



P&C loss development triangles and reserves as of December 2021

Group Actuarial Department

2021 P&C Triangles

P&C loss development triangles and reserves as of December 2021

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- further instability affecting the global financial system and developments related thereto;
- further deterioration in global economic conditions;
- the cyclicity of the reinsurance industry;
- uncertainties in estimating reserves;
- uncertainties in estimating future claims for purposes of financial reporting, particularly with respect to large natural catastrophes, as significant uncertainties may be involved in estimating losses from such events and preliminary estimates may be subject to change as new information becomes available;
- the frequency, severity and development of insured claim events;
- acts of terrorism and acts of war;
- pandemic outbreaks
- extraordinary events affecting the Group's clients and other counterparties, such as bankruptcies, liquidations and other credit-related events;
- current, pending and future legislation and regulation affecting the Group or its ceding companies and the interpretation of legislation or regulations.

The P&C loss development triangles as of December 2021 is provided by SCOR for informational purposes only. SCOR is under no obligation to, and does not intend to, update or revise any of the information included in the excel workbook or referred to in this presentation, whether as a result of new information, future events or other developments, even when any such new information, events or developments have been reflected in any report or other document published by SCOR or any of its business units. Although the information in the excel workbook bears directly on estimating loss reserves, it is not the only basis used by SCOR to establish its reserves.

Covid-19 disclaimer

The full impact of the Covid-19 crisis on SCOR's business and results can still not be accurately assessed at this stage, given the uncertainty related both to the magnitude and duration of the Covid-19 pandemic and to the possible effects of future governmental actions and/or legal developments in this context. This uncertainty follows from the high difficulty in working on sound hypothesis on the impact of this crisis due to the lack of comparable events, the ongoing nature of the pandemic and its far-reaching impacts on world-wide economies, on the health of the population and on our customers and counterparties.

These hypotheses include, in particular:

- the duration of the pandemic, its impact on health on the short and long term, the availability and effect of the vaccines
- the response of government bodies world-wide (including executive, legislative and regulatory);
- the potential judicial actions or social influences;
- the coverage and interpretation of SCOR's contracts under these circumstances;
- the assessment of the net claim estimate and impact of claim mitigation actions.

Therefore:

- any assessments and resulting figures presented in this document will necessarily be rough estimates based on evolving analysis, and encompass a wide range of theoretical hypothesis, which are still highly evolutive;
- at this stage, none of these scenarios, assessments, impact analysis or figures can be considered as certain or definitive.

Contents

1. A robust governance

2. Triangles disclosure

3. SCOR portfolio

4. Appendices

A nighttime aerial view of a city, likely Dubai, featuring a dense cluster of skyscrapers on the left and a complex highway interchange with light trails from traffic in the center. The city extends into the distance with numerous smaller buildings and streetlights. The text '1. A robust governance' is overlaid in white on the central part of the image.

1. A robust governance

P&C loss development triangles and reserves as of December 2021

A robust Governance coupled with a prudent reserving philosophy

SCOR overall reserving philosophy can be summarized as follows:

01

A robust governance insuring independent opinion and free from influence environment

02

Top of the class actuarial methods coupled with an holistic “four axis approach”

03

Instant reactivity to indications of potential negative developments

04

Conservative opening ultimate loss ratios applied on more recent underwriting years where statistical data is scarce

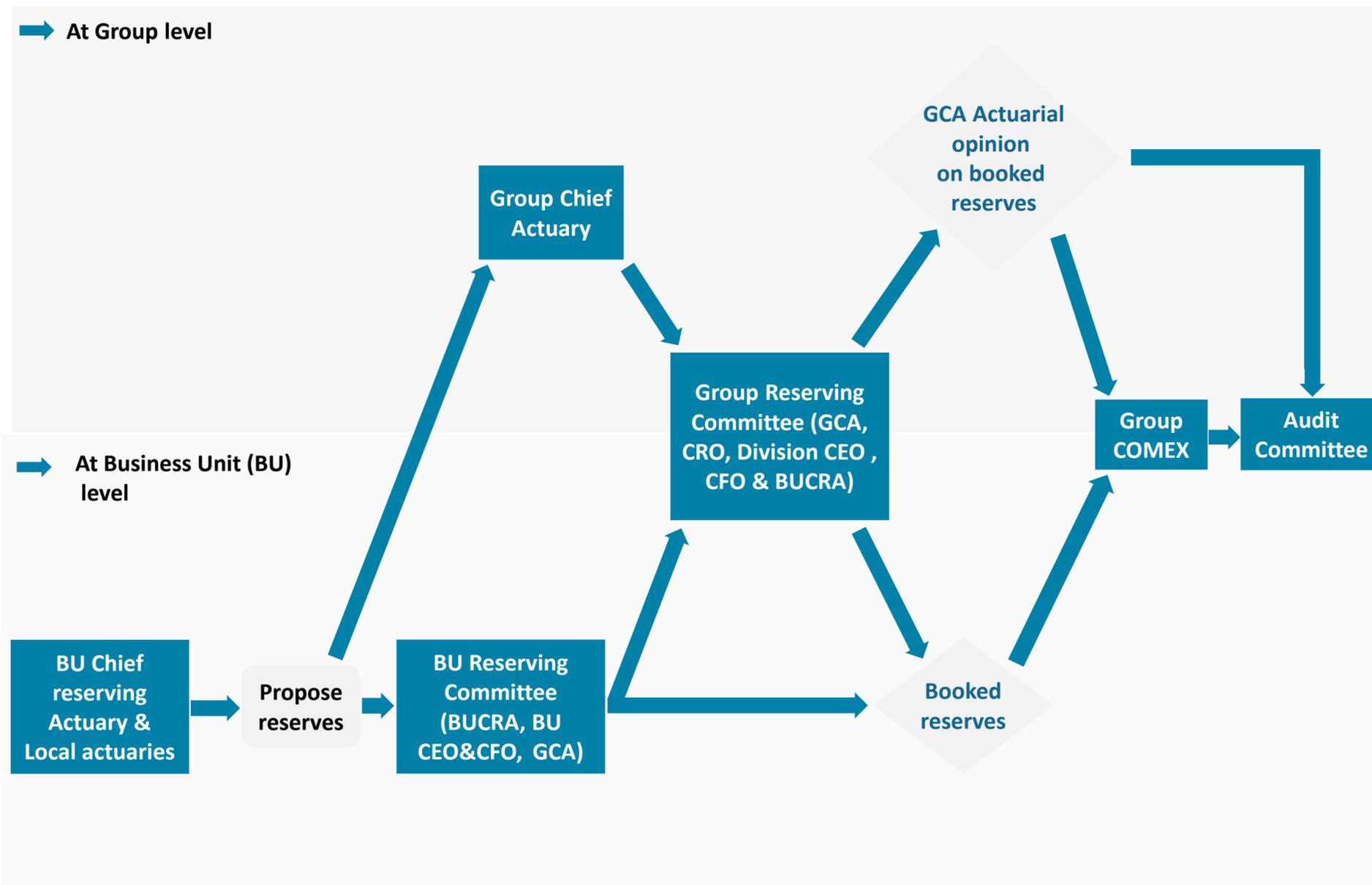
05

Hypothesis used in pricing systematically challenged and stress tests impact on pricing expected loss ratios taken into account

06

Extra time allowed to recognise positive run-offs, especially for mid and long tail classes of business

A strong governance with a quarterly process ensuring strong reserving control and independent opinion



GCA : Group Chief Actuary
BUCRA: BU Chief Reserving Actuary

1

As presented in the chart, an initial booked reserves position is proposed by the Business Unit (BU) based on Business Unit Chief Reserving Actuary's opinion. An opinion on IFRS point estimate is formed by the Group Chief Actuary based on Business Unit and Group Actuarial analyses.

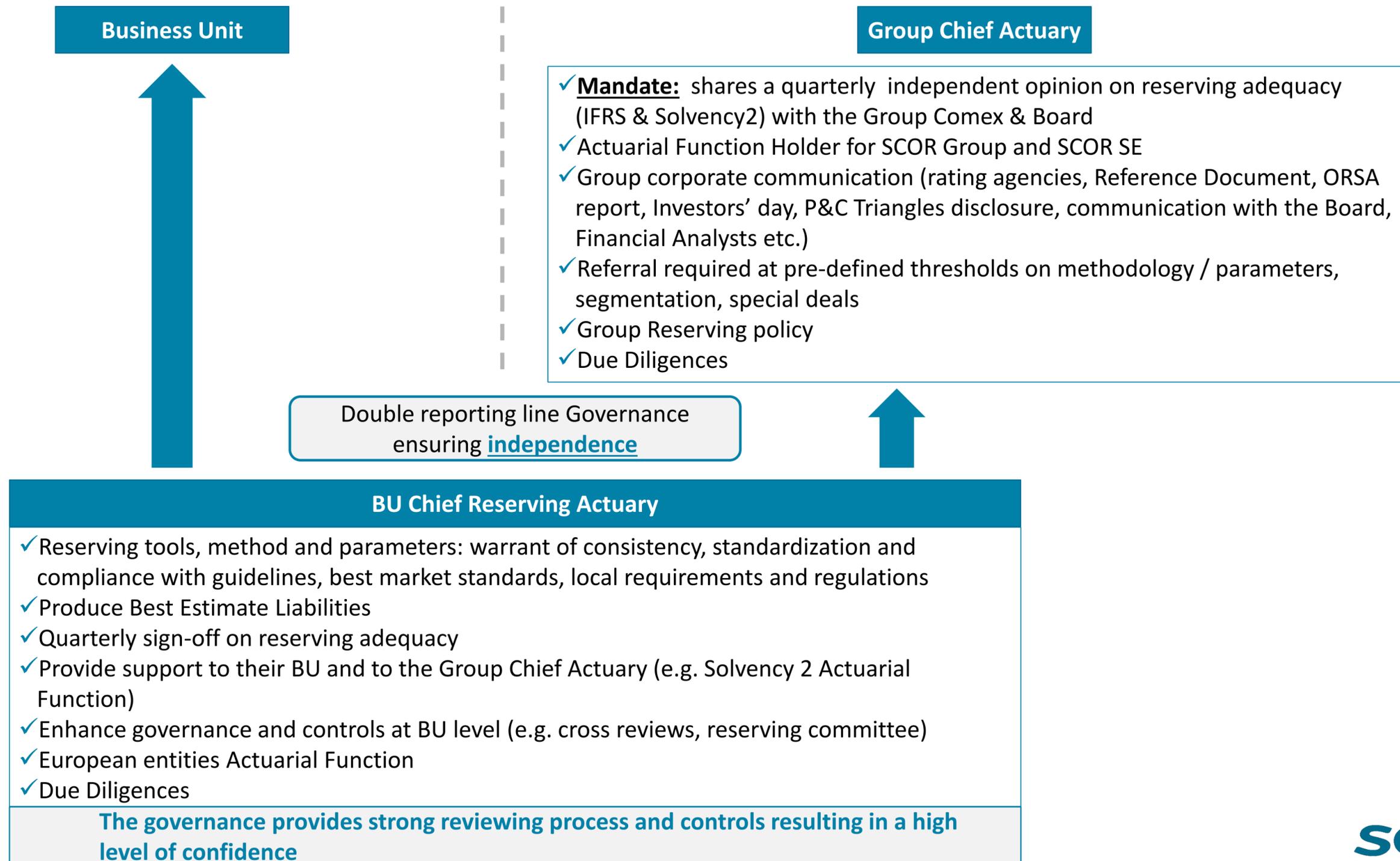
2

The final Group Chief Actuary view on the level of reserves is then presented to the Group Executive Committee who validates the booked reserves.

3

The Group Chief Actuary opinion on the reserving adequacy is then shared by the Group Chief Actuary with Board Audit Committee as detailed in the chart:

A strong governance in a free from influence environment



Top of the class Actuarial methods

Assessment of IBNR reserves and the variability of the overall reserves

- To assess IBNR reserves and the variability of the overall reserves, SCOR generally uses actuarial techniques which take into account quantitative loss experience data, together with qualitative factors, where appropriate.
- This exercise is performed on homogenous groups of contracts, called actuarial segments having similar development pattern and a required statistical mass.
- The reserves are also adjusted to reflect reinsurance treaty terms and conditions, and the variety of claims processing which may potentially affect SCOR's commitment over time.

Methods used by SCOR

SCOR uses among others:

- Deterministic methods (e.g. Chain Ladder, Bornhuetter-Ferguson, Average cost per claim or Loss ratio methods) for Best Estimate assessment
- Stochastic approaches (e.g. Mack model, Bootstrap) for reserves' volatility estimates
- Tailor made solutions like annuity projection by victim, generalized linear models, machine learning such as neural networks

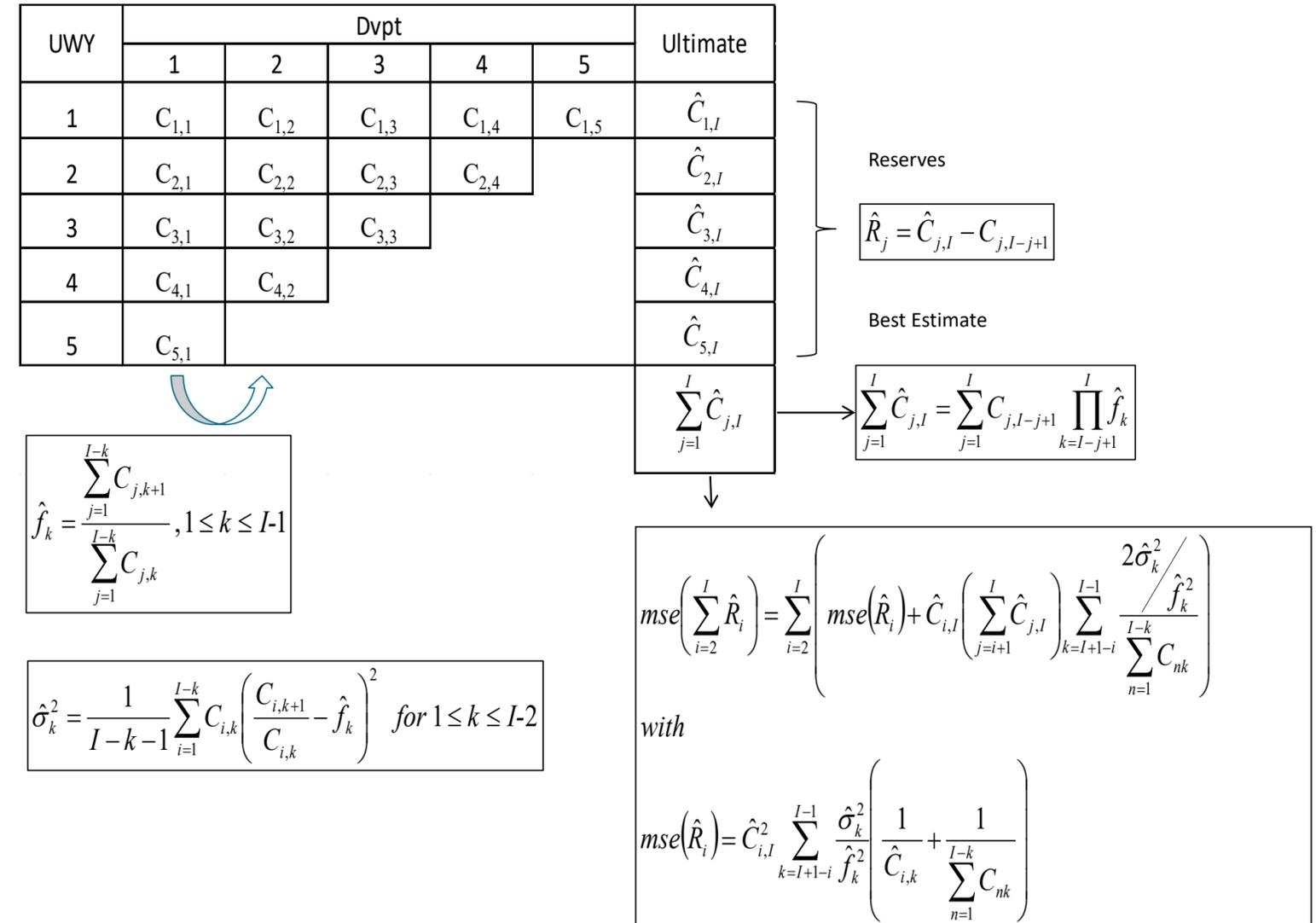
Top of the class Actuarial methods

Example of actuarial method Chain-Ladder

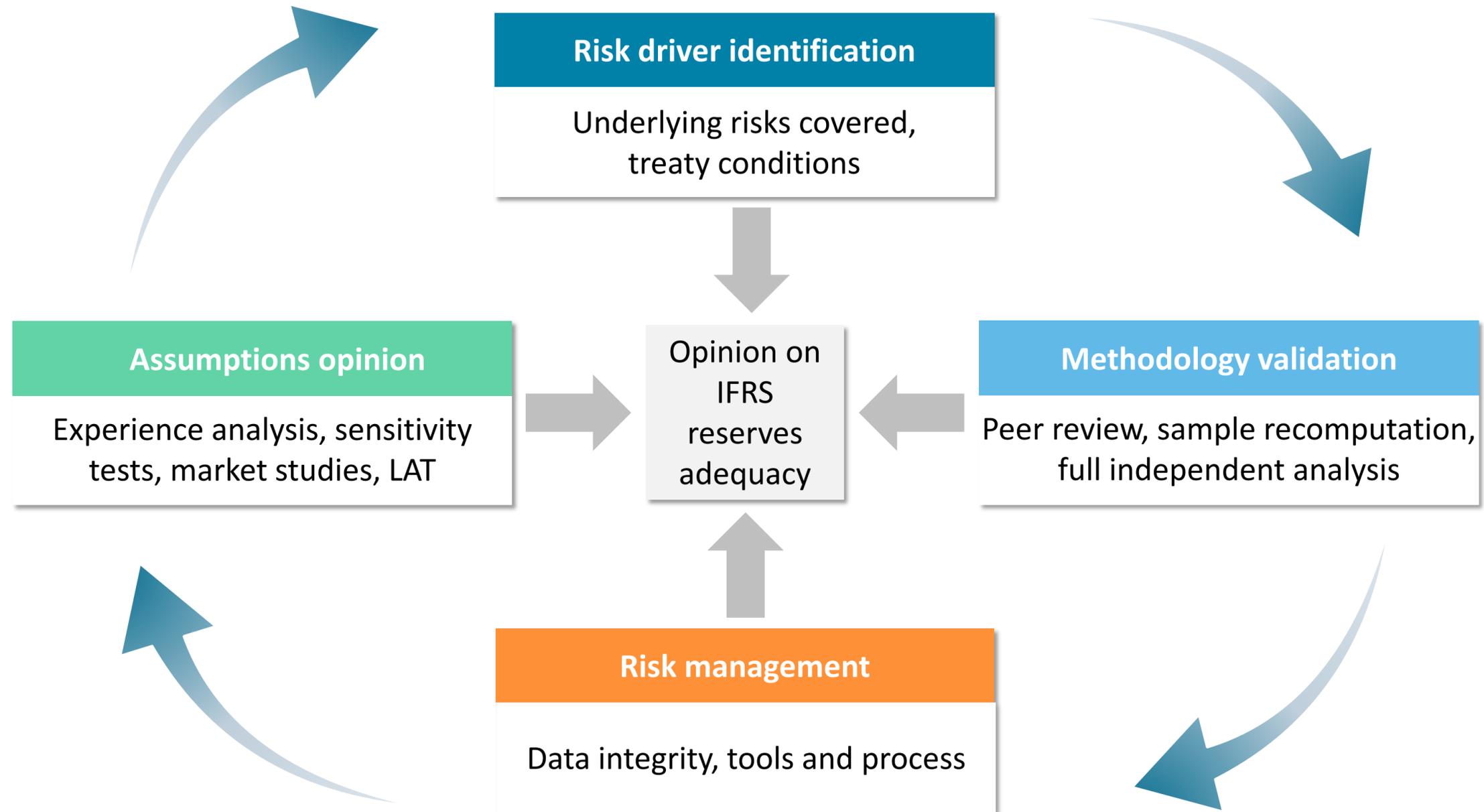
- Chain-Ladder is a deterministic method which consists in the analysis of the behavior of losses using historical data in order to estimate a development pattern
- The estimated pattern is applied to the latest diagonal of the triangle in order to project the ultimate loss

Example of actuarial method Mack model

- Mack is a stochastic model whose structure is based on the Chain-Ladder method
- It is distribution free and provides a measure of variability of the reserves



A holistic “four axis approach”



A woman in a blue and white athletic top and shorts is hiking on a dirt trail on a mountain ridge. The scene is bathed in the warm, golden light of a sunrise or sunset. In the background, a vast valley opens up, showing a city and a body of water under a hazy sky. The overall mood is serene and adventurous.

2. Triangles disclosure

Scope



In SCOR, the actuarial analysis axis is the actuarial segment which groups together homogeneous contracts based on a variety of criteria (proportional basis or not, underlying risks typology, geography...).

The eight reserving classes disclosed are aggregations of these actuarial segments.



These triangles and reserves disclosure covers circa 90% of gross P&C IFRS booked reserves for the disclosed UWYs (10 years for short tail and 15 years for long tail lines of business).



Triangles data are reconciled with financial statements which have been audited by the external auditors. Triangles are also reviewed in the framework of the agreed upon procedures exercise performed by external auditors.

Data which is not included in the triangles:

- Lloyd's portfolio as the RITC scheme (Reinsurance To Close – Lloyd's accounting scheme) does not allow displaying entire triangles
- Run-off portfolios are not disclosed as their claims development profile does not match the actual development of the ongoing portfolio
- Direct business segments (including MGA US) are also excluded from triangles as this is pure primary insurance
- Fronting contracts from a major French aviation insurer
- Proportional business in South America due to incomplete diagonals for older years following M&A
- Significant quota-shares in China because of their specificities (large sliding scales)

P&C loss development triangles and reserves as of December 2021

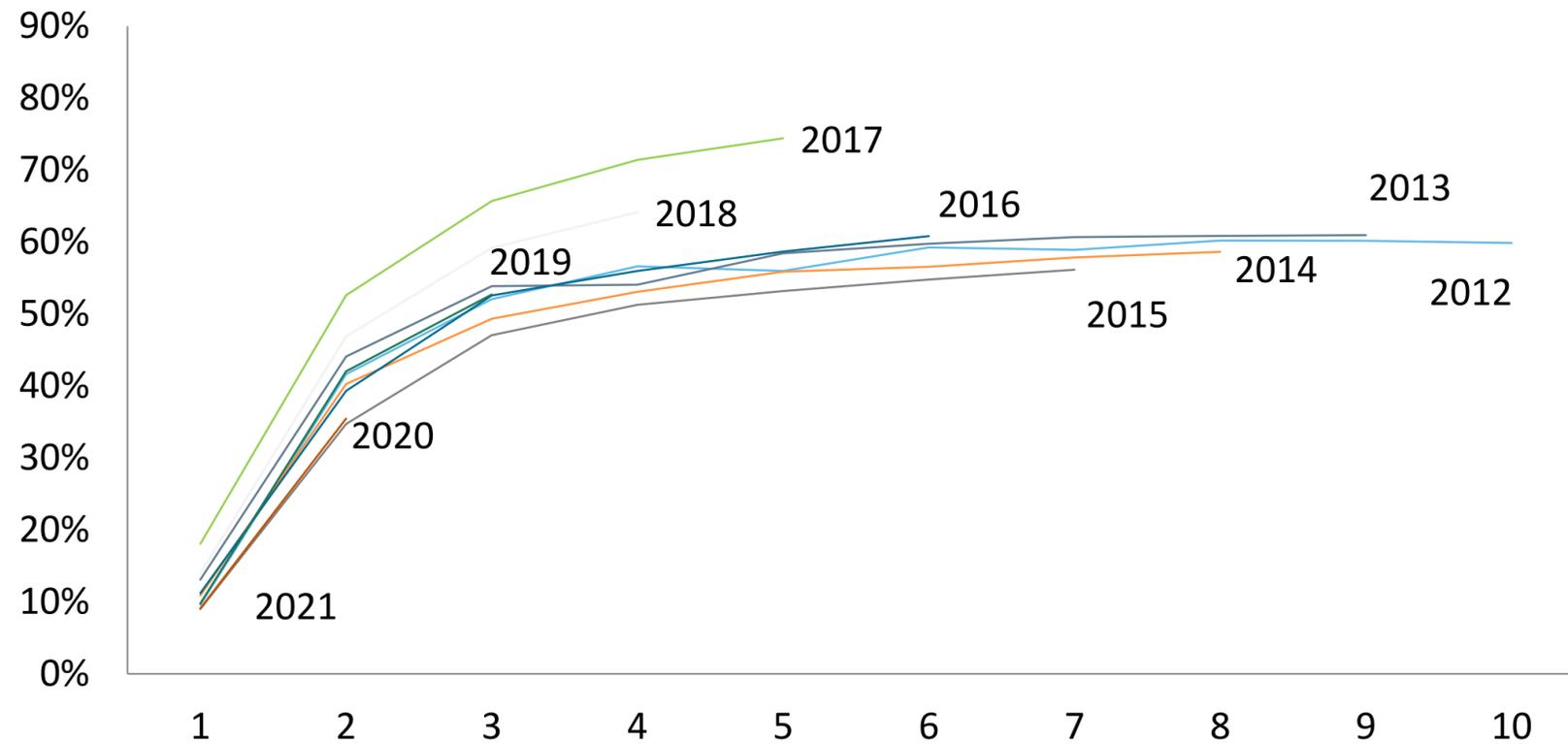
Total loss development triangle

Total triangle

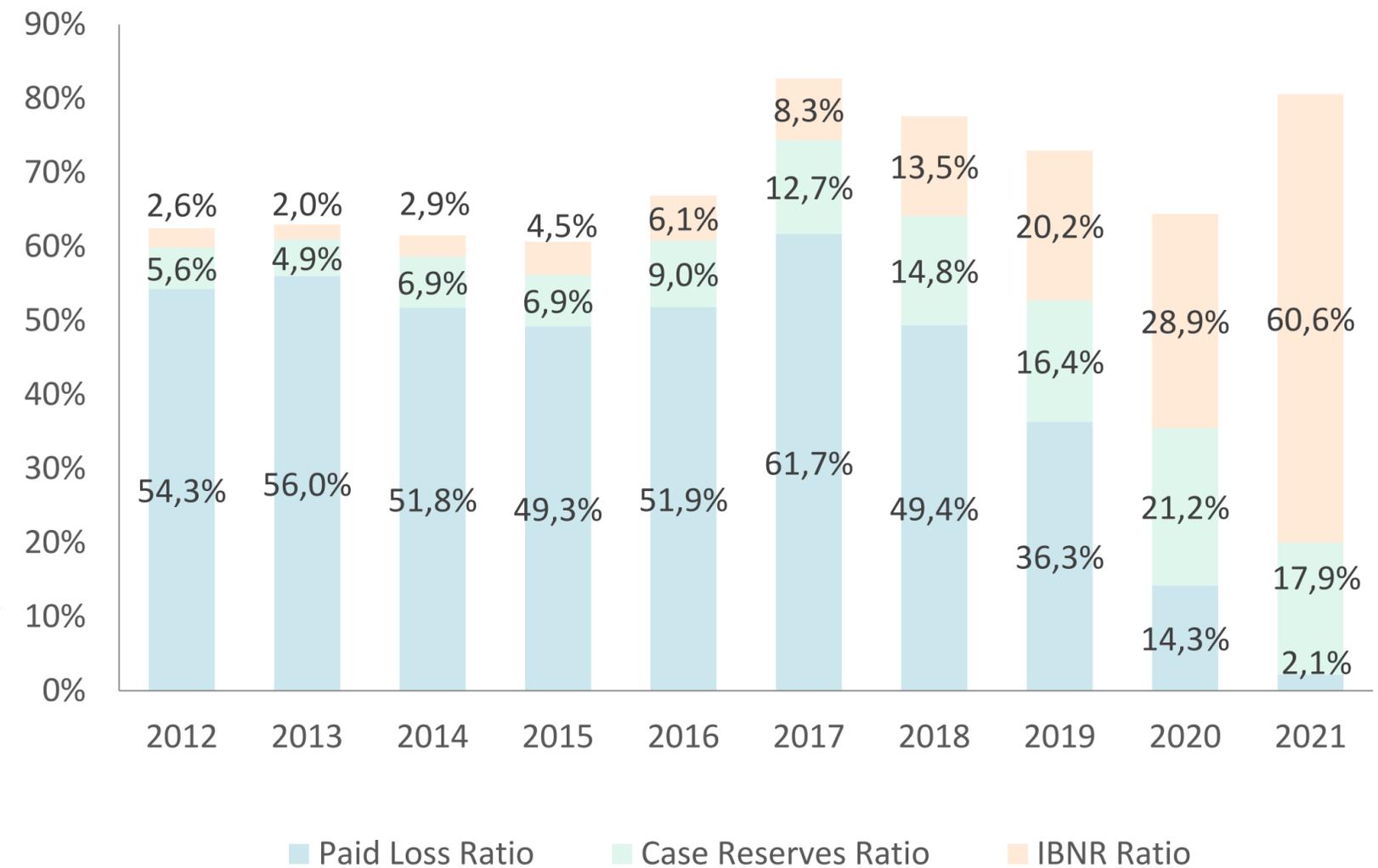
Under writing Year	Ultimate Premium (€m)	Development Year										Ultimate Loss Ratio	Ultimate Loss Ratio 2020 - as if 2021	Paid Loss Ratio	Case Reserves Ratio	IBNR Ratio
		1	2	3	4	5	6	7	8	9	10					
2012	3 521	9.6%	41.7%	52.1%	56.6%	56.0%	59.3%	58.9%	60.2%	60.2%	59.9%	62.5%	63.0%	54.3%	5.6%	2.6%
2013	3 434	13.1%	44.1%	53.9%	54.1%	58.4%	59.8%	60.7%	60.9%	61.0%		63.0%	63.5%	56.0%	4.9%	2.0%
2014	3 633	10.9%	40.3%	49.3%	53.1%	55.9%	56.6%	57.9%	58.6%			61.5%	61.8%	51.8%	6.9%	2.9%
2015	3 843	9.0%	34.7%	47.0%	51.3%	53.2%	54.8%	56.1%				60.7%	60.2%	49.3%	6.9%	4.5%
2016	4 034	11.2%	39.3%	52.6%	56.0%	58.7%	60.8%					66.9%	66.4%	51.9%	9.0%	6.1%
2017	4 229	18.1%	52.6%	65.7%	71.4%	74.4%						82.7%	82.6%	61.7%	12.7%	8.3%
2018	4 974	14.0%	46.9%	59.2%	64.1%							77.6%	77.0%	49.4%	14.8%	13.5%
2019	5 671	9.8%	42.1%	52.7%								73.0%	73.1%	36.3%	16.4%	20.2%
2020	5 838	9.1%	35.5%									64.4%	65.1%	14.3%	21.2%	28.9%
2021	6 242	20.0%										80.6%		2.1%	17.9%	60.6%

Total loss development triangle

Incurred loss development in loss ratios



Paid loss, case reserves and IBNR ratios



A reserving approach leading to a high confidence in reserving adequacy

SCOR's strong reserving process reveals high level of confidence

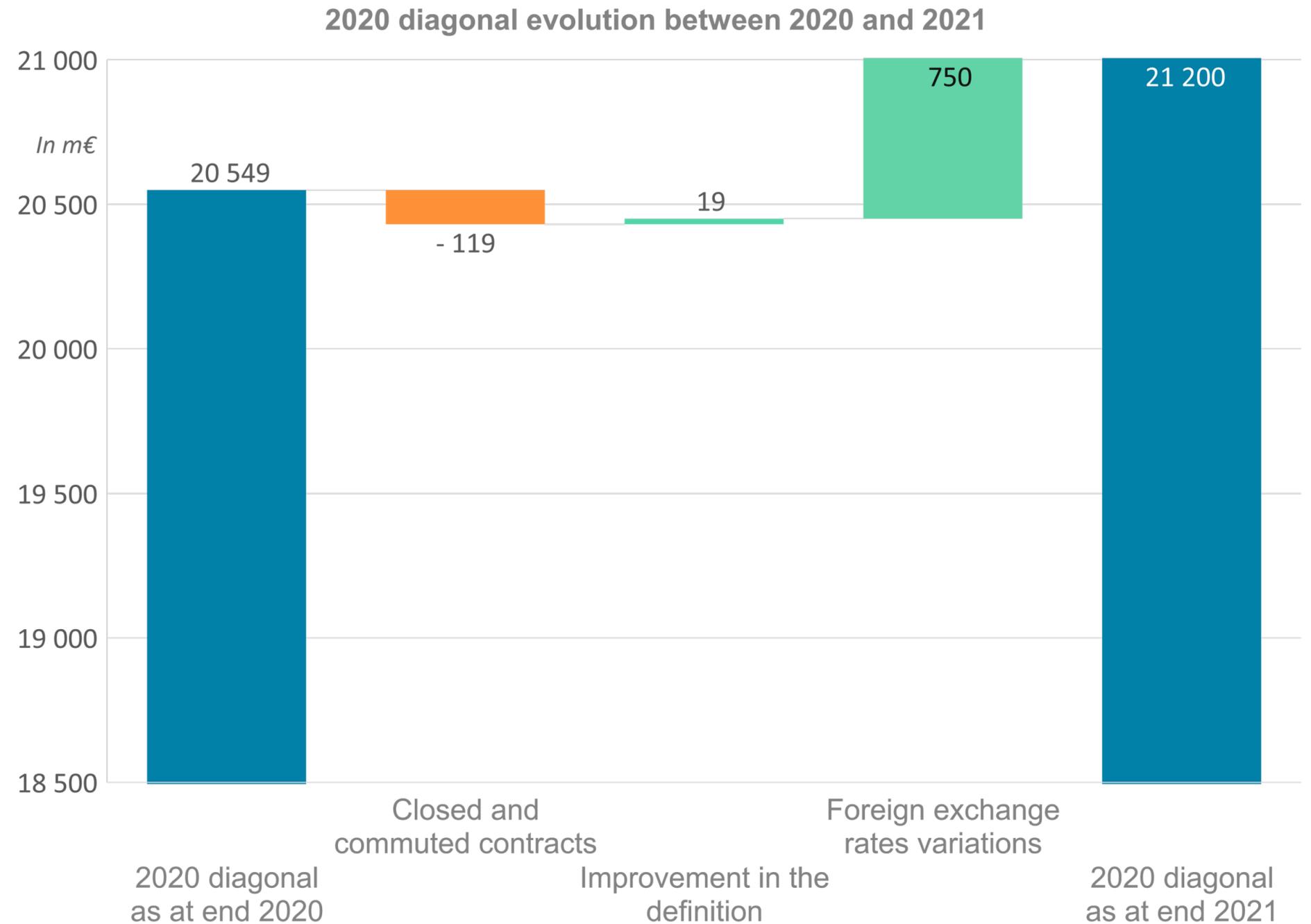
- The table reads as:
 - 1 Ultimate Loss Ratios (ULRs) 2020 on 2021 perimeter and Exchange rates
 - 2 2021 ULRs on 2021 perimeter
- Globally, ULRs develop positively from 2020 to 2021 calendar year on recent and old UWYs but slightly increased for UWYs 2015 to 2018 mainly coming from Casualty business.
- The ULR for UWY 2017, 2018, 2019 & 2021 are higher than historical average due to Cat losses.

Underwriting Year	Ultimate Premium € billion	1 Ultimate Loss Ratio 2020 as if 2021	2 Ultimate Loss Ratio 2021	Difference
2012	3.5	63.0%	62.5%	-0.5%
2013	3.4	63.5%	63.0%	-0.5%
2014	3.6	61.8%	61.5%	-0.3%
2015	3.8	60.2%	60.7%	0.4%
2016	4.0	66.4%	66.9%	0.5%
2017	4.2	82.6%	82.7%	0.1%
2018	5.0	77.0%	77.6%	0.6%
2019	5.7	73.1%	73.0%	-0.1%
2020	5.8	65.1%	64.4%	-0.7%
2021	6.2		80.6%	

Reconciliation to prior triangles

Reconciliation between 2020 diagonal as at end of 2020 and 2021

The following graph provides reconciliation between the amount of incurred claims disclosed at year-end 2020 and year-end 2021 taking into account all available information at reserving class level. The main changes come from the foreign exchange rates variations (increase of EUR 750m).



A photograph of a forest during autumn. The ground is covered in fallen orange and brown leaves. Several tall, thin trees stand in the background, and a few smaller evergreen trees are in the foreground. Sunlight is streaming through the trees, creating a warm, golden glow. The text "3. SCOR Portfolio" is overlaid in the center in white.

3. SCOR Portfolio

Types of reinsurance

52%

Treaty proportional ⁽¹⁾

The reinsurer, in return for a predetermined share of the insurance premium charged by the ceding company, indemnifies the ceding company against the same predetermined share of the losses of the ceding company under the covered insurance contracts

(1) Proportional or quota share reinsurance

32%

Treaty non-proportional ⁽²⁾

The reinsurer indemnifies the ceding company against all or a specified portion of losses, on a claim by claim basis or with respect to a specific event or a line of business, in excess of a specified amount, known as the ceding company's retention or reinsurer's attachment point, and up to a negotiated reinsurance treaty limit

(2) Non-proportional, or excess of loss or stop loss reinsurance

16%

Facultative

The ceding company cedes and the reinsurer assumes all or part of the risks covered by a single specific insurance policy

Facultative reinsurance is negotiated separately for each insurance contract that is reinsured

Facultative reinsurance normally is purchased by ceding companies for individual risks not covered by their reinsurance treaties, for amounts in excess of the monetary limits of their reinsurance treaties or for unusual risks

Lines of business description

Engineering

It provides coverage for the risks inherent in the construction projects (from inception to completion). It covers all types of civil construction risks, plant and machinery breakdown risks as well as delay in start up coverage

Property

The risks covered are classically fire, agriculture, machinery breakdown, and theft for private individuals, commercial or industrial risks along with CAT exposure

Credit and surety

This class mainly contains proportional business. The surety business is mainly performance bonds. The rest of the portfolio is credit insurance

Proportional casualty

This class contains professional and personal liabilities, Directors and Officers, and Workers' Compensation (mainly in run-off) with main exposure in the US (regional and national portfolios) and in Europe. This class contains IDI business (Inherent Defect Insurance) as well in France and Spain. IDI provides coverage for inherent defects that are detected during a period starting at the completion of a construction/installation and expiring up to 10 years after.

Non-proportional casualty

This class contains professional indemnity, E&O, public and product damages, Cyber and EIL on facultative and treaty basis (UK and US mainly), IDI (France and Spain mainly), medical malpractice (mainly US and France) and professional and manufacturing liabilities (heavy industry, food producers). Workers compensation business is also included (mainly in the US)

Marine, transport, aviation

This class is split between aviation and marine risks. Aviation risks include products liability, hull and liabilities for airlines, general aviation and satellite risks. Marine and transport are basically insurance of hull and liabilities for merchant ships along with offshore coverage

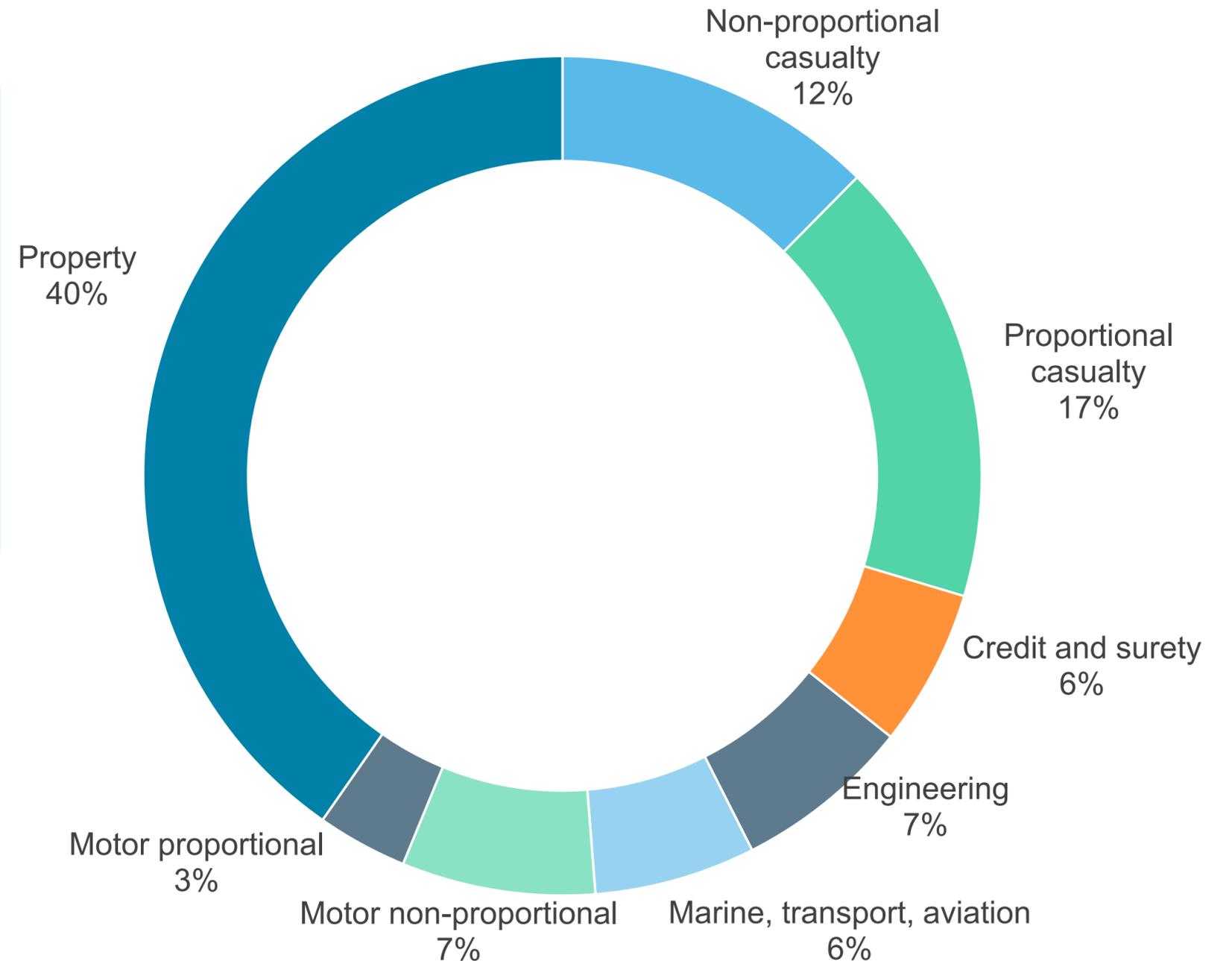
Lines of business description

Motor non-proportional

- The main risk covered is auto liability
- For the displayed period, the most important part of this class is motor third party liability on UK market. The second largest part is motor third party liability on French market, followed by large European markets (Germany, Italy, Northern Europe)
- Both premium and reserves are mainly related to bodily injury covers
- From a reinsurance point of view, this class is expected to have a longer development length than the motor proportional class, as only claims that overcome the threshold (as defined in the reinsurance contract) are concerned

Motor proportional

- This class contains property damage covers as well as bodily injury covers
- The reserves mainly relate to US, Israeli and large European markets.
- Compared to the motor non-proportional class, this motor proportional class has a shorter development length
- This is explained by the more important weight of damages to property (short term risks) and the nature itself of this class (the claims reporting to the reinsurer is faster for proportional businesses)



2012 – 2021 Reserves split by line of business

A person is seen from behind, holding a black umbrella on a rainy city street at night. The umbrella is covered in raindrops. The background is filled with blurred city lights in various colors (yellow, orange, blue, green) and a car with its taillights on. The overall atmosphere is moody and atmospheric. The text "4. Appendices" is overlaid in the center in a white, bold, sans-serif font.

4. Appendices

P&C loss development triangles and reserves as of December 2021

Appendix 1: Large losses

Underwriting year	Paid claims	Incurred claims	Main events by UWY
Worldwide Property fire all natures including Nat Cat			
2012	92,713	93,464	Hurricane Sandy
2013	318,392	319,617	Central European Flood, Fire in a China Semiconductor Company, Hailstorm Andreas, Japan Snowstorm, Saint-Jude Storm
2014	90,216	90,494	European hail (Ela)
2016	122,685	124,613	Fort McMurray Wildfire, Maria, Hurricane Matthew
2017	727,314	793,774	Abu Dhabi Nat Oil Company, California Wildfire, Harvey, Irma, Maria, Refinery Explosion in Wisconsin
2018	513,020	569,992	Camp California Wildfire, Hurricane Michael, Typhoon Jebi, Typhoon Trami, Refinery Explosion in Germany
2019	509,331	612,639	Typhoon Hagibis, Typhoon Faxai, Hurricane Dorian, Petrochemical plant explosion in Texas
2020	119,012	489,893	Midwest Derecho CAT 2046, Coronavirus / Covid-19, Hurricane Laura - Cat 2050, US Severe Winter Storm 2021
2021	144,173	777,179	Hurricane Ida, European Flooding - July 2021, South Africa Riots 2021, European Convective Storms
Worldwide marine, transport , aviation all natures			
2014	68,185	69,838	BW offshore explosion, Mexican Petrol Company - Abkatun Platform Fire
2015	31,392	31,521	Failure of turret
2018	30,151	48,455	Falcon Eye 1 launch failure, Ethiopian Boeing B737 Max 8
Worldwide Credit & Surety all natures			
2012	23,977	23,977	Seadrill
2017	16,186	16,725	Bankruptcy of a Chinese mobile manufacturer
2018	15,883	15,883	Bondfield Construction Company
Worldwide Casualty non proportional and facultative - including PA, WC, IDI and Medical Malpractice			
2008	247	17,895	Talc claims
2010	39,365	39,365	DuPont (Imprelis Herbicide), Residences damaged by pyrrhotite (Canada)
2012	22,092	22,092	Bayou Corne sinkhole
Worldwide Engineering all natures			
2014	4,065	23,148	Kuwait Flood
2018	13,140	18,923	South Alex Fire

Appendix 2: Positive (negative) development vs Reserve release (reinforcement)



1

Positive (negative) development

Any movement of the reserves which are fully reflecting the incurred's ones and are not impacting the margin are identified as positive or negative development.

2

Reserve release (reinforcement)

Any movement of the reserves which are not fully reflecting the incurred's ones and therefore are impacting the margin are identified as reserves' release or reinforcement.

Appendix 3: External auditors (KPMG and Mazars) statement

On our request, procedures have been performed in 2022 by SCOR external auditors which has led to a “Statutory auditors’ report of the factual findings of the agreed-upon procedures relating to the loss development triangles and reserves for the year ended December 31, 2021”. The objective was to provide SCOR with their findings regarding the quality and the completeness of the loss development triangles disclosed. These procedures as defined by us covered quality and completeness of data disclosed, correct consolidation of the triangles and controls of process leading to the production of the Ultimate Loss Ratios as well as the “As-if” figures.

As part of the procedure, SCOR external auditors have found that the disclosed triangles reconcile with the underlying data; the triangles have been consolidated with no exception found, the process leading to the production of the Ultimate Loss Ratios as well as the “As-if” figures did not raise any exception and the document accompanying the triangles is a fair reflection of the way in which the triangles are actually built.



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