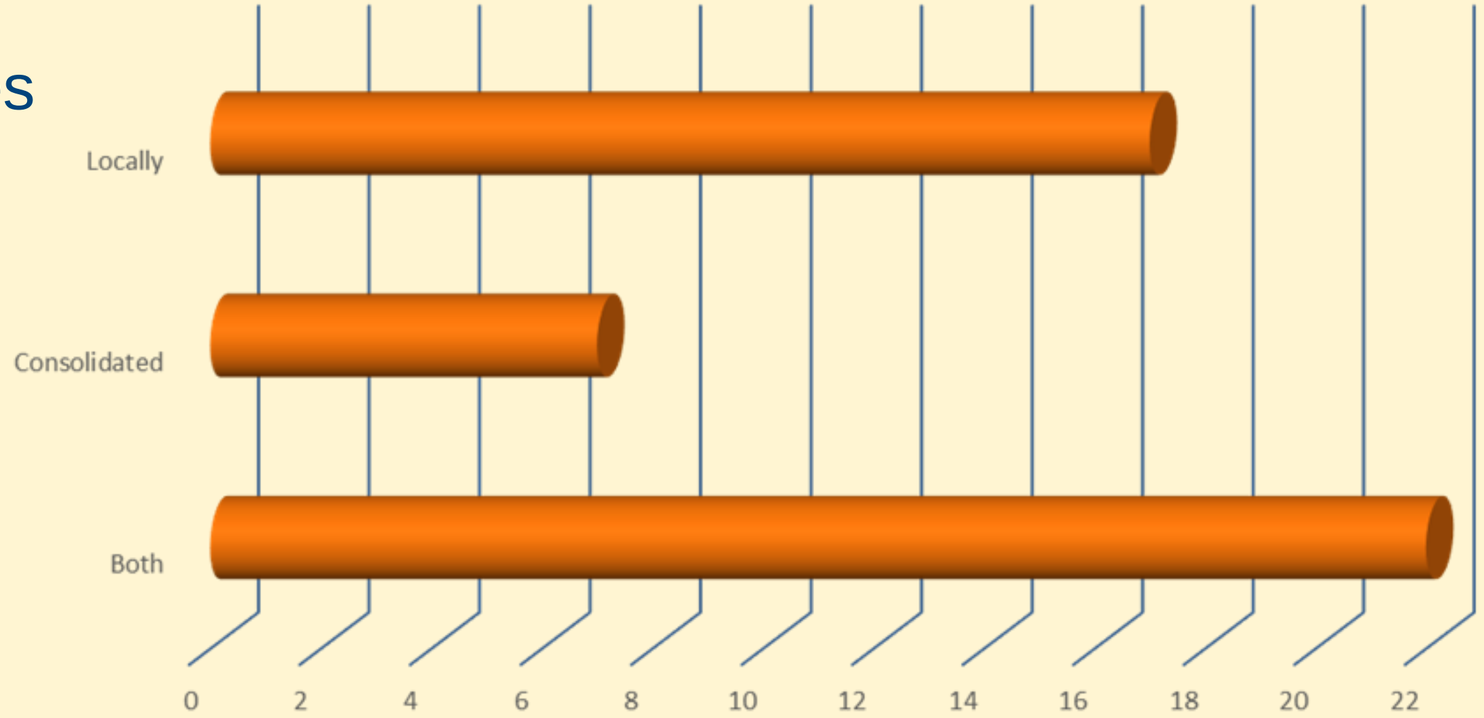


Introduction - Question 2 (2/2)

Adoption and Reporting

All responses indicate that IFRS 17 adoption is mandatory, which shows how this obligation constitutes a high incentive for entities to understand it and thus participate in surveys such as this one.

Most (85%) of the responses indicate that the reporting of financial statements under IFRS 17 is done locally, either on its own or in conjunction with a consolidated disclosure.



Questions, Analysis of Results and Conclusions

Perspective of Actuaries performing IFRS 17 Valuations

Question 1 (1/2)

Actuaries Involvement

All responses indicate that actuaries are involved in the IFRS 17 valuations.

This is somewhat good news since the measurement of insurance commitments under IFRS 17 requires a specific level of professional expertise which actuaries can provide.

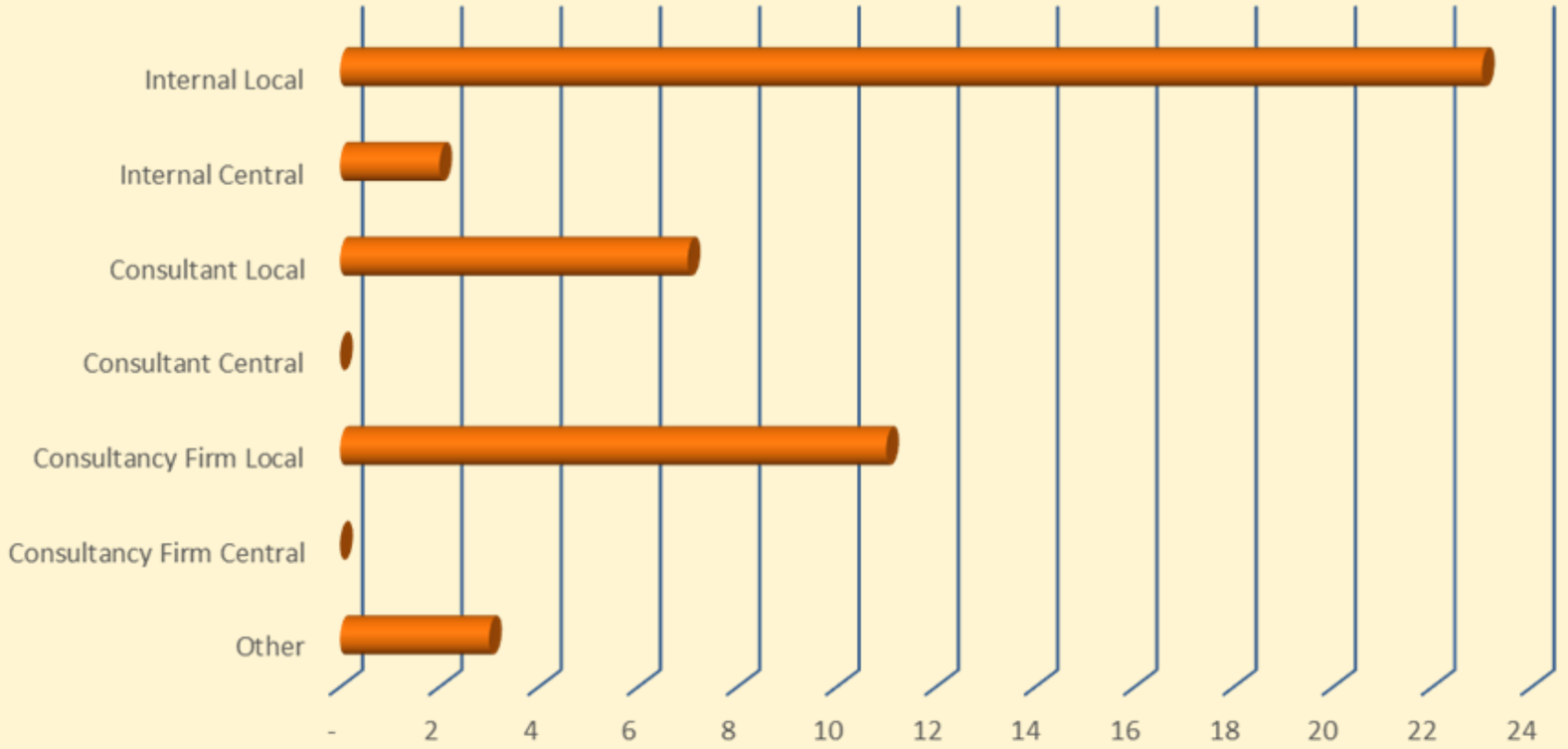
It shows that (re)insurance entities feel the need to acquire such actuarial expertise and it also provides some level of robustness or legitimacy to the results obtained (in this survey and generally under IFRS 17).

Question 1 (2/2)

Actuaries Affiliation

Most (54%) of the entities have internally and locally dedicated actuaries working in the reporting of IFRS 17, perhaps since actuaries are usually also involved in pricing and reserving calculations for insurers.

Thus, insurers may already have internally dedicated actuarial teams they can rely on to perform the actuarial calculations necessary to meet the requirements of IFRS 17.



Classification of Contracts

Classification of Contracts - Question 2 (1/3)

Actuaries Involvement

Most (96%) of the entities have actuaries involved in the classification of contracts under IFRS 17 (on top of performing actuarial calculations).

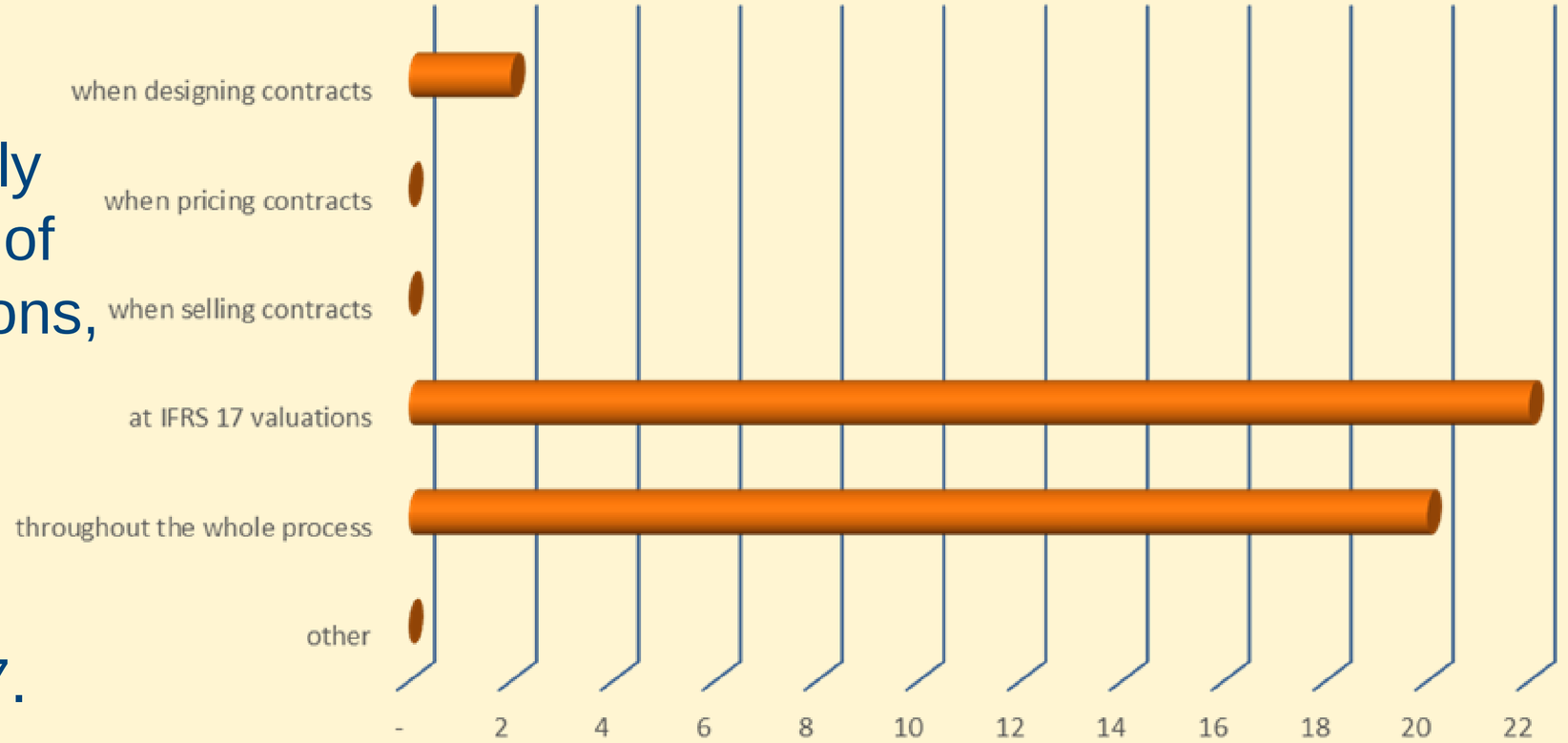
This is somewhat good news since the measurement of insurance commitments under IFRS 17 which is carried out by actuaries depends on the classification of contracts and could be impacted by any modifications to the contracts.

Classification of Contracts - Question 2 (2/3)

Actuaries Involvement - Stage

A good percentage (45%) of actuaries are involved in the classification of contracts under IFRS 17 throughout the whole process.

The somewhat bad news is that 50% of actuaries are only involved in the classification of contracts at IFRS 17 valuations, when it might be too late to correct any misclassification which could impact the measurement of insurance commitments under IFRS 17.



Classification of Contracts - Question 2 (3/3)

Separation of Components

The majority (52%) of the responses to this survey indicates that separation of insurance or non-insurance components within contracts is not required, with most of the entities who indicate this necessity being those who carry out life business.

Classification of Contracts - Question 3

Reinsurance Held

The majority (96%) of the responses to this survey indicates that entities hold reinsurance contracts.

Holding reinsurance, in the sense of IFRS 17, means for protection / risk management / investment strategy, so that the reinsurance contracts constitute ceded business - claims are ceded to a reinsurer for a premium paid by the entity.

Classification of Contracts - Question 4

Split of Business per PIC

(average percentage of underwritten business, measured in relation to written premium)

Motor insurance (damage and liability) in conjunction with property insurance are the most significant PICs, which is explainable since these are lines of business which are in some way mandatory or highly encouraged in most countries (e.g. third-party liability under motor, fire under property).

PIC	Average
Motor Liability	17.5%
Motor Damage	23.5%
General Liability	8.3%
Property	21.0%
Construction	1.3%
Marine and Aviation	1.9%
Transport	0.5%
Accident or Health	13.1%
Financial Loss	5.8%
Other	7.1%
Total	**100%**

Classification of Contracts - Question 5

Private vs. Commercial Business

The majority of the responses to this survey indicates that entities mostly do business with private customers:

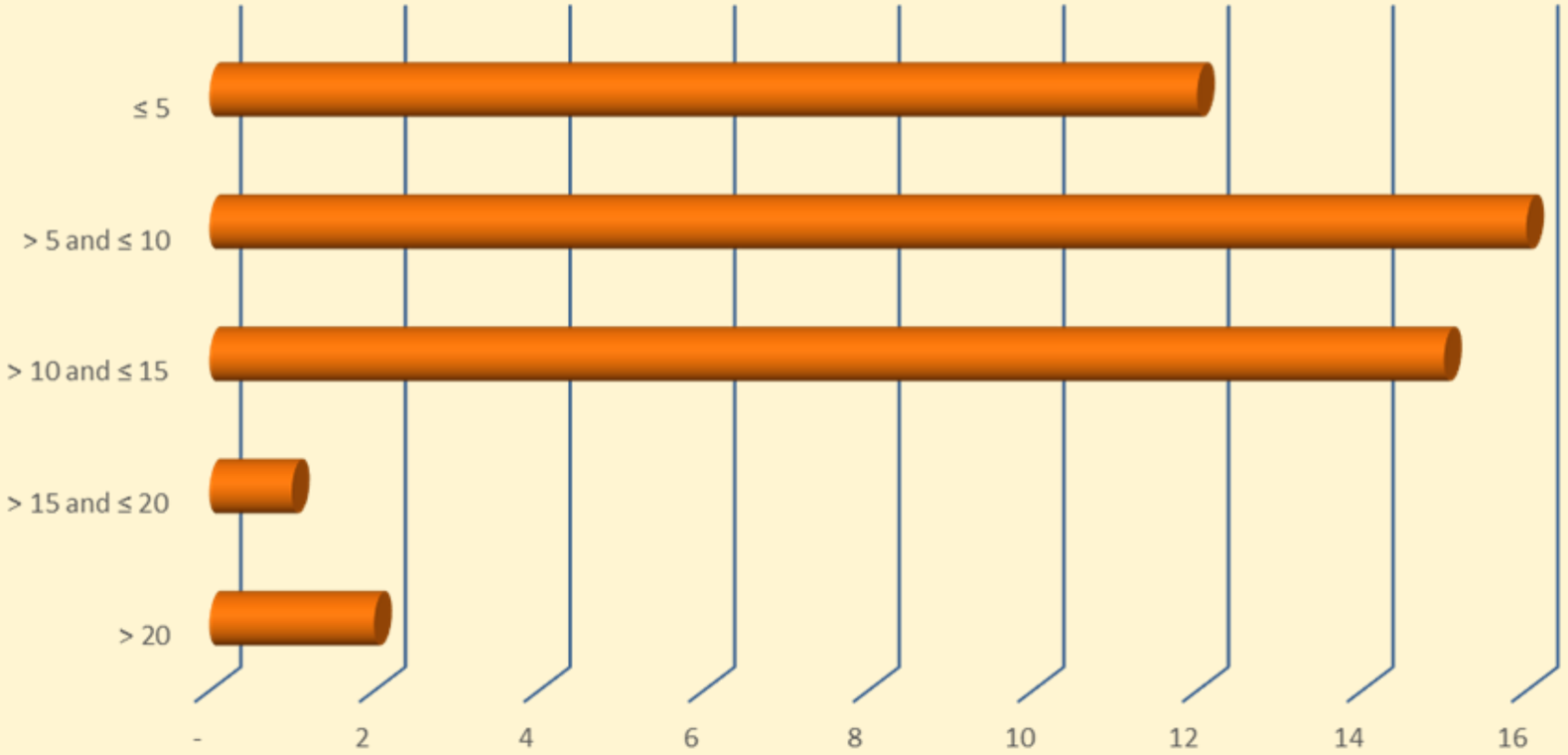
- the average percentage of underwritten business (measured in relation to written premium) that represents private customers is 63%;
- 70% of entities indicate having a percentage of private business of 50% or more;
- only 1 entity indicates not having private customers.

Classification of Contracts - Question 6

Cohorts in the LIC

The majority (93%) of the responses to this survey indicates that entities allow for up to 15 years of separate cohorts when measuring the LIC.

When analyzing this matter, both the data as well as the system capacity dimensions should be considered.



Classification of Contracts - Question 7

Measurement Model

As expected, most entities use the PAA since non-life insurance is generally shorter-term:

- the average percentage of underwritten business (measured in relation to written premium) that represents the PAA is 92%.

However, the use of the GMM / BBA cannot be ruled out (24% indicate using it).

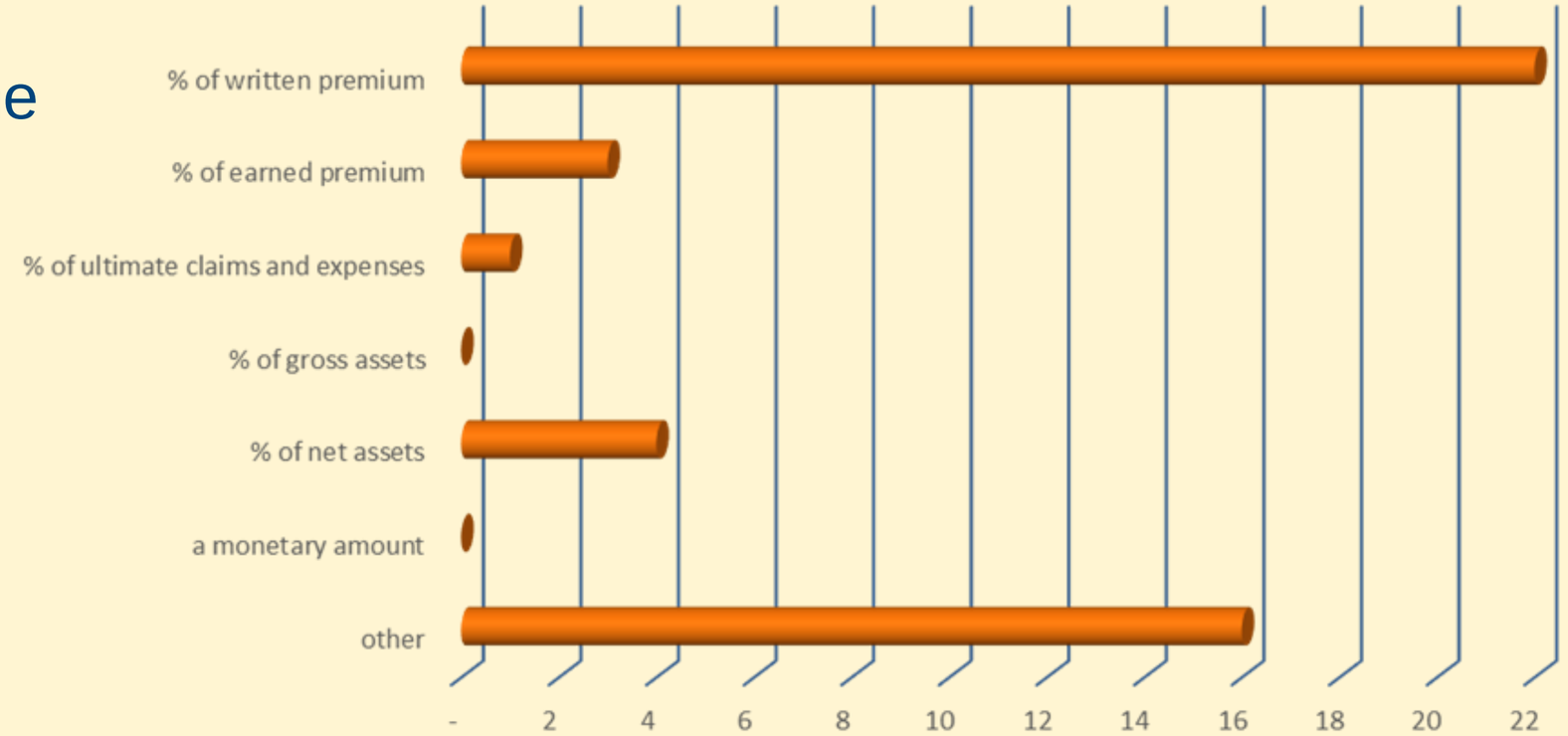
Only 2 entities indicate using the VFA.

Classification of Contracts - Question 8 (1/2)

Materiality Threshold

The majority (54%) of the responses to this survey indicates the use of a materiality threshold to determine the use of the PAA in a way that it is immaterially different from using the GMM / BBA based on a percentage of premium, up to 5% and applied in the same manner per PIC.

This is in line with maintaining a consistent, easy to follow approach across PICs. However, it might not always be appropriate considering the specificities of each entity and the contracts underwritten.



Classification of Contracts - Question 8 (2/2)

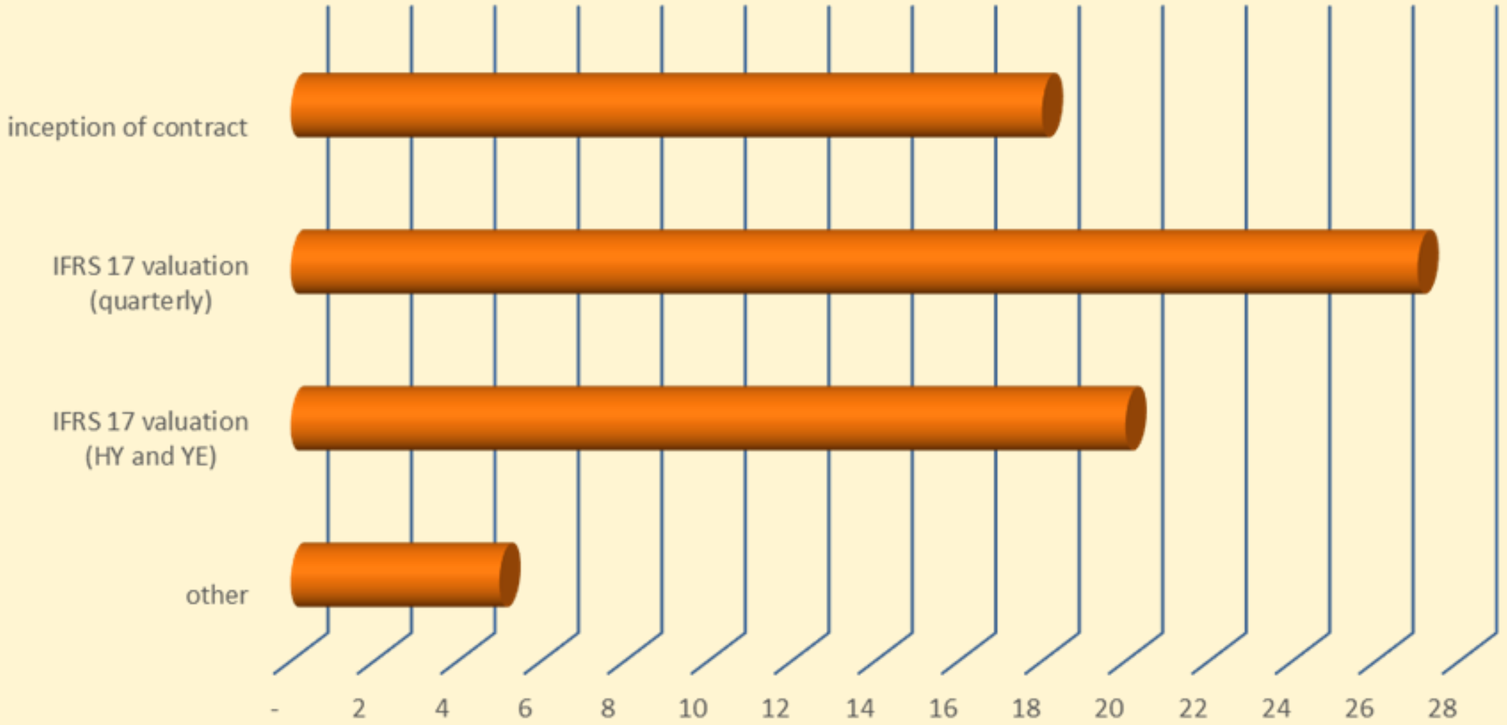
Backup Plan

The majority (81%) of the responses to this survey indicates that entities do not have a backup plan to adopt the GMM / BBA swiftly in case the materiality threshold is breached in subsequent years.

Classification of Contracts - Question 9

OCT - When

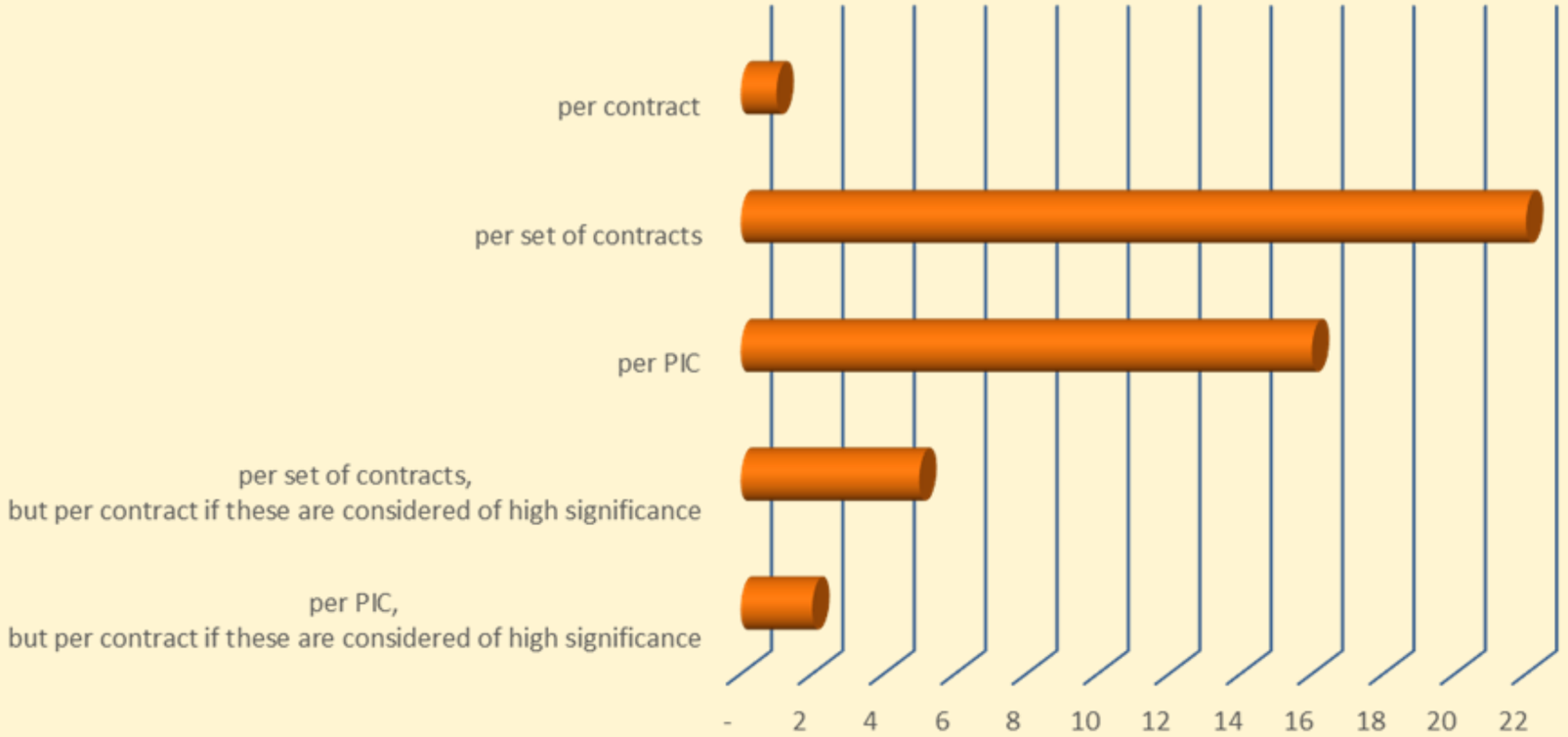
The majority (93%) of the responses to this survey indicates that the OCT is performed at particular points in time (vs. regularly), namely at IFRS 17 valuations.



Classification of Contracts - Question 10

OCT - How

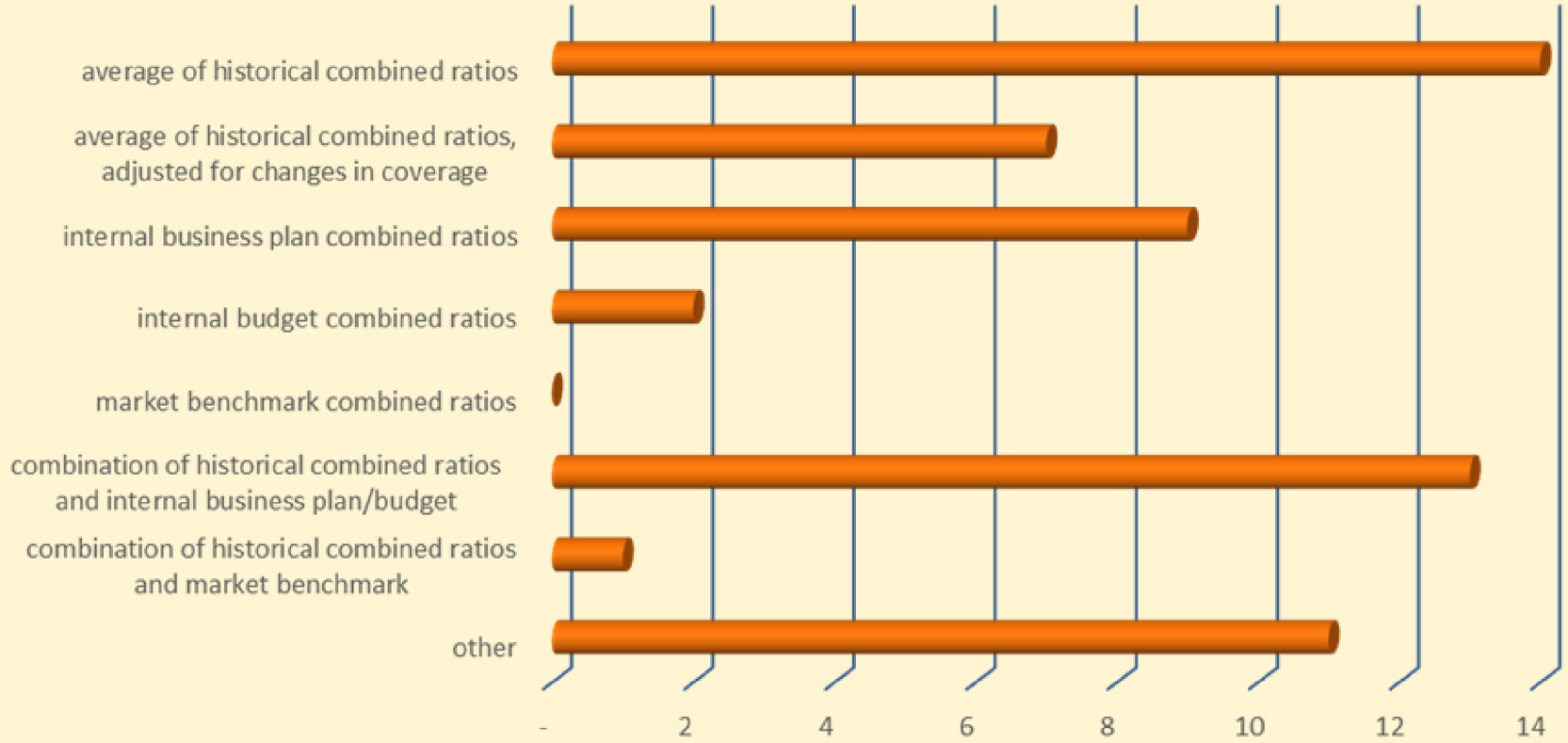
The majority (98%) of the responses to this survey indicates that the OCT is performed per set of contracts or per PIC (i.e. not a priori per contract).



Classification of Contracts - Question 11 (1/3)

Combined Ratios in the OCT - Estimation Method

The majority (61%) of the responses to this survey indicates the use of combined ratios based on historical data, on their own or combined with internal business plan or budget ratios.

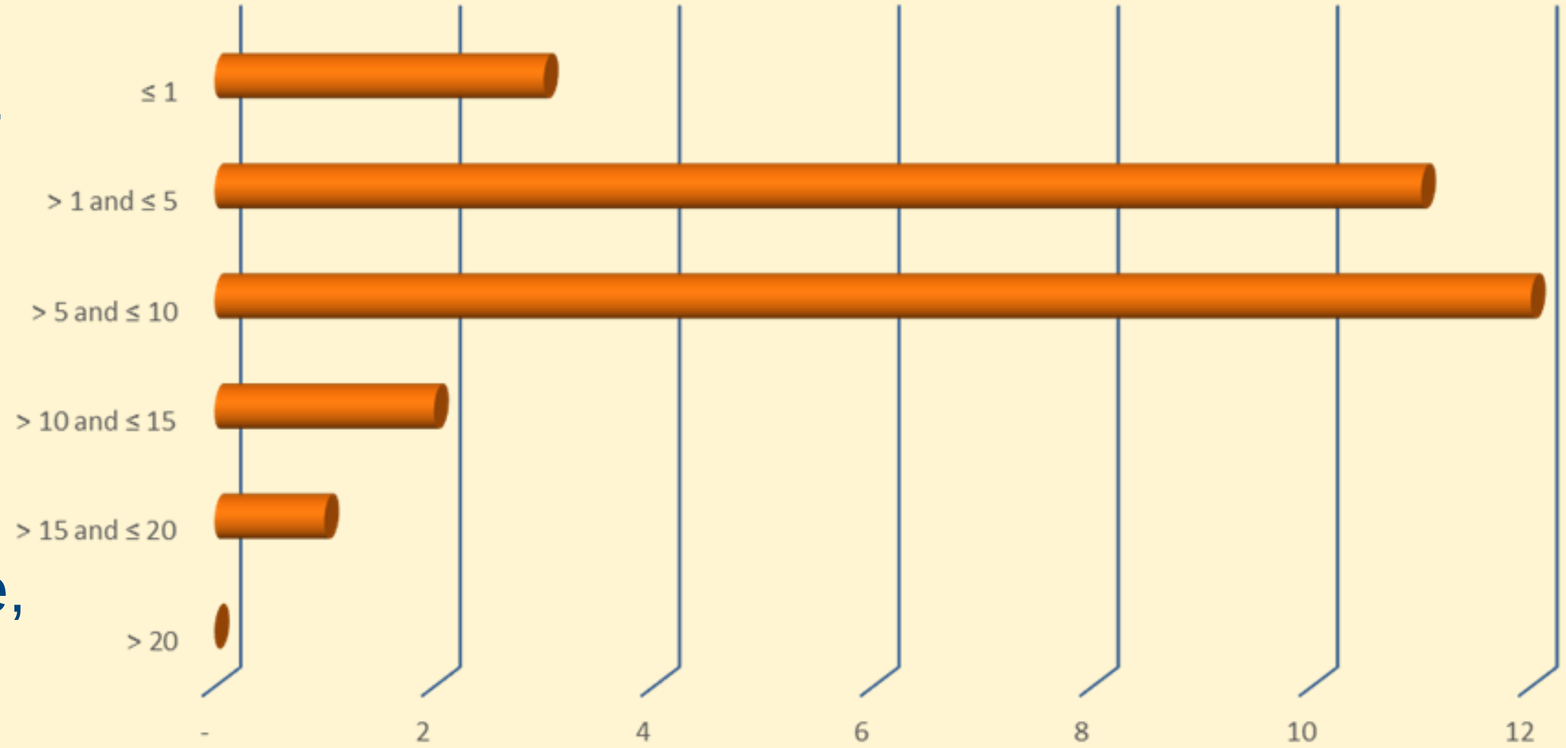


Classification of Contracts - Question 11 (2/3)

Combined Ratios in the OCT - Historical Data

There is almost a tie (48%/52%) between using the most recent, shorter-term historical data, i.e. up to 5 years and using longer periods from 5 up to 20 years.

It might make sense to consider the most recent data to perform the OCT given recent trends or changes in coverage may impact the results. However, it might also make sense to consider past claims experience, namely, to allow for the occurrence of larger claims.



Classification of Contracts - Question 11 (3/3)

Combined Ratios in the OCT - Consistency

The majority (83%) of the responses to this survey indicates that the combined ratios used for the OCT are consistent with the measurement of the LRC when determining the LC or the CSM.

This is expected since the determination of any LC or CSM derives from an analysis of profitability.

Classification of Contracts - Question 12

Amounts excluded from the OCT

The majority (70%) of the responses to this survey indicates that extremely large claims are consistently excluded from the OCT.

Classification of Contracts - Question 13

OCI Option

The majority (63%) of the responses to this survey indicates that entities do not take the OCI option.

Data

Data - Question 14

Annuities

A minority (11%) of the responses to this survey indicates the presence of annuities, mostly representing up to 5% of underwritten business (measured in relation to written premium) and not treated separately from other insurance amounts (63% indicating this).

This may be explained by the difficulty meeting the data requirements when comparing annuities with other non-life insurance amounts. It may also be explained by the generally immaterial presence of annuities in non-life insurance portfolios.

When analyzing this matter, both the data as well as the system capacity dimensions should be considered.

Data - Question 15

Split of LIC per Amount

Within the LIC, pure claim amounts represent the highest proportion (circa 81%), with ALAE and ULAE representing between 2.5% and 5%. The RA, mainly linked to adverse deviations of claims experience, which may be significant when large claims occur, is not immaterial (circa 7.5% on average considering the responses to this survey).

LIC	Average
Pure in LIC	80.9%
ALAE in LIC	3.2%
ULAE in LIC	4.6%
Profit Participation in LIC	0.1%
Risk Adjustment in LIC	7.3%
Annuities in LIC	3.9%
Total	**100%**

Data - Question 16

Split of Expenses per Amount

On average, the majority (88%) of total expenses considered under IFRS 17 (acquisition, maintenance, other), namely for the LRC, are attributable (or technical), with most (80%) of the entities indicating deferring part of the acquisition expenses.

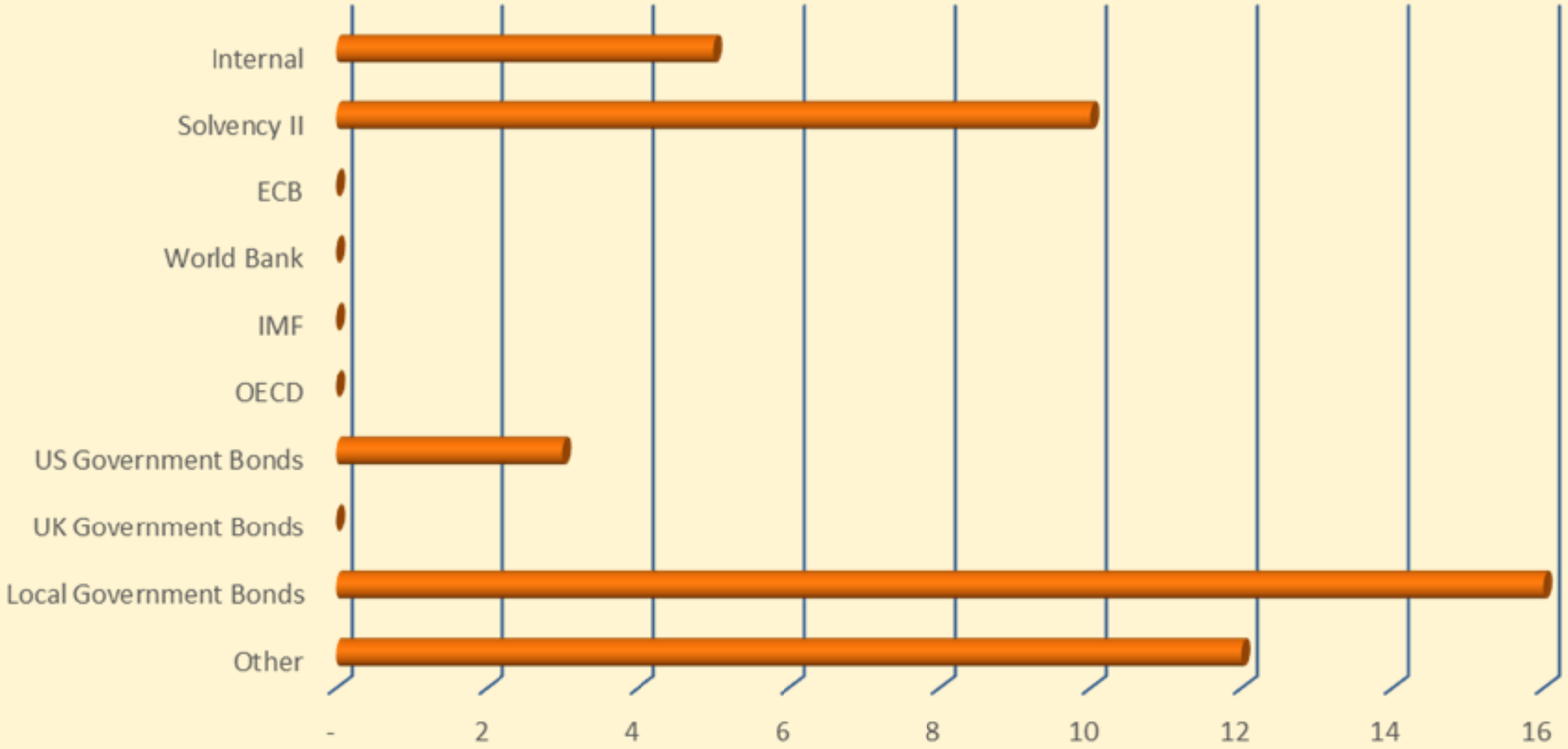
Expenses	Average
Attributable (or technical) Acquisition Expenses	44%
Attributable (or technical) Maintenance Expenses	44%
Non-Attributable (or non-technical) Expenses	12%
Total	**100%**

Interest Rates

Interest Rates - Question 17 (1/3)

Source

The majority (35%) of the responses to this survey indicates that interest rates are based on local government bonds.



Interest Rates - Question 17 (2/3)

Approach

The majority (67%) of the responses to this survey indicates that interest rates are determined using a bottom-up (instead of top-down) approach.

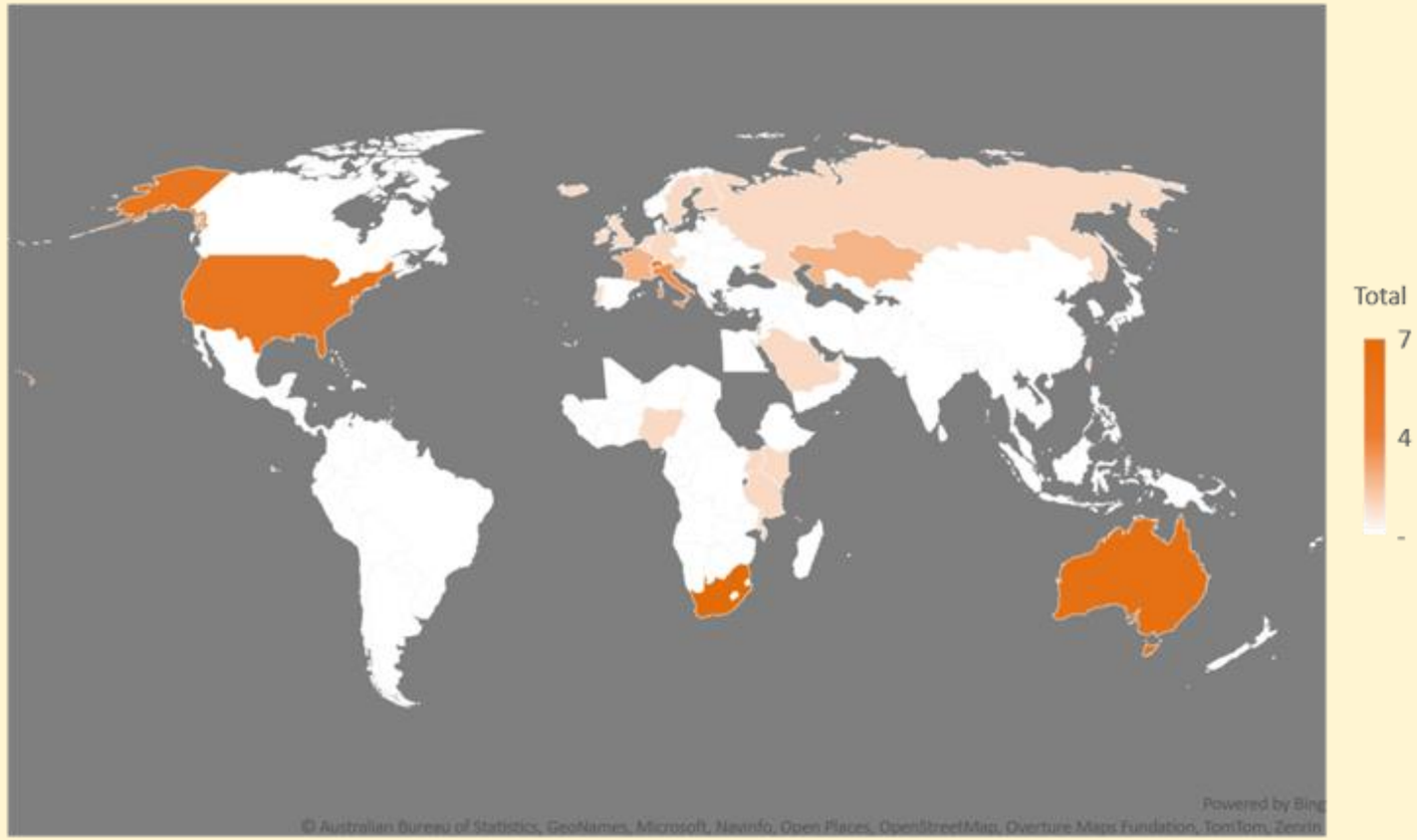
The majority (67%) of the responses to this survey indicates that interest rates are determined considering forward (instead of swap) interest rates.

Interest Rates - Question 17 (3/3)

Currencies

21 different currencies from all continents, including America, are represented in the responses to this survey, with emphasis on Euro (17), as well as South African Rand (7), Australian Dollar (6) and United States Dollar (5).

Continent	Count
Africa	14
America	5
Asia	7
Europe	24
Oceania	6
Total	**56**



Interest Rates - Question 18

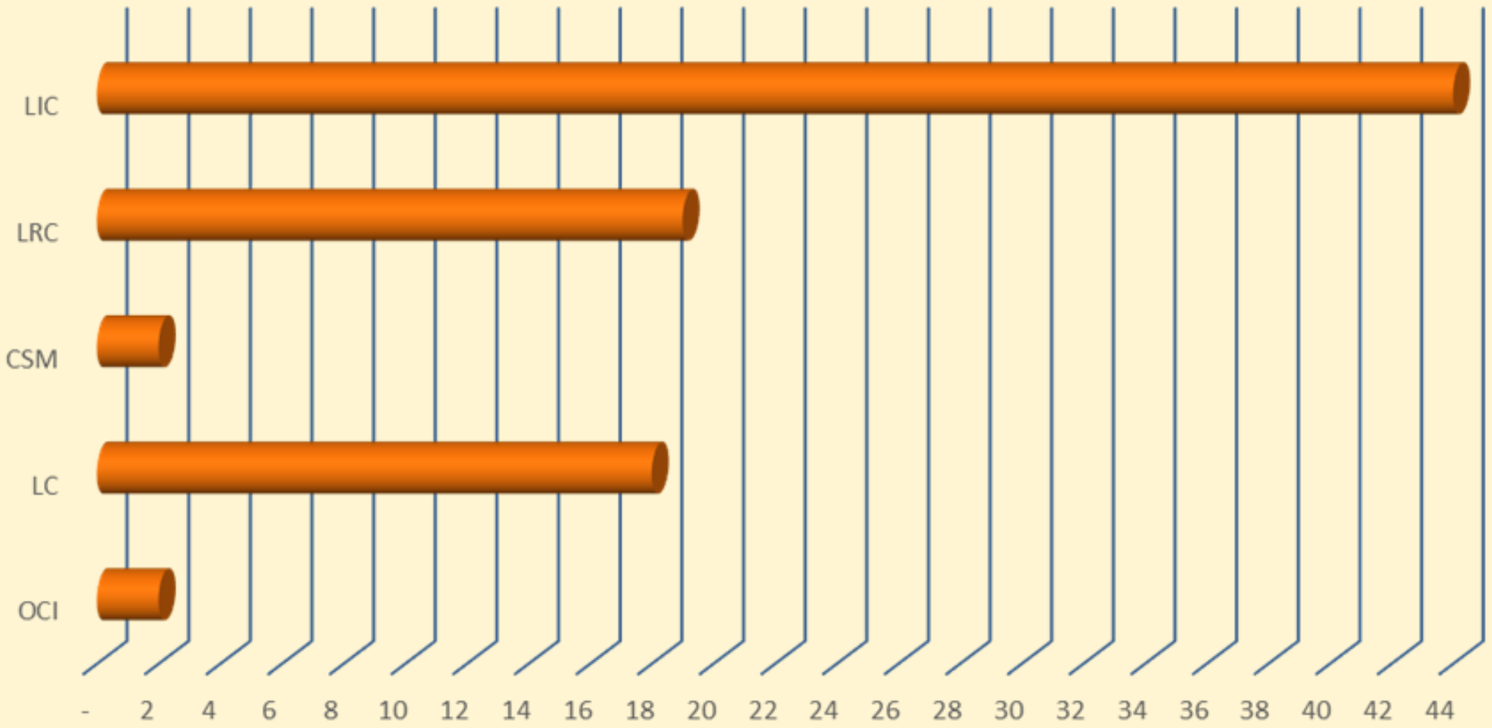
Spread

The majority (61%) of the responses to this survey indicates that a spread per country is added to the base interest rate curve, with this spread per country including an illiquidity premium (96% indicating this).

Interest Rates - Question 19 (1/3)

Current Discount Rates

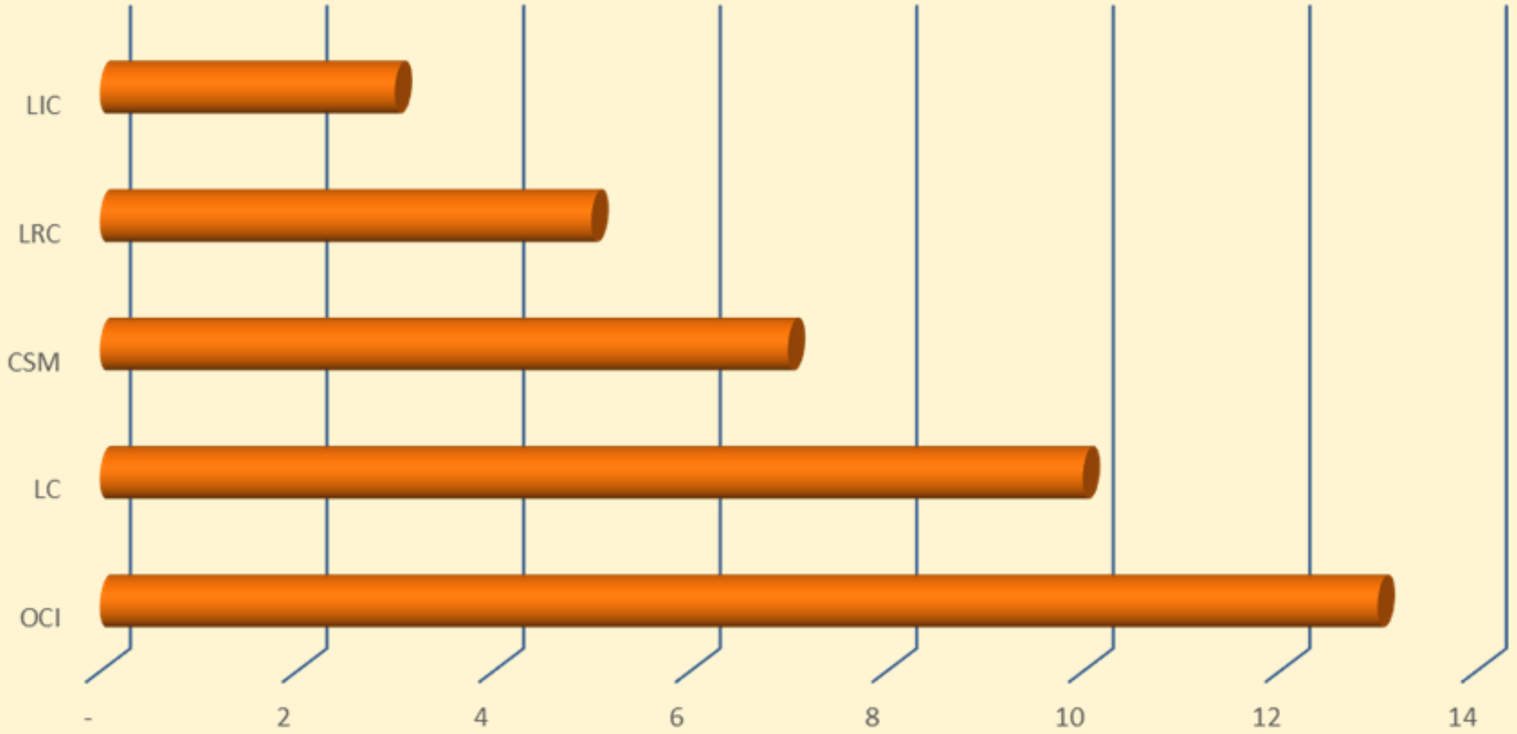
Almost all (98%) of the responses to this survey indicate using current discount rates.



Interest Rates - Question 19 (2/3)

Locked-In Discount Rates

Only almost half (48%) of the responses to this survey indicate the use of locked-in discount rates.



Interest Rates - Question 19 (3/3)

Discounting of Measures

The LIC is generally discounted, and this is mostly done by using current discount rates.

The OCI is generally discounted, and this is mostly done by using locked-in discount rates.

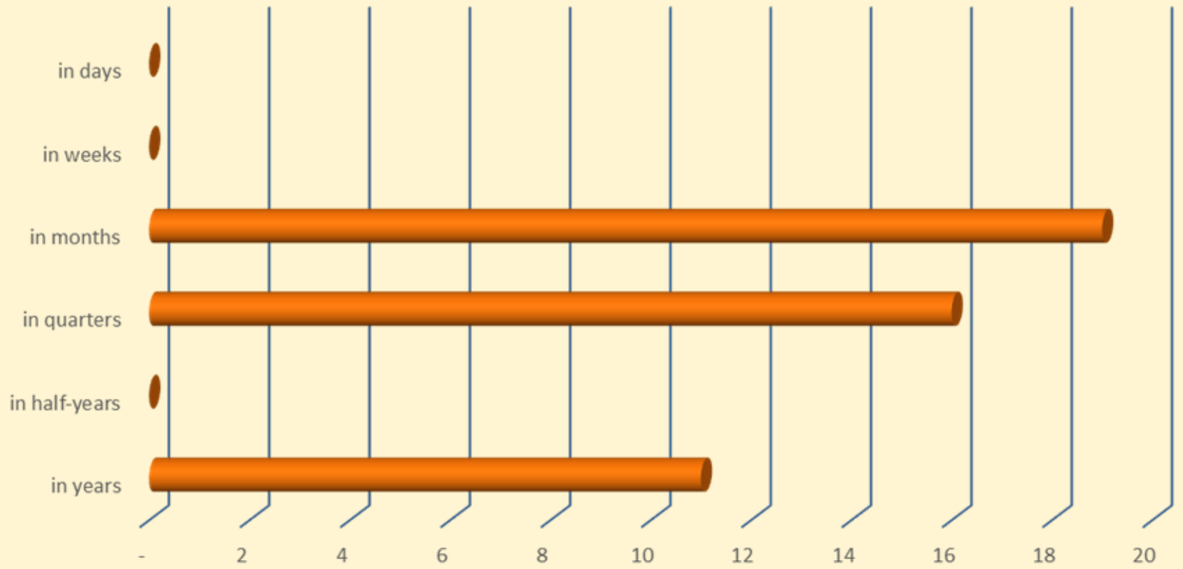
For the LRC, the LC and the CSM, the conclusions are not so linear. These seem to be discounted, the LRC and the LC using current discount rates and the CSM using locked-in discount rates, but the responses vary significantly.

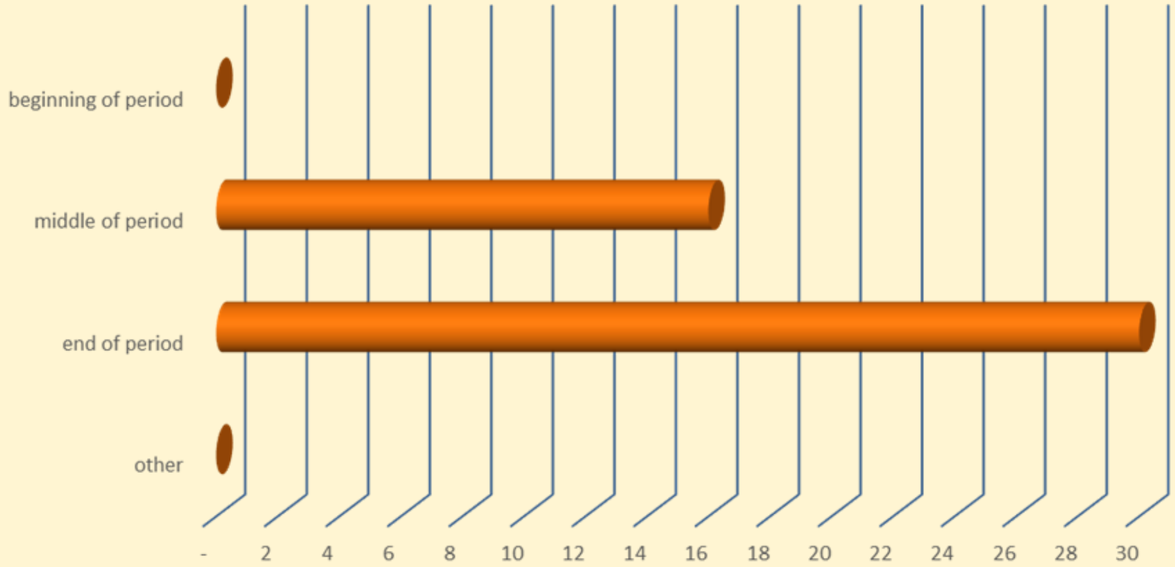
Interest Rates - Question 20

Claims Cash Flows

Generally, claims cash flows are projected to occur on a monthly, quarterly or annually basis, mostly at the end of each projected period, but also at the middle. When analyzing this matter, both the data as well as the system capacity dimensions should be considered.

All entities confirmed discounting claim amounts.



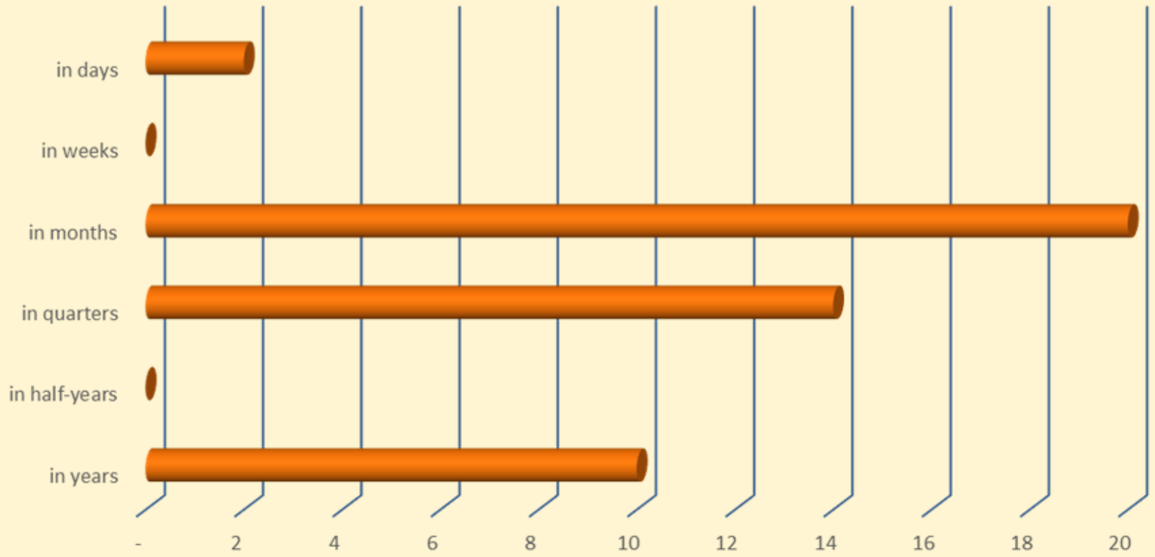


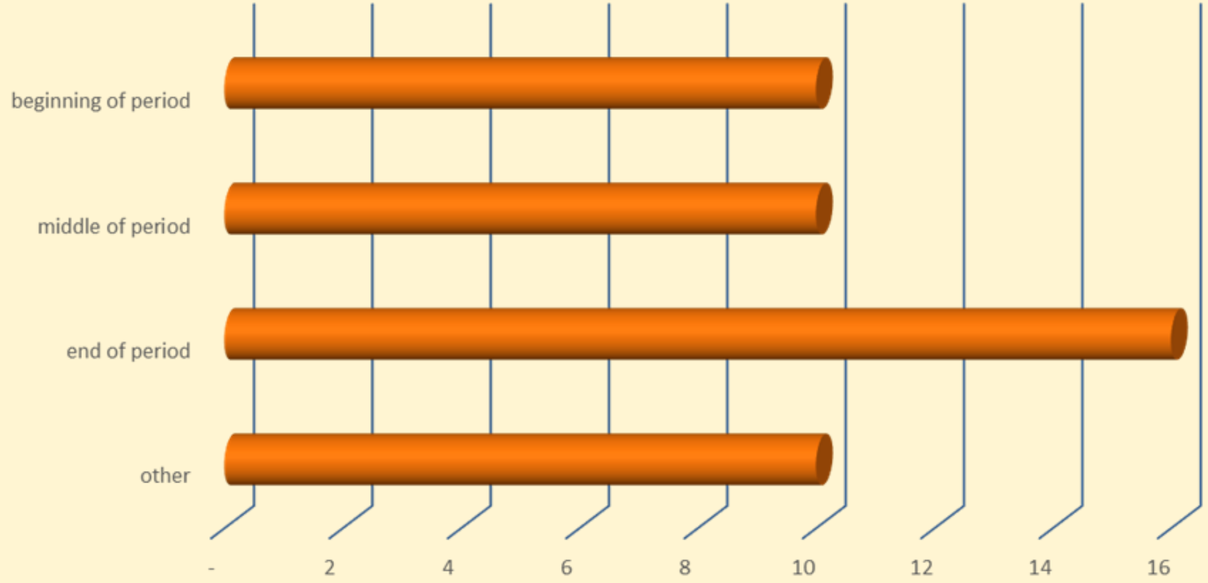
Interest Rates - Question 21

Premium Cash Flows

Generally, premium cash flows are also projected to occur on a monthly, quarterly or annually basis, mostly at the end of each projected period, but also at the beginning or middle. When analyzing this matter, both the data as well as the system capacity dimensions should be considered.

Contrary to claims, not all entities confirmed discounting premium amounts.



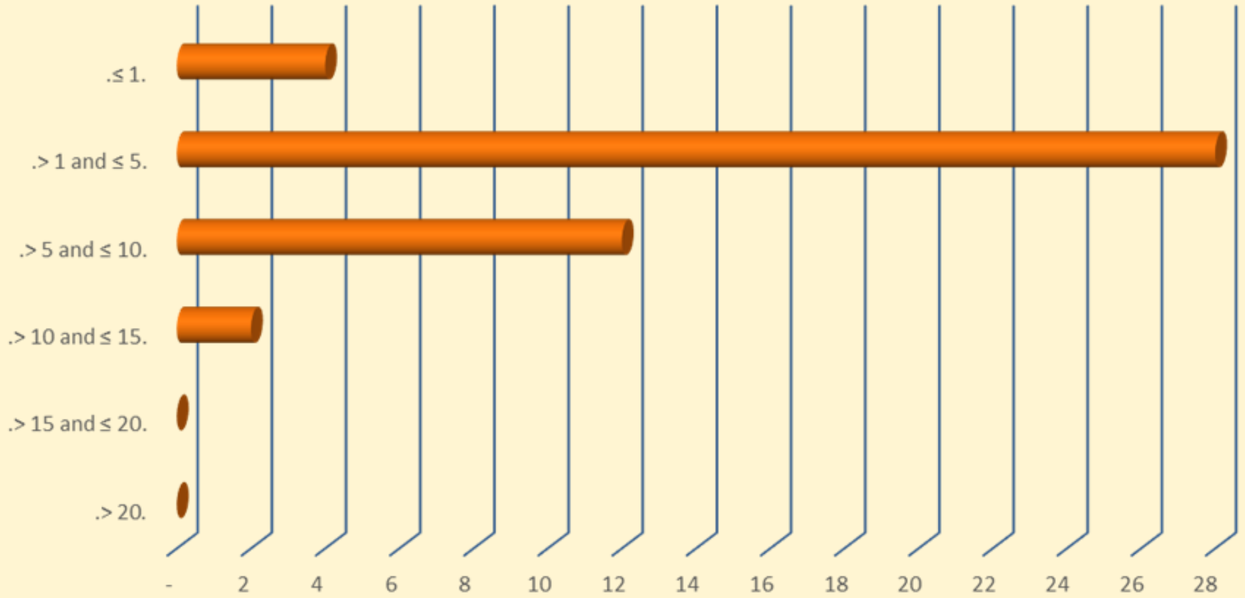


Interest Rates - Question 22

Duration of the LIC

On average, the duration of the LIC is between 1 and 5 years, although the majority (96%) of the responses to this survey indicates a duration of the LIC up to 10 years.

The results per PIC are consistent with the results in total.



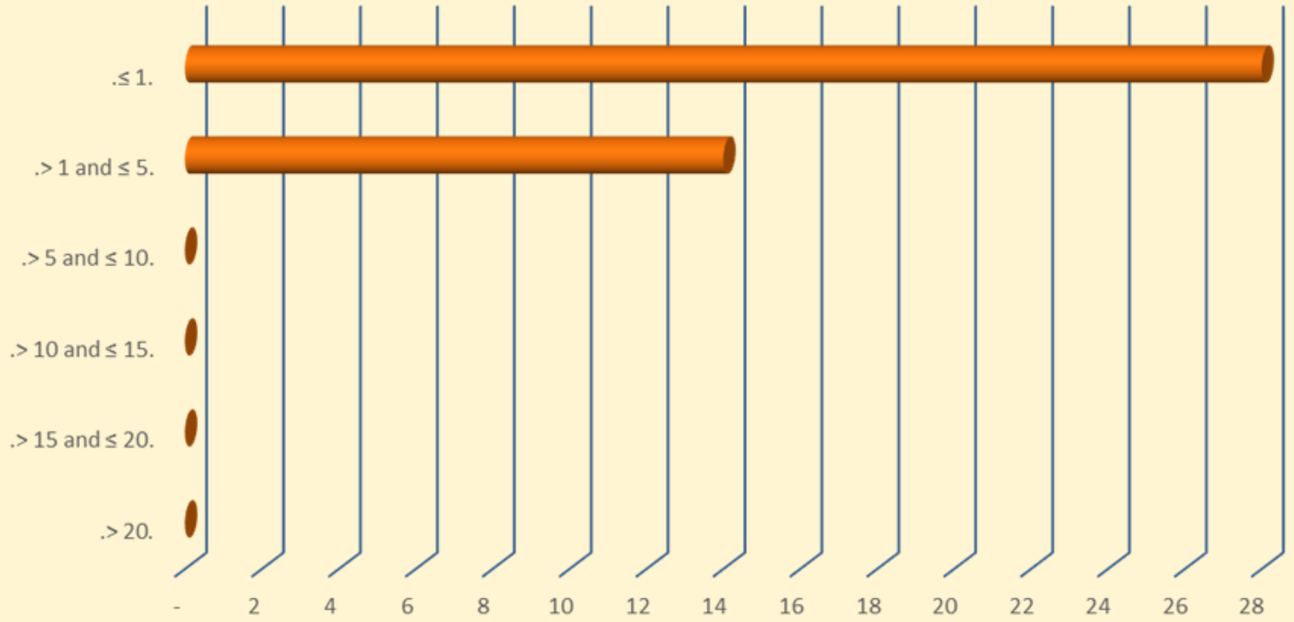
PIC	Most Common
Motor Liability	.> 1 and ≤ 5.
Motor Damage	.≤ 1.
General Liability	.> 1 and ≤ 5.
Property	.> 1 and ≤ 5.
Construction	.> 1 and ≤ 5.
Marine and Aviation	.> 1 and ≤ 5.
Transport	.> 1 and ≤ 5.
Accident or Health	.≤ 1.
Financial Loss	.> 1 and ≤ 5.
Other	.> 1 and ≤ 5.

Interest Rates - Question 23 (1/3)

Duration of the LRC

It is somewhat unexpected that the responses to this survey indicate:

- A duration for the LC for more than 1 year, and namely up to 5 years, since the LC is supposed to be established mostly under the PAA for immediate recognition.

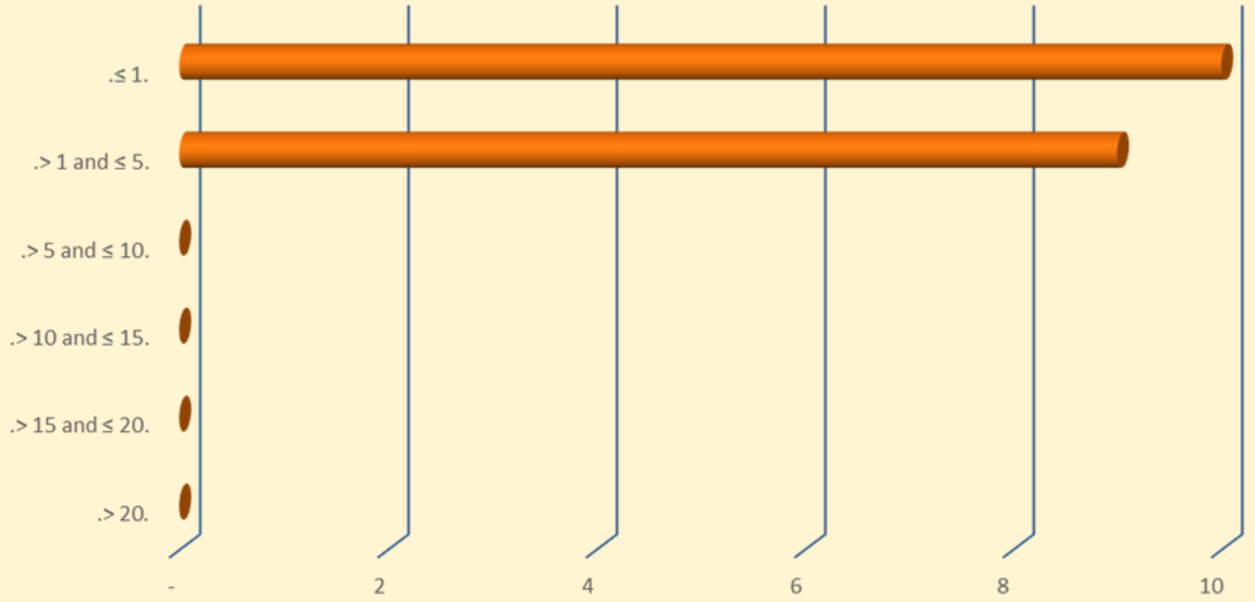


Interest Rates - Question 23 (2/3)

Duration of the LRC

It is somewhat unexpected that the responses to this survey indicate:

- A duration for the CSM mostly up to 1 year and of not more than 5 years, since the CSM is supposed to be established mostly under the GMM / BBA for deferred recognition.



Interest Rates - Question 23 (3/3)

Duration of the LRC

The results per PIC are consistent with the results in total.

PIC	Most Common
Motor Liability	.≤ 1.
Motor Damage	.≤ 1.
General Liability	.≤ 1.
Property	.≤ 1.
Construction	.≤ 1.
Marine and Aviation	.≤ 1.
Transport	.≤ 1.
Accident or Health	.≤ 1.
Financial Loss	.≤ 1.
Other	.≤ 1.

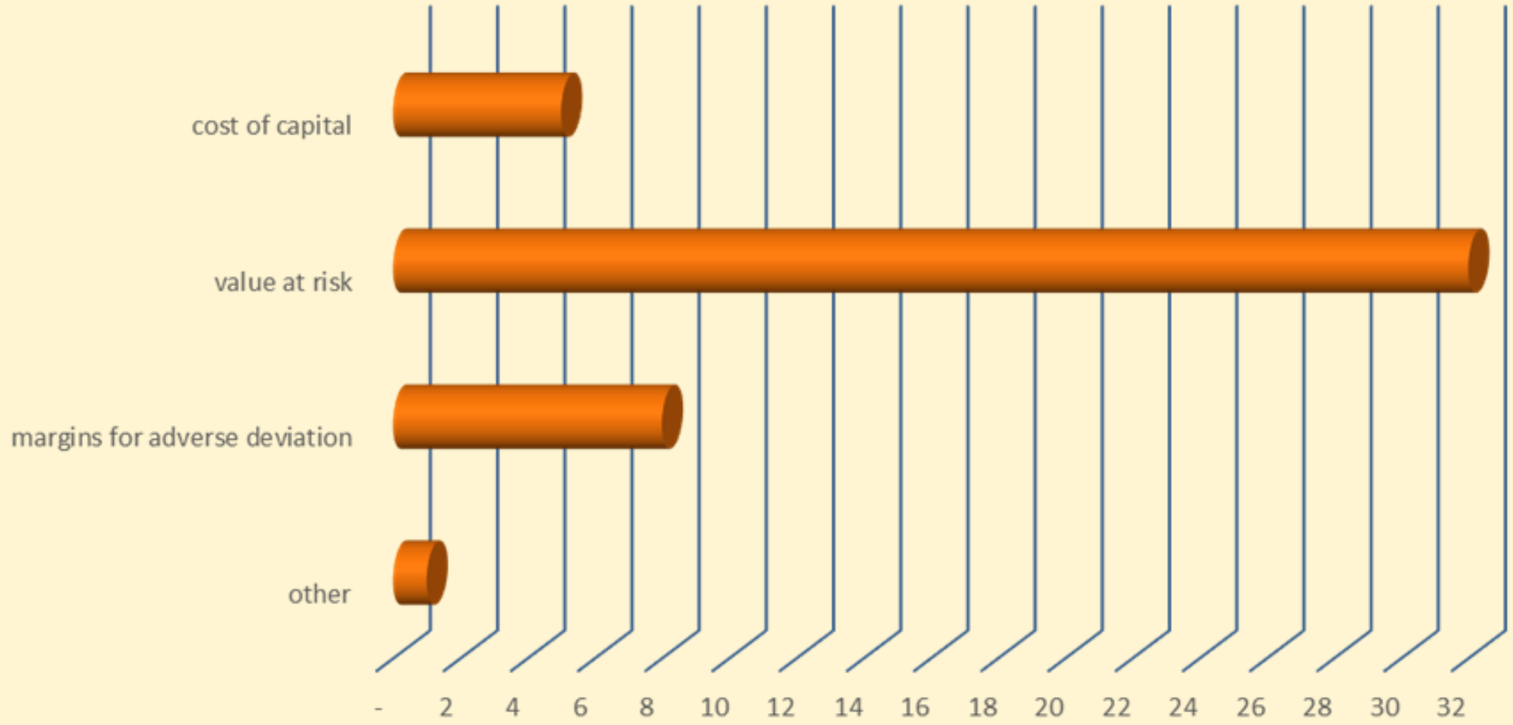
Risk Adjustment

Risk Adjustment - Question 24

Estimation Method

The majority (70%) of the responses to this survey indicates that the RA is generally calculated based on a value at risk approach with the quantiles used in this calculation reported precisely in the financial statements (81% indicating this).

The RA is also mainly linked to the occurrence of claims, and it is this dimension which is used to allocate the RA per PIC (88% indicating this).



Risk Adjustment - Question 25

Discounting

The RA is generally discounted (83%) and in the same manner as claim amounts (97%).

Risk Adjustment - Question 26

RA in the FCF for the LRC

On average, the RA represents circa 9% of the FCF associated with the LRC.

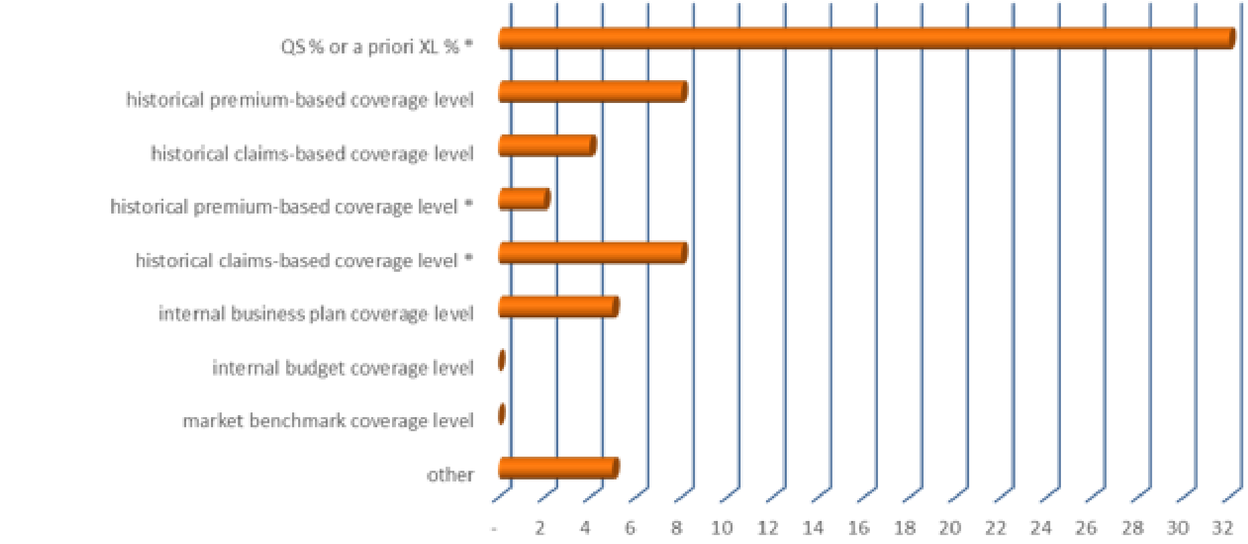
The majority (78%) of the responses to this survey indicates a percentage of the RA in the FCF associated with the LRC of up to 10%.

Reinsurance Held

Reinsurance Held - Question 27 (1/4)

Level of Coverage - Estimation Method

The majority (50%) of the responses to this survey indicates the use of the QS (quota-share) or an a priori XL (excess of loss) percentages, applicable only to the elements of gross reserves covered by the treaty, to estimate the expected level of coverage provided by the reinsurance held arrangements.



** applicable only to the elements of gross reserves covered by the treaty*

Reinsurance Held - Question 27 (2/4)

Level of Coverage - Estimation Method

This makes sense, particularly since:

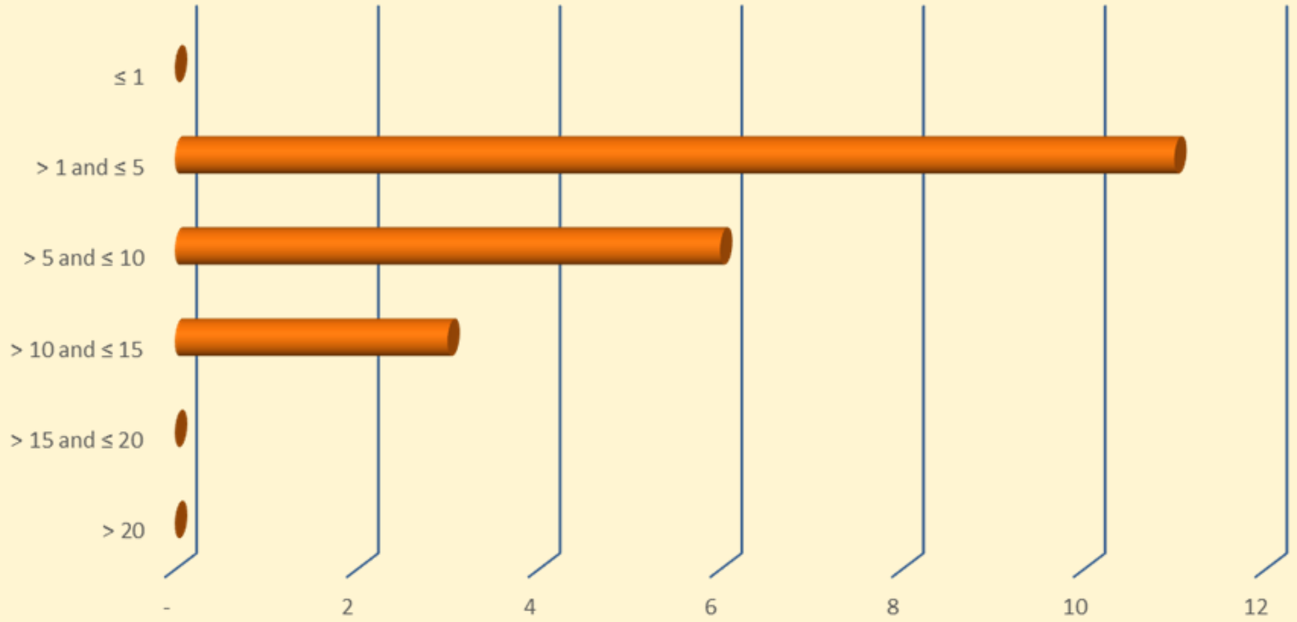
- the QS percentage represents the level of coverage reinsurers accept to provide;

- and, XL treaties generally cover higher losses, for which there may not be enough internal historical data to provide an estimation of the level of coverage.

Reinsurance Held - Question 27 (3/4)

Level of Coverage - Historical Data

Some entities indicate using historical reinsurance coverage levels based on claims or premium, mostly over a period of 1 to 5 years, but up to 15 years.



Reinsurance Held - Question 27 (4/4)

Level of Coverage - Historical Data

Responses indicating historical coverage levels based on claims or premium have more or less the same significance, which is explainable, since, in line with the comment for XL treaties above, for claims-based coverage percentages to be determined, there needs to be enough ceded claims data, which may not be available.

For this reason, it might make sense to estimate the expected level of coverage provided by the reinsurance held arrangements considering the proportion of ceded in gross premium, priced to consider the reinsurer's estimation of the coverage to be provided, naturally, as well as the reinsurer's profit.

Reinsurance Held - Question 28

Discounting

The reinsurance held is generally (98%) discounted and in the same manner as for gross business.

Reinsurance Held - Questions 29 and 30

RA and OCI Proportionality

The RA and the OCI for reinsurance held are generally (75% and 94%, respectively) calculated proportionally to the ones obtained for gross business.

Reinsurance Held - Question 31

CRA

The majority (66%) of the responses to this survey indicates that the CRA is calculated and based on credit ratings (64% indicating this).

Glossary of Acronyms

Glossary of Acronyms

Acronym	Group	Definition
ALAE	Insurance	Allocated Loss Adjustment Expenses
BBA	IFRS 17	Building Block Approach
CRA	IFRS 17	Credit Risk Adjustment
CSM	IFRS 17	Contractual Service Margin
FCF	IFRS 17	Fulfilment Cashflows
GMM	IFRS 17	General Measurement Model
LC	IFRS 17	Loss Component
LIC	IFRS 17	Liability for Incurred Claims
LRC	IFRS 17	Liability for Remaining Coverage
OCI	Accounting	Other Comprehensive Income
OCT	IFRS 17	Onerous Contract Test
PAA	IFRS 17	Premium Allocation Approach
PIC	IFRS 17	Portfolio of Insurance Contracts
ULAE	Insurance	Unallocated Loss Adjustment Expenses
VFA	IFRS 17	Variable Fee Approach

Thank you! Obrigado!

Questions?

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