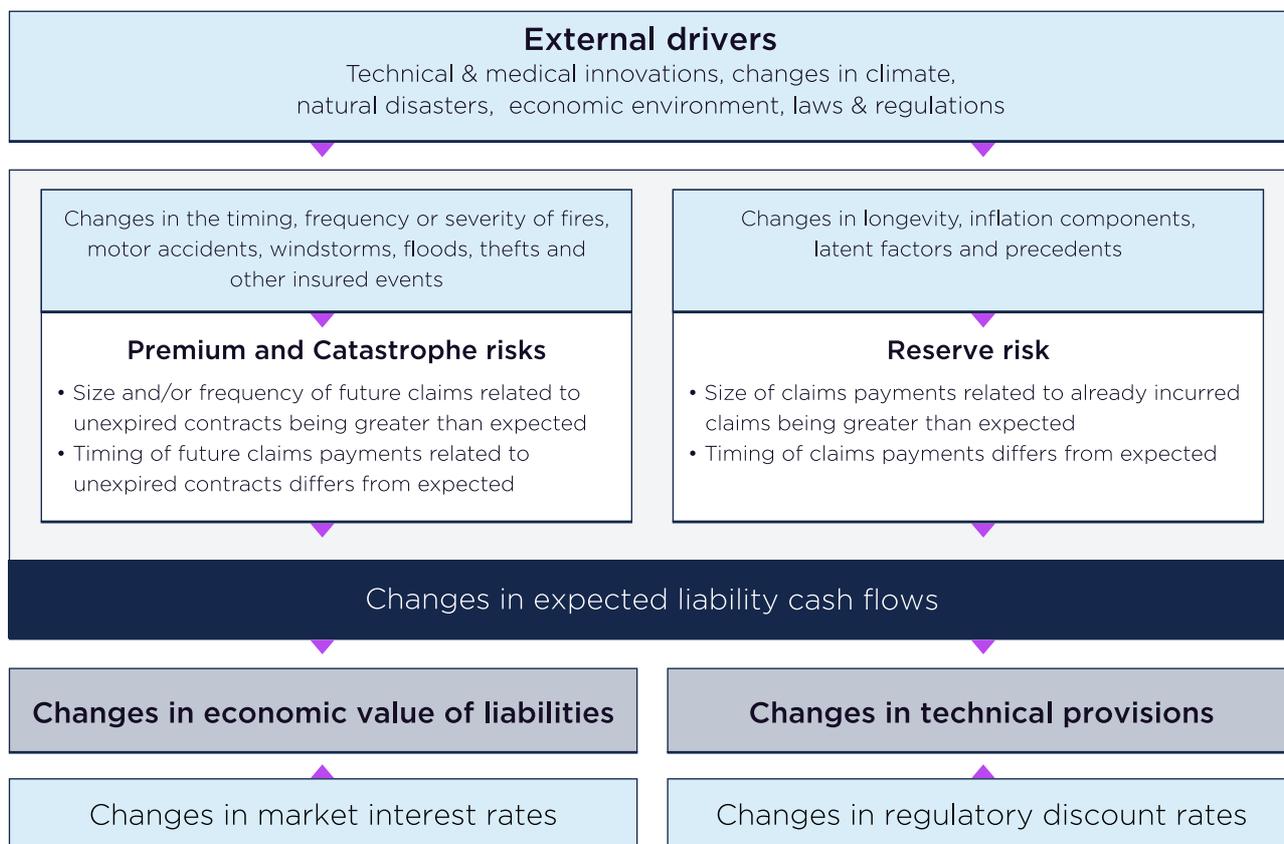


# Non-life Insurance Underwriting Risks

Underwriting risk is the risk of loss, or of adverse changes in the value of insurance liabilities, due to inadequate pricing and provisioning assumptions. Non-life insurance underwriting risks are often divided

into premium and catastrophe risks and reserve risk in order to separate the risks related to future claims of current insurance contracts and already incurred claims.

## Non-life Insurance Underwriting Risks



## Premium Risk and Catastrophe Risk

Premium risk relates to future claims resulting from expected insured events which have not occurred by the balance sheet date. The frequency, severity and timing of insured events and hence future claims may differ from those expected. As a result the claims cost for future claims exceeds the expected level and there is a loss or adverse changes in the value of insurance liabilities.

Catastrophe risk can be seen as an extreme case of Premium risk. It is the risk of low frequency, high severity extreme or exceptional events, such as natural catastrophes whose pricing and setting of provisioning assumptions include significant uncertainty. These events may lead to significant deviations in actual claims from the total expected claims resulting into a loss or adverse changes in the value of insurance liabilities.

# Premium Risk and Catastrophe Risk Management and Control

The Underwriting Committee (UWC) shall give its opinion on and propose actions in respect of various issues related to underwriting risk. The committee shall also consider and propose changes to the Underwriting Policy (UW Policy) that is the principal document for underwriting, and sets general principles, restrictions and directions for the underwriting activities. The Board of Directors of If P&C approves the UW Policy at least once a year. The Chairman of UWC is responsible for the reporting of policy deviations and other issues dealt with by the committee.

The UW Policy is supplemented with guidelines outlining in greater detail how to conduct underwriting within each business area. These guidelines cover areas such as tariff and rating models for pricing, guidelines in respect of standard conditions and manuscript wordings, as well as authorities and limits. In accordance with the Instructions for the Underwriting Committee, the Committee is responsible for monitoring compliance with the established underwriting principles.

The business areas manage the underwriting risk on a day-to-day basis. A crucial factor affecting the profitability and risk of non-life insurance operations is the ability to accurately estimate future claims and expenses and thereby correctly price insurance contracts. The premiums within the Private business area and the premiums for smaller risks within the Commercial business area are set through tariffs. The underwriting of risks in the Industrial business area and of more complex risks within Commercial is based to a greater extent on principles and individual underwriting than on strict tariffs. In general, pricing is based on statistical analyses of historical claims data and assessments of the future development of claims frequency and claims inflation.

The insurance portfolio is well diversified, given the fact that If P&C has a large customer base and the business is underwritten in different geographical areas and across several lines of business. The degree of diversification is shown in the figure Breakdown of Gross Written Premiums by Business Area, Country and Line of Business, If P&C, 2014.

## Breakdown of Gross Written Premiums by Business Area

If P&C, 2014, total EURm 4,634



## Breakdown of Gross Written Premiums by Country

If P&C, 2014, total EURm 4,634



## Breakdown of Gross Written Premiums by Line of Business

If P&C, 2014, total EURm 4,634



The item Other (including group eliminations) is not shown in the breakdowns above but it is included in total gross written premiums. There are minor differences between the figures reported by Sampo Group and If P&C due to differences in foreign exchange rates used in consolidation.

Despite the diversified portfolio, risk concentrations and thereby severe claims may arise through, for example, exposures to natural catastrophes such as storms and floods. The geographical areas most exposed to such events are Denmark, Norway and Sweden. In addition, single large claims could have an impact on the insurance operations' result. The economic impact of natural disasters and single large claims is managed using reinsurance and through diversification.

If P&C's Reinsurance Policy stipulates guidelines for the purchase of reinsurance. The need and optimal choice of reinsurance is analyzed based on statistical models for single large claims, while If P&C cooperates with external advisors for the evaluation of the exposure to natural catastrophes and the probability of occurrence of catastrophe losses. The analysis relies on If P&C's Internal Model, including catastrophe models in which catastrophes are simulated based on

historical meteorological data, supplemented by statistical models as well as internal and external expert opinions. Different reinsurance structures are evaluated by looking at the expected costs versus the benefits of reinsurance, their impact on result volatility and decreased capital requirement.

A group wide reinsurance program has been in place in If P&C since 2003. In 2014, retention levels were between SEK 100 million (approximately EUR 10.6 million) and SEK 250 million (approximately EUR 26.6 million) per risk and SEK 250 million (approximately EUR 26.6 million) per event.

Sensitivity of underwriting result and hence underwriting risk is presented by changes in certain key figures in the table Sensitivity Test of Underwriting Result, If P&C, 31 December 2014 and 31 December 2013.

## Sensitivity Test of Underwriting Result

If P&C, 31 December 2014 and 31 December 2013

Key figure	Current level (2014)	Change in current level	Effect on pretax profit, EURm	
			2014	2013
Combined ratio, business area Private	87.4%	+/- 1 percentage point	+/- 26	+/- 26
Combined ratio, business area Commercial	88.6%	+/- 1 percentage point	+/- 13	+/- 13
Combined ratio, business area Industrial	89.0%	+/- 1 percentage point	+/- 5	+/- 5
Combined ratio, business area Baltics	86.8%	+/- 1 percentage point	+/- 1	+/- 1
Net premiums earned	4,457	+/- 1 per cent	+/- 45	+/- 45
Net claims incurred	3,162	+/- 1 per cent	+/- 29	+/- 32
Ceded written premiums	170	+/- 10 per cent	+/- 17	+/- 21

## Reserve Risk

Reserve risk relates to incurred claims, resulting from insured events which have occurred at or prior to the balance sheet date. The final amount, frequency and timing of claims payments may differ from those originally expected. As a result technical provisions are not sufficient to cover the cost for already incurred claims and there is a loss or adverse changes in the value of insurance liabilities.

In financial accounting the technical provisions includes, in addition to the above described provisions for claims outstanding, the provisions for unearned premiums. The technical provisions for unearned premiums is intended to cover anticipated claims costs and operating expenses during the remaining term of insurance contracts in force.

Reserve risk includes revision risk, which is defined as the risk of loss, or of adverse change in the value of

insurance and reinsurance liabilities, resulting from fluctuations in the level, trend, or volatility of revision rates applied to annuities, due to changes in the legal environment or in the state of health of the person insured.

Technical provisions and economic value of insurance liabilities always include a degree of uncertainty as they are based on estimates of the size, timing and the frequency of future claim payments. The uncertainty is normally greater for new portfolios for which complete run-off statistics are not yet available, and for portfolios including claims that take a long time to settle. Workers' Compensation (WC), Motor Third Party Liability (MTPL), Personal Accident and Liability insurance, are products with the latter characteristics.

## Reserve Risk Management and Control

The Board of Directors of If P&C decides on the guidelines governing the calculation of technical provisions. If P&C's Chief Actuary is responsible for developing and presenting guidelines on how the technical provisions are to be calculated and for assessing whether the level of the total provisions is sufficient. At group level the Chief Actuary issues a quarterly report on the adequacy of technical provisions, which is submitted to the Boards of Directors, CEO, CFO and the ORSAC of If P&C.

The Actuarial Committee (AC) is a preparatory and advisory body for If P&C's Chief Actuary. The

committee shall secure a comprehensive view over reserve risk, discuss and give recommendations on policies and guidelines for calculation of technical provisions, as well as consider and propose changes to the Risk Data Policy.

The actuaries continuously monitor the level of provisions to ensure that they comply with established guidelines. The actuaries also develop methods and systems to support these processes.

The actuarial estimates are based on existing exposures and historical claims data that are available

at the balance sheet date. Factors that are monitored include loss development trends, the level of unpaid claims, changes in legislation, case law and economic conditions. When setting provisions, the Chain Ladder and Bornhuetter-Fergusson methods are generally used, combined with projections of the number of claims and the average claim costs.

The anticipated inflation trend is taken into account when calculating all provisions and is of the utmost importance for claims settled over a long period of time, such as Motor Third Party Liability (MTPL) and Workers' Compensation (WC). The anticipated inflation is based on external assessments of the inflation trend in various areas, such as the consumer

price index and payroll index, combined with If P&C's own estimation of costs for various types of claims. For lines of business such as MTPL and WC, legislation differs significantly between countries. Some of the Finnish, Swedish and Danish technical provisions for these lines include annuities that are sensitive to changes in mortality assumptions and discount rates. The proportion of technical provisions that are related to MTPL and WC was 68 per cent.

Technical provisions and the economic durations broken down by line of business and major geographical area is shown in the table Technical Provisions by Line of Business and Major Geographical Area, If P&C, 31 December 2014.

## Technical Provisions by Line of Business and Major Geographical Area

If P&C, 31 December 2014

Total	Sweden		Norway		Finland		Denmark		Total	
	EURm	Duration	EURm	Duration	EURm	Duration	EURm	Duration	EURm	Duration
Motor other and MTPL	2,514	7.3	656	1.9	940	10.9	143	1.5	4,253	7.1
Workers' compensation	0	-	328	5.2	1,135	11.5	251	6.8	1,715	9.8
Liability	282	2.8	152	2.8	128	2.8	63	2.0	625	2.7
Accident	264	4.6	338	2.4	163	3.9	82	1.2	847	3.3
Property	426	1.1	498	0.9	204	1.0	103	0.7	1,231	1.0
Marine, aviation, transport	26	1.2	46	0.7	8	0.7	15	0.8	95	0.8
<b>Total</b>	<b>3,513</b>	<b>5.8</b>	<b>2,018</b>	<b>2.3</b>	<b>2,579</b>	<b>9.5</b>	<b>657</b>	<b>3.4</b>	<b>8,767</b>	<b>5.9</b>

The sensitivity of If P&C's technical provisions to an increase in inflation, an increase in life expectancy and

a decrease in the discount rate is presented in the table Sensitivities of Technical Provisions, If P&C, 2014.

## Sensitivities of Technical Provisions

If P&C, 2014

Technical provision item	Risk factor	Change in risk parameter	Country	Effect EURm
Nominal provisions	Inflation increase	Increase by 1%-point	Sweden	194.5
			Denmark	9.5
			Norway	51.6
			Finland	31.3
Annuities and estimated share of claims provisions to future annuities	Decrease in mortality	Life expectancy increase by 1 year	Sweden	31.5
			Denmark	1.7
			Finland	53.7
Discounted provisions (annuities and part of Finnish IBNR)	Decrease in discount rate	Decrease by 1%-point	Sweden	63.8
			Denmark	11.4
			Finland	248.3

From 2014 onwards the estimated share of claims provision to future annuities are included in the life expectancy increase sensitivity.

If P&C's technical provisions are further analyzed by claims years. The outputs of this analysis are illustrated both before and after reinsurance in the

claims cost trend tables. These are disclosed in the [Note 27](#) to the Financial Statements.