SAMPO GROUP

RISK MANAGEMENT 2017

RISK MANAGEMENT

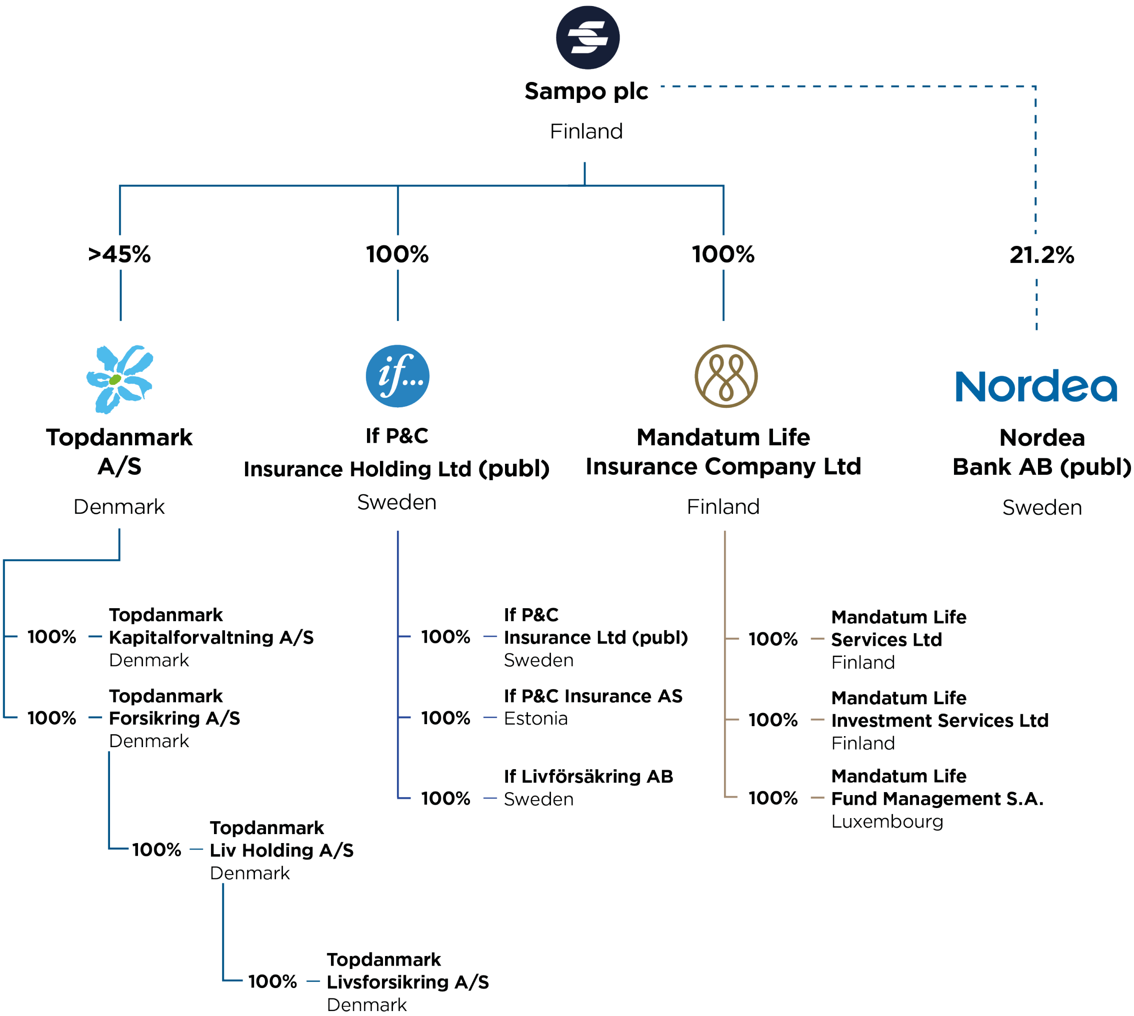
Sampo Group's Structure and Business Model

Sampo Group ("Group") is engaged in non-life insurance, life insurance and banking mainly in Nordics.

Non-life insurance and life insurance activities are conducted by the subsidiaries If P&C Insurance Holding Ltd (publ) ("If P&C"), Mandatum Life Insurance Company Ltd ("Mandatum Life") and Topdanmark A/S ("Topdanmark"). First two are wholly owned by the Group's parent company, Sampo plc ("parent company" or "Sampo"), which is a listed holding company and has no insurance or banking activities of its own. In Topdanmark Sampo has a 46.7 per cent holding of shares and 48.9 per cent of votes.

In addition to the insurance subsidiaries, as at 31 December 2017 the Group's parent company held an equity stake of 21.2 per cent in Nordea Bank AB (publ) ("Nordea") through which Sampo Group is engaged in banking business. The legal structure of Sampo Group including major operative companies of subsidiaries is shown below.

Sampo Group Legal Structure



Sampo as a holding company manages its subsidiaries and associated companies independently of each other meaning that the legal sub-groups Mandatum Life, If P&C, Topdanmark and the associated company Nordea conduct their businesses independently from each other. The independent sub-groups have their own infrastructures and management as well as operative processes in place. In instances where the subsidiaries and the associated companies cooperate in some business areas, cooperation is conducted similarly as with any third-party.

The major management tool is the work in the companies' Boards of Directors. The Boards of If P&C and Mandatum Life are manned by Sampo plc personnel. In regards to wholly owned subsidiaries, Sampo gives more exact guidance on how activities should be organized in terms of group-wide principles and there is a frequent dialogue between Sampo and subsidiaries in major operative issues. In addition, Sampo is monitoring performance, risks and capitalisation at detailed levels.

In Topdanmark, the Chairman and two other board members are Sampo Group employees and they constitute three of the total six board members elected by the annual general meeting. Topdanmarks's Board of Directors and management share Sampo's view on risk definitions and principles of how to run business activities on an overall level, but have not adopted Sampo's group-wide policies as such. The dialogue between Sampo and Topdanmark as well as the Risk Management report focus on performance, risk and capitalization reporting and is not as detailed as between Sampo and its wholly-owned subsidiaries.

Nordea is an associated company and not controlled by Sampo. Because of this its risk management is not covered in Sampo Group's Annual Report. Nordea has however a material effect on the Group's profits, risks and capital needs. Hence, Nordea is carefully analysed by Sampo as separate business and as a component of Sampo's portfolio of Nordic financial companies.

As described above Sampo Group's legal structure and business model are both straightforward and simple. In addition there are only a limited amount of intragroup exposures, of which the most material are as follows: (i) Sampo's holdings of hybrid capital and subordinated loan instruments issued by If P&C, Mandatum Life, Topdanmark and Nordea, (ii) internal dividends and (iii) service charges. Service charges are related to intragroup outsourcing agreements. If P&C and Mandatum Life have outsourced part of their investment management processes to Sampo. Sampo has outsourced its IT platform services to If P&C and its financial accounting to Mandatum Life. Between Sampo and Topdanmark there are no outsourcing agreements.

As dividends are the parent company's major source of income, Sampo's primary target for every sub-group is to maintain a healthy balance between profits, risks and capital, in order to facilitate a steady stream of dividend payments in the long run. The secondary target is ensuring stable profitability at business portfolio level. Potential risk concentrations especially and the correlation of reported profits generally are monitored closely and their sources are analysed. To the extent possible risk concentrations are proactively prevented by strategic decisions. Thirdly, as a general rule Sampo prefers to have low leverage and adequate liquidity buffers to be able to generate liquidity as needed. The size of assessed diversification benefit of the Group companies' profits is reflected in Sampo's decisions on own capital structure and liquidity position.

Further information on Sampo Group's steering framework and risk management process can be found in Appendix 1 (Sampo Group Steering Framework and Risk Management Process).

Sampo has a diversified shareholder base and the major shareholders have owned their holdings for many years. Sampo Group's main supervisor is the Finnish Financial Supervisory Authority. Due to Sampo Group's activities in Nordics and Baltics other Nordic supervisors have supervisory responsibilities as well. Sampo Group's auditor is EY.

Sampo Group's Risks and Core Risk Management Activities

Sampo Group companies operate in business areas where specific features of value creation are the pricing of risks and the active management of risk portfolios in addition to sound client services. Hence common risk definitions are needed as a basis for business activities.

Group's Risks

In Sampo Group the risks associated with business activities fall into three main categories as shown in the picture Classification of Risks in Sampo Group: strategic risks, reputational risk and risks inherent in the business operations. The first two risk classes are only briefly described in this Risk Management Disclosure as the focus is on the third risk class.

External Drivers and Strategic Risks

Strategic risk is the risk of losses due to changes in the competitive environment or lack of internal operational flexibility. Unexpected changes in the general business environment can cause larger than expected fluctuations in the financial results and in the long run these can endanger the existence of Sampo Group's business models.

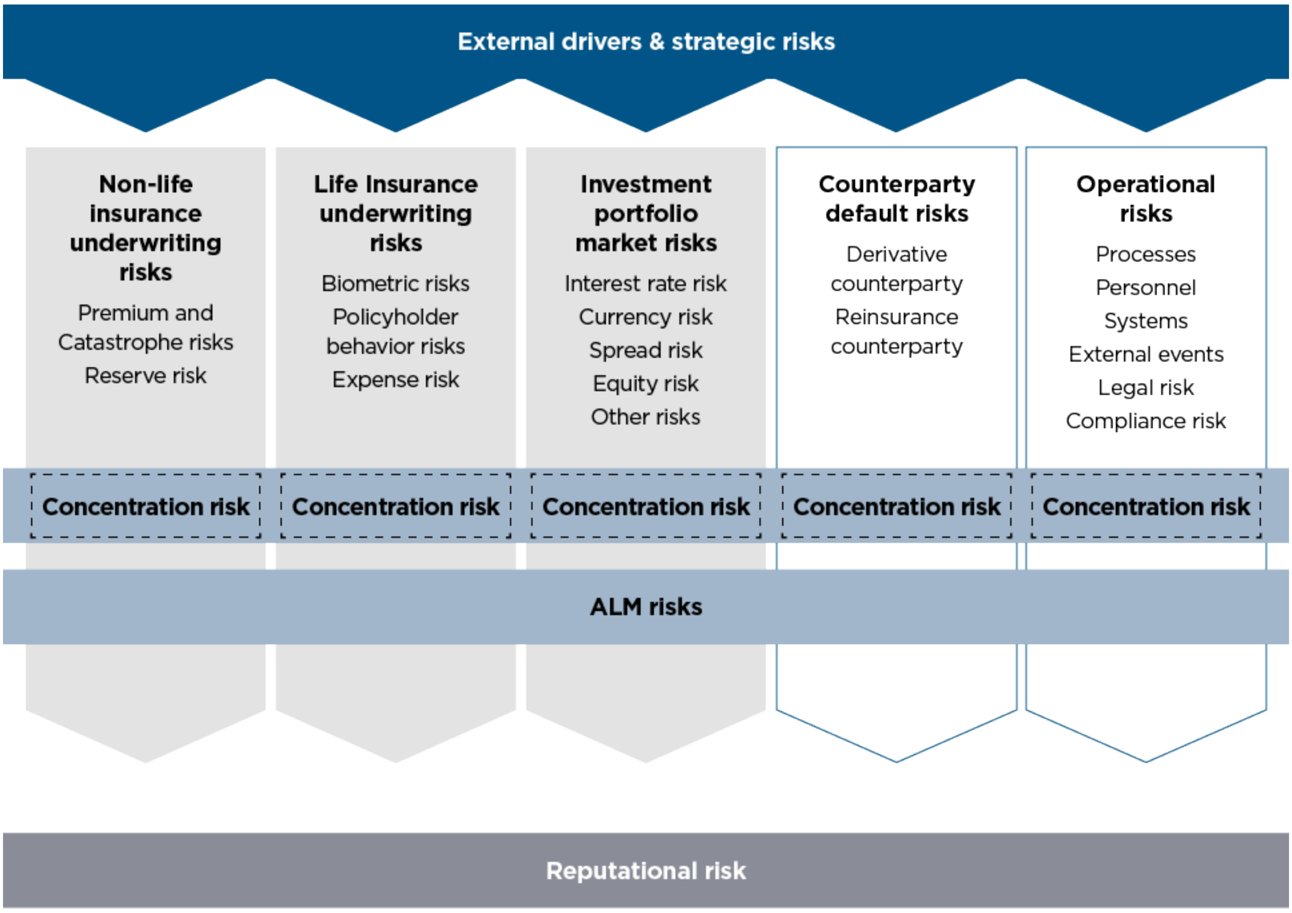
External drivers behind such changes are varied, and include for instance general economic development, changes in values, development of the institutional and physical environment and technological innovations. External drivers are often connected to each other in many ways and because of them customer demand and behaviour can change, new competitors may appear and as a result business models of the industry can change. Currently the themes of sustainable business practices in general and especially the issues related to environment, society and governance are changing the preferences and values of different stakeholders and hence as a result business environment is also changing in many different ways.

Due to the predominantly external nature of the drivers and development in the competitive environment, managing strategic risks is the responsibility of the executive level senior management. Proactive strategic decision-making is the central tool in managing strategic risks relating to business practices and competitive advantage. The maintenance of internal operational flexibility, in order to be able to adjust the business model and cost structure when needed is also an efficient tool in managing strategic risks. Although strategic risks are not covered by the capitalization process in Sampo Group they may have an effect on the amount and structure of the actual capital base, if this is deemed to be prudent in the existing business environment.

Reputational Risk

Reputational risk refers to the risk that adverse publicity regarding the company's business practices or associations, whether accurate or not, causes a loss of confidence in the integrity of the institution. Reputational risk is often a consequence of a materialized operational or compliance risk and often manifests as a deterioration of reputation amongst customers and other stakeholders. Reputational risk is related to all activities shown in the figure Classification of Risks in Sampo Group. As the roots of reputational risk are varied, the tools to prevent it must be diverse and embedded within the corporate culture. The corporate culture, which is based on the core values of ethicality, loyalty, openness and entrepreneurship, is thus seen as an essential tool in preventing reputational risk in Sampo Group. These core values are reflected in how Sampo deals with environmental issues and its core stakeholders (i.e. customers, personnel, investors, other co-operation partners, tax authorities and supervisory authorities) and how Sampo Group has organized its Corporate Governance system.

Classification of Risks in Sampo Group



Risks Inherent in Business Operations

In its underwriting and investment operations, Sampo Group is consciously taking certain risks in order to generate earnings. These **earnings risks** are carefully selected and actively managed. Underwriting risks are priced to reflect their inherent risk levels and the expected return of investments is compared to the related risks. Furthermore, earnings related risk exposures are adjusted continuously and their impact on the capital need is assessed regularly.

Successful management of underwriting risks and investment portfolio market risks is the main source of earnings for Sampo Group companies. Day-to-day management of these risks, i.e. maintaining them within given limits and authorisations is the responsibility of the business areas and the investment unit.

Some risks, such as counterparty default risks and operational risks presented in the figure Classification of Risks in Sampo Group are indirect repercussions of Sampo's normal business activities. They are one-sided risks, which in principle have no related earnings potential. Accordingly, the risk management objective is to mitigate these risks efficiently rather than actively manage them. Mitigation of **consequential risks** is the responsibility of the business areas and the investment unit. The capital need for these risks is measured by independent risk management functions. It has to be noted that the categorization of risks between earnings and consequential risks varies depending on the industry. For Sampo Group's clients, for instance, the events that are subject to insurance policies are consequential risks and for Sampo Group these same risks are earnings risks.

Some risks such as interest rate, currency and liquidity risks are by their nature simultaneously linked to various activities. In order to manage these risks efficiently, Sampo Group companies have to have a detailed understanding of expected cash flows and their variance within each of the company's activities. In addition, a thorough understanding is needed of how the market values of assets and liabilities may fluctuate at the total balance sheet level under different scenarios. These balance sheet level risks are commonly defined as Asset and Liability Management ("ALM") risks. In addition to interest rate, currency and liquidity risk, inflation risk and risks relating to GDP growth rates are central ALM risks in Sampo Group. The ALM risks are one of the focus areas of senior management because of their relevance to risks and earnings in the long run.

In general, **concentration risk** arises when the company's risk exposures are not diversified enough. When this is the case, an individual extremely unfavourable claim or financial market event, for instance, could threaten the solvency of the company.

Concentrations can evolve within separate activities – large single name or industry specific insurance or investment exposures – or across activities when a single name or an industry is contributing widely to the profitability and risks of the company through both insurance and investment activities.

Concentration risk may also materialize indirectly when profitability and capital position react similarly to general economic developments or to structural changes in the institutional environment in different areas of business. This kind of indirect concentration risk can be seen as part of strategic risk.

More detailed risk definitions can be found in Appendix 2 (Risk Definitions).

Core Risk Management Activities

To create value for all stakeholders in the long run, Sampo Group companies must have the following forms of capital in place:

- Financial flexibility in the form of adequate capital and liquidity.
- Good technological infrastructure.
- Intellectual capital in the form of comprehensive proprietary actuarial data and analytical tools to convert this data to information.
- Human capital in the form of skilful and motivated employees.
- Social and relationship capital in the form of good relationships with society and clients to understand the changing needs of different stakeholders.

At the company level, these resources are continuously developed. They are in use when the following core activities related to risk pricing, risk taking and active management of risk portfolios are conducted.

Appropriate selection and pricing of underwriting risks

- Underwriting risks are carefully selected and are priced to reflect their inherent risk levels.
- Insurance products are developed proactively to meet clients' changing needs and preferences.

Effective management of underwriting exposures

- Diversification is actively sought.
- Reinsurance is used effectively to reduce largest exposures.

Careful selection and execution of investment transactions

- Risk return ratios and sustainability issues of separate investments opportunities are carefully analysed.
- Transactions are executed effectively.

Effective mitigation of consequential risks

- Counterparty default risks are mitigated by carefully selecting counterparties, applying collateral agreements and assuring adequate diversification.
- High quality and cost efficient business processes are maintained.
- Continuity and recovery plans are continuously developed to secure business continuity.

Effective management of investment portfolios and the balance sheet

- Balance between expected returns and risks in investment portfolios and the balance sheet is optimized, taking into account the features of insurance liabilities, internally assessed capital needs, regulatory solvency rules and rating requirements.
- Liquidity risks are managed by having an adequate portion of investments in liquid instruments. The portion is mainly dependent on the features of the liabilities.

At the group level, the risk management focus is on group-wide capitalization and liquidity. It is also essential to identify potential risk concentrations and to have a thorough understanding of how reported profits of companies would develop under different scenarios. These concentrations and correlations may have an effect on group level capitalization and liquidity buffers as well as on group level management actions.

When the above-mentioned core activities are successfully implemented, a balance between profits, risks and capitalization can be achieved on both a company and group level and shareholder value can be created.

If P&C Group

If P&C conducts property and casualty insurance operations in the Nordic and Baltic countries and underwrites policies that cover various risks for both individuals and corporations over a geographically diverse area. In addition, If P&C has branch offices in Germany, France, the United Kingdom and the Netherlands for its Nordic corporate customers that conduct international operations. The underwriting business is also well-diversified over lines of business and clients which further enhances the role of diversifications as a value driver of If P&C.

The Nordic P&C (property and casualty) insurance market is relatively concentrated. The four largest players account for approximately 70 to 90 per cent of the markets in Norway, Finland and Sweden. In Denmark the market is less concentrated. The largest insurance companies are often established in more than one Nordic country, but If P&C is the only company with a significant market share in all Nordic countries.

In the Nordic region customer retention levels are high, with renewal rates of approximately 80 to 90 per cent. The market is characterized also by low expense ratios in the range of 15 to 20 per cent. In If P&C, the internet continues to grow in importance both as a distribution channel as well as a service channel. Additionally, distribution through partnerships (e.g. with banks and car dealerships) is increasingly important.

Underwriting Risks and Performance

The Insurance operation in the Nordic region is organizationally divided into Business Areas by customer segment - Private, Commercial (small and medium sized companies) and Industrial (large corporates). Insurance operations in the Baltic countries are organized in one Business Area, Baltic. Business Area Private is the largest by premium volume, accounting for more than half of total premium income.

- Business Area Private's gross premium income increased during the year, driven by continued good customer loyalty and strong new car sales. Underwriting performance was also supported by a favourable claims trend.
- Business Area Commercial had positive premium growth, whereas the large claims outcome, especially in Sweden and Norway, had an adverse impact on the overall underwriting result.
- Business Area Industrial's underwriting performance improved during the year, due to positive premium growth and stable costs, both with regards to claims and operations.
- Business Area Baltic's underwriting results were higher than in the preceding year, reflecting positive premium development combined with a favorable claims outcome and continued cost efficiency.

If P&C’s three major Solvency II Lines of Business are Motor vehicle liability insurance, Other motor insurance and Fire and other damage to property insurance. The table If P&C Underwriting Performance, 31 December 2017 presents the development of If P&C’s premiums, claims, operating expenses, reinsurer’s share and underwriting performance per Solvency II Lines of Business for the last two years.

If P&C Underwriting Performance
31 December 2017 and 31 December 2016

Underwriting performance by SII LoB (EURm)	Premiums written 2017	Premiums written 2016	Premiums earned 2017	Premiums earned 2016	Claims incurred 2017	Claims incurred 2016	Operating expense 2017	Operating expense 2016	Reinsurers share per LoB 2017	Reinsurers share per LoB 2016	Total underwriting performance direct insurance 2017	Total underwriting performance direct insurance 2016
Medical expense insurance	131.3	125.4	129.0	132.9	69.6	74.2	34.0	33.4	0.1	0.1	25.3	25.1
Income protection insurance	397.4	369.1	381.9	367.1	236.5	248.9	80.3	79.1	-0.5	0.3	65.6	38.8
Workers' compensation insurance	198.6	194.1	199.3	198.5	43.5	54.3	36.7	41.6	5.3	2.9	113.8	99.7
Motor vehicle liability insurance	589.7	615.0	599.1	620.1	307.7	274.4	185.0	180.7	-0.1	0.0	106.4	165.0
Other motor insurance	1,334.3	1,301.1	1,296.7	1,271.0	892.0	849.9	244.9	253.1	0.7	1.6	159.0	166.5
Marine, aviation and transport insurance	117.6	117.9	117.6	119.5	95.1	61.3	24.9	24.7	-2.2	10.8	-0.2	22.6
Fire and other damage to property insurance	1,433.7	1,425.9	1,424.8	1,435.0	877.8	883.1	300.4	308.0	50.2	76.6	196.4	167.3
General liability insurance	271.0	259.9	264.9	261.2	131.5	158.7	51.8	51.1	12.7	-9.1	68.9	60.4
Assistance	14.4	15.0	14.2	15.7	12.4	12.4	2.5	2.7	0.0	0.0	-0.7	0.5
Other Life insurance	37.8	34.7	36.5	33.1	8.6	6.2	8.6	7.1	2.0	1.8	17.3	18.0
Annuities stemming from non-life insurance contracts and relating to health insurance obligations	0.0	0.0	0.0	0.0	77.3	66.7	0.0	0.0	0.0	0.0	-77.3	-66.7
Annuities stemming from non-life insurance contracts and relating to insurance obligations other than health insurance obligations	0.0	0.0	0.0	0.0	60.8	52.2	0.0	0.0	-0.0	0.0	-60.8	-52.2
Total (excluding other expenses)	**4,525.7**	**4,458.1**	**4,464.0**	**4,454.1**	**2,812.8**	**2,742.5**	**969.2**	**981.6**	**68.3**	**84.9**	**613.7**	**645.0**
Other expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	8.0	15.4
Total	**4,525.7**	**4,458.1**	**4,464.0**	**4,454.1**	**2,812.8**	**2,742.5**	**969.2**	**981.6**	**68.3**	**84.9**	**621.7**	**660.4**

The figures are segmented in accordance with Solvency II defined Lines of Business, which differ from the insurance class segmentation according to local GAAP or IFRS requirements that are used in other tables.

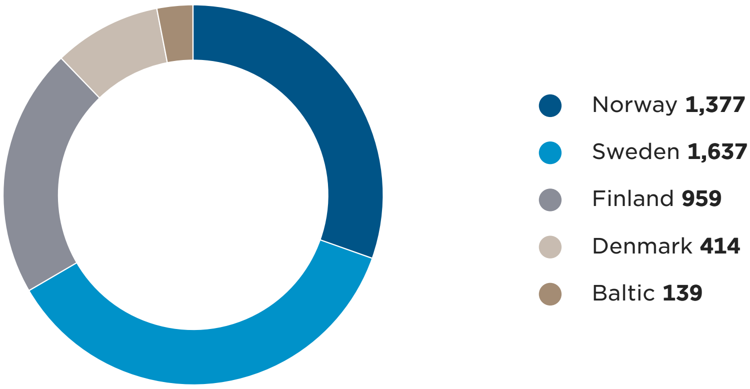
As shown in the below figure Breakdown of Gross Written Premiums by Business Area, Country and Line of Business, If P&C, 2017, the If P&C insurance portfolio is well diversified across Business Areas, Countries and Lines of Business. The six Lines of Business are segmented in accordance with insurance class segmentation used in IFRS.

Breakdown of Gross Written Premiums by Business Area

If P&C, 2017, total EUR 4,526 million

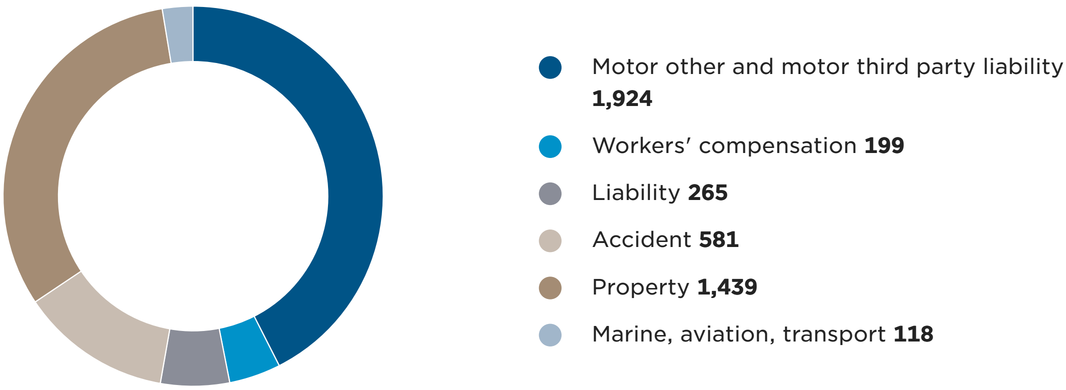
Breakdown of Gross Written Premiums by Country

If P&C, 2017, total EUR 4,526 million



Breakdown of Gross Written Premiums by Line of Business

If P&C, 2017, total EUR 4,526 million



The following adjustments from IFRS LoB´s to Solvency II LoBs are made:

- IFRS Line of Business Motor other and Motor third party liability (1,924) include Solvency II Line of Business Motor vehicle liability insurance (590) and Other motor insurance (1,334).

- IFRS Line of Business Accident (581) includes Solvency II Line of Businesses Income protection insurance (397), Other Life (38), Medical expense insurance (131) and Assistance (14).

The item Other (including group eliminations) is not shown in the breakdowns above but 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.

Premium and Catastrophe Risk and Their Management and Control

Definitions of premium and catastrophe risk can be found in Appendix 2 (Risk Definitions).

Despite the diversified portfolio, risk concentrations and consequently 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 to natural catastrophes, single large claims could have an impact on the insurance operations' result. The negative economic impact of natural catastrophes and single large claims is effectively mitigated by having a well-diversified portfolio and a group wide reinsurance program in place.

The sensitivity of the 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 2017 and 31 December 2016.

Sensitivity Test of Underwriting Result
If P&C, 31 December 2017 and 31 December 2016

			Effect on pretax profit, EURm	
Key figure	**Current level (2017)**	**Change in current level**	**2017**	**2016**
Combined ratio, business area Private	84.0%	+/- 1 percentage point	+/- 26	+/- 26
Combined ratio, business area Commercial	88.0%	+/- 1 percentage point	+/- 12	+/- 12
Combined ratio, business area Industrial	88.7%	+/- 1 percentage point	+/- 4	+/- 4
Combined ratio, business area Baltics	88.9%	+/- 1 percentage point	+/- 1	+/- 1
Net premiums earned (EURm)	4,294	+/- 1 per cent	+/- 43	+/- 43
Net claims incurred (EURm)	2,959	+/- 1 per cent	+/- 30	+/- 29
Ceded written premiums (EURm)	168	+/- 10 per cent	+/- 17	+/- 17

The Underwriting Committee ("UWC") shall give its opinion on and propose actions in respect of various issues related to underwriting risk. The committee also considers and proposes changes to the Underwriting Policy ("UW Policy"), which is the principal document for underwriting, and sets general principles, restrictions and directions for the underwriting activities. This document shall be reviewed and decided at least yearly by the Boards of Directors.

The Chairman of the 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 monitors 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 the Commercial Business Area 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.

If P&C's Reinsurance Policy stipulates guidelines for the purchase of reinsurance. The need and optimal choice of reinsurance is evaluated by looking at the expected cost versus the benefit of the reinsurance, the impact on result volatility and impact on capital requirements. The main tool for this evaluation is If P&C's internal model in which frequency of claims, large claims and natural catastrophes are modelled.

A group-wide reinsurance program has been in place in If P&C since 2003. In 2017, retention levels were between SEK 100 million (approximately EUR 10.2 million) and SEK 250 million (approximately EUR 25.4 million) per risk and SEK 250 million (approximately EUR 25.4 million) per event.

Reserve Risk and Its Management and Control

Definition of reserve risk can be found in Appendix 2 (Risk Definitions).

The main reserve risks for If P&C are stemming from uncertainty in the claim amounts caused by higher claim inflation and increases in life expectancy than expected, with the consequences that both annuities and lump sum payments would increase.

In the table Technical Provisions by Line of Business and Major Geographical Area, If P&C, 31 December 2017 below, If P&C's technical provisions and durations are presented by Line of Business and Major Geographical Area. When the breakdown of technical provisions is compared to the breakdown of gross written premiums it can be seen that Finland's and Sweden's share of technical provisions is larger than the share of gross written premiums. This is mainly due to Sweden and Finland having a long duration of Motor other and Motor third party liability and Finland also having a long duration of Workers compensation. The long duration is mainly due to annuities in these lines of business, which increases the amount of technical provisions. The duration of the provisions, and thus the sensitivity to changes in interest rates, varies with each product portfolio. The weighted average duration for 2017 across the product portfolios was 6.5 years.

Technical Provisions by Line of Business and Major Geographical Area
If P&C, 31 December 2017

	Sweden		Norway		Finland		Denmark		Total	
	EURm	Duration	EURm	Duration	EURm	Duration	EURm	Duration	EURm	Duration
Motor other and MTPL	2,516	7.5	536	1.4	1,033	12.7	160	1.8	4,245	7.8
Workers' compensation	0	0.0	218	5.0	1,199	12.1	252	6.7	1,669	10.4
Liability	268	2.7	127	1.4	122	3.0	74	1.9	591	2.4
Accident	327	4.9	372	5.7	156	4.3	94	1.7	948	4.8
Property	407	1.2	475	0.9	226	1.1	99	1.0	1,207	1.0
Marine, aviation, transport	21	1.9	48	0.6	10	0.9	23	1.2	101	1.0
Total	**3,537**	**6.1**	**1,775**	**2.5**	**2,746**	**10.5**	**701**	**3.1**	**8,760**	**6.5**

As on Sampo's annual report 2017 figures are excluding Baltic, total EUR 140 million.

Reserves are exposed mainly to inflation and discount rates and to some extent to life expectancy. 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, 2017.

Sensitivities of Technical Provisions
If P&C, 2017

Technical provision item	Risk factor	Change in risk parameter	Country	Effect EURm 2017
Nominal provisions	Inflation increase	Increase by 1%-point	Sweden	183.8
			Denmark	11.7
			Norway	53.3
			Finland	37.4
Annuities and estimated share of claims provisions to future annuities	Decrease in mortality	Life expectancy increase by 1 year	Sweden	24.6
			Denmark	1.6
			Finland	66.2
Discounted provisions (annuities and part of Finnish IBNR)	Decrease in discount rate	Decrease by 1%-point	Sweden	66.2
			Denmark	13.3
			Finland	299.3

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 output from this analysis is illustrated both before and after reinsurance in the claims cost trend tables. These are disclosed in the Note 25 to the Financial Statements.

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 other and Motor third party liability and Workers' compensation. 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 Motor other and Motor third party liability and Workers' compensation, legislation differs significantly between countries. Some of the Finnish, Swedish and Danish technical provisions for these lines include annuities which are sensitive to changes in mortality assumptions and discount rates. The proportion of technical provisions related to Motor other and Motor third party liability and Workers' compensation was 68 per cent.

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 total provisions is sufficient. On If P&C group level the Chief Actuary issues a quarterly report on the adequacy of technical provisions.

The Actuarial Committee is a preparatory and advisory board for If P&C's Chief Actuary. The committee secures a comprehensive view over reserve risk, discusses and gives recommendations on policies and guidelines for calculating technical provisions.

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

The actuarial estimates are based on historical claims and existing exposures 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 property and casualty provisions, the Chain Ladder and Bornhuetter-Fergusson methods are generally used, combined with projections of the number of claims and average claims costs. For life provisions, the IBNR calculations are based on the estimated claims cost (risk premium) over the average time from claim occurrence to reporting.

Market Risks and Investment Performance

Fixed income investments and listed equity instruments form a major part of investment portfolio of EUR 11,685 million (EUR 12,192 million). A large part of the fixed income investments was at 31 December 2017 concentrated to financial institutions. The role of real estate, private equity, biometric and other alternative investments is immaterial.

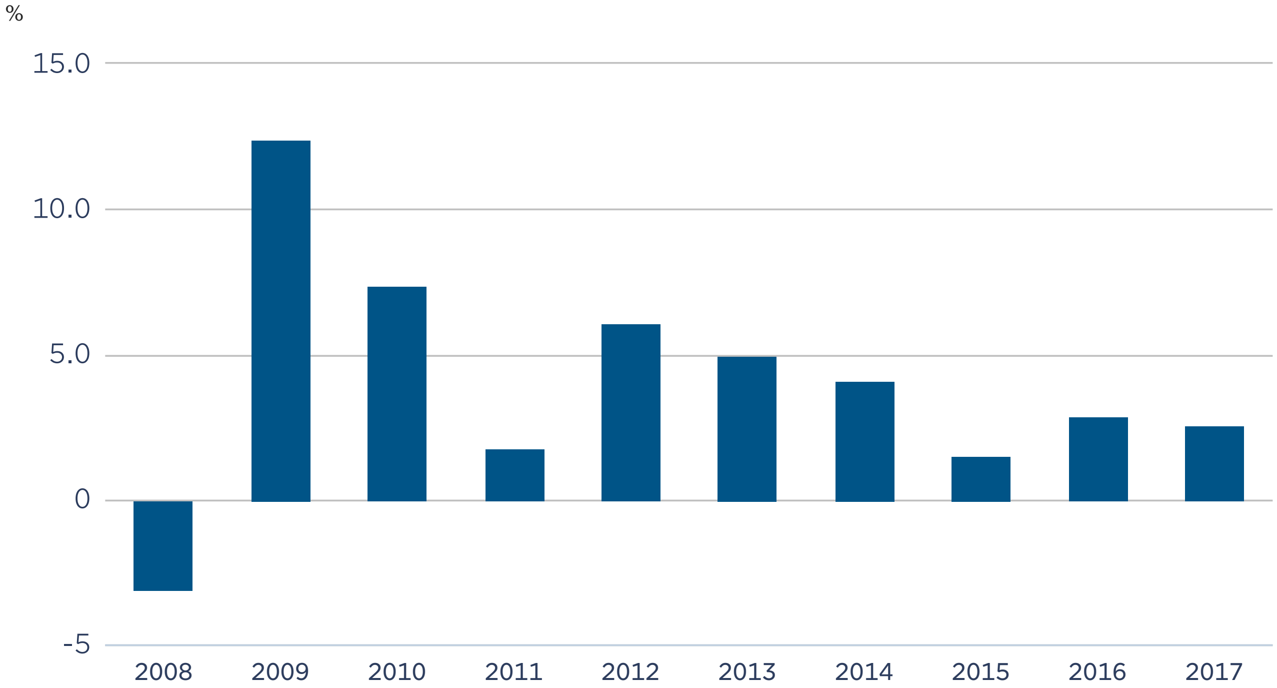
The composition of the investment portfolios by asset classes in If P&C at year end 2017 and at year end 2016 and average maturities of fixed income investments are shown in the table Investment Allocation, If P&C, 31 December 2017.

Investment Allocation
If P&C, 31 December 2017 and 31 December 2016

	If P&C 31 Dec 2017			If P&C 31 Dec 2016		
Asset class	**Market value, EURm**	**Weight**	**Average maturity, years**	**Market value, EURm**	**Weight**	**Average maturity, years**
Fixed income total	**10,200**	**87%**	**2.7**	**10,624**	**87%**	**2.8**
Money market securities and cash	575	5%	0.1	992	8%	0.3
Government bonds	1,040	9%	2.5	1,231	10%	3.1
Credit bonds, funds and loans	8,584	73%	2.9	8,401	69%	3.1
Covered bonds	3,084	26%	2.6	2,967	24%	3.1
Investment grade bonds and loans	3,490	30%	2.9	3,404	28%	2.9
High-yield bonds and loans	1,344	12%	2.8	1,461	12%	3.0
Subordinated / Tier 2	343	3%	4.7	278	2%	4.5
Subordinated / Tier 1	323	3%	3.2	292	2%	3.9
Hedging swaps	0	0%	-	0	-0%	-
Policy loans	0	0%	0.0	0	0%	0.0
Listed equity total	**1,448**	**12%**	**-**	**1,527**	**13%**	**-**
Finland	0	0%	-	0	0%	-
Scandinavia	151	1%	-	1,147	9%	-
Global	1,298	11%	-	380	3%	-
Alternative investments total	**39**	**0%**	**-**	**44**	**0%**	**-**
Real estate	20	0%	-	22	0%	-
Private equity	19	0%	-	23	0%	-
Biometric	0	0%	-	0	0%	-
Commodities	0	0%	-	0	0%	-
Other alternative	0	0%	-	0	0%	-
Trading derivatives	**-3**	**0%**	**-**	**-3**	**0%**	**-**
Asset classes total	**11,685**	**100%**	**-**	**12,192**	**100%**	**-**
FX Exposure, gross position	**207**	**0%**	**-**	**99**	**-**	**-**

During 2017 equities have performed well, spreads have tightened and the market volatility has decreased somewhat. The return of investments in 2017 was 2.6 per cent. Average return of investments has been 4.1 per cent during the years 2008-2017. Returns have trended down together with lowering interest rates and tightening credit spreads. However, investment returns have been sufficient taking into account good profitability of underwriting activities.

Annual Investment Returns at Fair Values 2008–2017
If P&C



If P&C´s investment management strategy is conservative, with a low equity share and low fixed-income duration.

The performance and market risk is actively monitored and controlled by the Investment Control Committee on a monthly basis and reported to the ORSA Committee quarterly. In addition, the allocation limits, issuer and counterparty limits, the sensitivity limits for interest rates and credit spreads as well as regulatory capital requirements are regularly monitored.

Market Risks of Fixed Income and Equity Instruments

Spread Risk and Equity Risk

Spread risk and equity risk are derived only from the asset side of the balance sheet. Exposures in fixed income and equity instruments are presented by Sectors, Asset Classes and Rating in below table that also include counterparty risk exposures relating to reinsurance and derivative transactions. Counterparty default risks are described in more detail in section Counterparty default risks. Due to differences in the reporting treatment of derivatives, the figures in the table are not fully comparable with other tables in this annual report.

Exposures by Sector, Asset Class and Rating

If P&C, 31 December 2017

EURm	AAA	AA+ - AA-	A+ - A-	BBB+ - BBB-	BB+ - C	D	Non-rated	Fixed income total	Listed equities	Other	Counterparty risk	Total	Change 31 Dec 2016
Basic Industry	0	0	31	58	1	0	52	143	40	0	0	183	23
Capital Goods	0	0	89	53	0	0	30	173	521	0	0	694	-4
Consumer Products	0	106	222	301	0	0	76	706	311	0	0	1,017	49
Energy	0	41	30	0	53	0	154	278	6	0	0	284	-137
Financial Institutions	0	968	1,250	444	22	0	26	2,710	28	0	6	2,744	-370
Governments	92	0	0	0	0	0	0	92	0	0	0	92	-31
Government Guaranteed	43	77	0	0	0	0	0	120	0	0	0	120	-36
Health Care	7	10	32	42	0	0	8	99	66	0	0	166	23
Insurance	0	0	40	63	27	0	22	152	0	0	60	212	-5
Media	0	0	0	0	0	0	22	22	0	0	0	22	-13
Packaging	0	0	0	0	0	0	5	5	0	0	0	5	0
Public Sector, Other	674	155	0	0	0	0	0	829	0	0	0	829	-123
Real Estate	0	6	92	80	8	0	489	674	0	20	0	694	91
Services	0	0	0	65	23	0	89	177	0	0	0	177	-12
Technology and Electronics	8	0	36	0	0	0	34	78	5	0	0	83	-21
Telecommunications	0	0	0	120	0	0	49	169	60	0	0	229	18
Transportation	0	72	7	53	0	0	167	299	7	0	0	306	-73
Utilities	0	0	31	244	46	0	44	364	0	0	0	364	-77
Others	0	26	0	0	0	0	12	39	0	0	0	39	22
Asset-backed Securities	0	0	0	0	0	0	0	0	0	0	0	0	0
Covered Bonds	3,020	63	0	0	0	0	0	3,084	0	0	0	3,084	117
Funds	0	0	0	0	0	0	0	0	403	19	0	422	20
Clearing House	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**3,845**	**1,525**	**1,860**	**1,523**	**180**	**0**	**1,279**	**10,212**	**1,448**	**39**	**66**	**11,765**	**-538**
Change 31 Dec 2016	**-17**	**-413**	**-162**	**274**	**-142**	**0**	**45**	**-413**	**-78**	**-5**	**-42**	**-538**	

Most of the fixed income exposures are in investment grade issues and currently the role of Nordic covered bonds and Nordic banks as issuers is central. Within fixed income investments part of the money market securities, cash and investment grade government bonds form a liquidity buffer.

In regards to equities most of the equity investments are in Scandinavian markets that are selectively picked direct investments. When investing in non-Nordic equities, funds or other assets, third party managed investments are mainly used. The changes of Equity positions during the year can be seen from the table Breakdown of Listed Equity Investments by Geographical regions, If P&C, 31 December 2017 and 31 December 2016.

Breakdown of Listed Equity Investments by Geographical Regions
If P&C, 31 December 2017 and 31 December 2016

	31 Dec 2017		31 Dec 2016	
If P&C	**%**	**EURm**	**%**	**EURm**
Denmark	0%	5	1%	9
Norway	10%	149	13%	195
Sweden	62%	891	62%	944
Finland	0%	0	0%	0
Western Europe	10%	151	11%	162
East Europe	0%	0	0%	0
North America	6%	87	6%	88
Latin America	2%	28	2%	25
Far East	9%	137	7%	105
Japan	0%	0	0%	0
Total		**1,448**		**1,527**

Market Risks of Balance Sheet

Asset and Liability Management (ALM) Risk

ALM risk is defined in Appendix 2 (Risk Definitions).

The ALM risk is taken into account through the risk appetite framework and its management and governance are based on If P&C's Investment Policies. In general to maintain the ALM risk within the overall risk appetite, the cash flows of insurance liabilities are matched by investing in fixed income instruments denominated in same currencies as liabilities or in case assets with healthy risk return ratios are not available in liability's currency derivatives are used. During the current low interest rate environment the liquidity of assets has been special focus of investment strategy.

Interest Rate Risk

In general If P&C Group is negatively affected when interest rates are decreasing or staying at low levels, because the longer duration of liabilities in If P&C Group than the duration of assets. If P&C has over the years decreased its combined ratio to counteract falling interest rates. Interest rate sensitivity in terms of the average duration of fixed income investments in If P&C was 1.4. The respective duration of insurance liabilities in If P&C was 6.5. Interest rate risk is managed by changing the duration of assets and interest rate derivatives based on the market view and risk appetite.

In the financial accounts most of the technical provisions are nominal, while a significant part, namely the annuity and annuity IBNR reserves, are discounted using interest rates in accordance with regulatory rules. Thereby If P&C is, from a financial accounting perspective, mainly exposed to changes in inflation and the regulatory discount rates. From an economic perspective, in which the cash flows of insurance liabilities are discounted with prevailing interest rates, If P&C is exposed to changes both in inflation and nominal interest rates. For more information see the table Sensitivities of Technical Provisions, If P&C, 2017 in the Non-life Underwriting Risks section.

Currency Risk

If P&C writes insurance policies that are mostly denominated in the Scandinavian currencies and in euro. In If P&C, the FX-transaction risk is reduced by matching technical provisions with investment assets in the corresponding currencies or by using currency derivatives. Hence, the so called structural FX risk is first mitigated as a rule after which If P&C can open short or long FX positions (active FX risk) within its FX risk limits. The transaction risk positions of If P&C against SEK are shown in the table Transaction Risk Position, If P&C 31 December 2017. The table shows the net transaction risk exposures and the changes in the value of positions given a 10 per cent decrease in the value of the base currency.

Transaction Risk Position
If P&C, 31 December 2017

	Base currency	EUR	USD	JPY	GBP	SEK	NOK	CHF	DKK	Other	Total, net
If P&C	**SEKm**										
Insurance operations		-3,472	-96	0	-2	-25	-2,125	-9	-820	-15	-6,564
Investments		1,876	1,495	0	0	0	2,147	0	68	1	5,587
Derivatives		1,494	-1,397	0	3	28	56	9	750	11	955
Total transaction risk, net position, If P&C		**-101**	**2**	**0**	**1**	**3**	**79**	**0**	**-2**	**-4**	**-22**
Sensitivity: SEK -10%		-10	0	0	0	0	8	0	0	0	-2

If P&C's transaction risk position in SEK represents exposure in foreign subsidiaries/branches within If P&C with base currency other than SEK

In addition to transaction risk, If P&C is also exposed to translation risk which at group level stems from foreign operations with other base currencies than SEK. Translation risk, and its management principles in Sampo Group, are described in the Appendix 4: Profitability, Risks and Capital.

Liquidity Risk

In If P&C, liquidity risk is limited, since premiums are collected in advance and large claims payments are usually known a long time before they fall due. Liquidity risks are managed by cash management functions which are responsible for liquidity planning. Liquidity risk is reduced by having investments that are readily tradable in liquid markets. The available liquid financial assets, being that part of the assets which can be converted into cash at a specific point in time, are analysed and reported to the ORSA Committee.

The maturities of technical provisions and financial assets and liabilities are presented in the table Cash Flows According to Contractual Maturity, If P&C, 31 December 2017. The average maturity of fixed income investments was 2.7 years in If P&C. The table shows the financing requirements resulting from expected cash inflows and outflows arising from financial assets and liabilities as well as technical provisions.

Cash Flows According to Contractual Maturity
If P&C, 31 December 2017

	Carrying amount total			Cash flows						
EURm	Carrying amount total	Carrying amount without contractual maturity	Carrying amount with contractual maturity	2018	2019	2020	2021	2022	2023-2032	2033-
If P&C										
Financial assets	13,115	1,883	11,232	2,836	2,098	2,321	2,322	1,426	325	318
of which interest rate swaps	0	0	0	0	0	0	0	0	0	0
Financial liabilities	940	15	925	-722	-12	-13	-326	-3	0	0
of which interest rate swaps	2	0	2	-1	-1	-1	0	-3	0	0
Net technical provisions	8,900	0	8,900	-3,019	-1,048	-628	-504	-310	-2,038	-1,885

In the table, financial assets and liabilities are divided into contracts that have an exact contractual maturity profile, and other contracts. Only the carrying amount is shown for the other contracts. In addition, the table shows expected cash flows for net technical provisions, which by their nature, are associated with a certain degree of uncertainty.

If P&C Group has a relatively low amount of financial liabilities and thus Group's respective refinancing risk is relatively small.

Counterparty Default Risks

In If P&C the major three sources of counterparty risk are reinsurance, financial derivatives and other receivables.

Counterparty default risk arising from receivables from policyholders and other receivables related to commercial transactions is very limited, because non-payment of premiums generally results in cancellation of the insurance policies.

Reinsurance Counterparty Risk

In If P&C reinsurance is used regularly and If P&C have number of programs in place. If P&C is using reinsurance to (i) utilize its own capital base efficiently and reduce cost of capital, (ii) limit large fluctuations of underwriting results and (iii) have access to reinsurers' competence base. The Reinsurance Committee ("RC") is a collaboration forum for reinsurance related issues in general and shall give its opinion on and propose actions in respect of such issues. The committee shall consider and propose changes to the Reinsurance Policy and the Internal Reinsurance Policy. The Chairman is responsible for reporting policy deviations and other issues dealt with by the committee.

The distribution of reinsurance receivables and reinsurers' portion of outstanding claims on 31 December 2017 per rating category is presented in the table Reinsurance Recoverables and Pooled Solutions, If P&C, 31 December 2017 and 31 December 2016.

Reinsurance Recoverables and Pooled Solutions
If P&C, 31 December 2017 and 31 December 2016

	31 Dec 2017		31 Dec 2016	
Rating	Total EURm	% of total	Total EURm	% of total
AAA	0	0%	0	0%
AA+ - A-	59	27%	102	41%
BBB+ - BBB-	1	1%	2	1%
BB+ - C	0	0%	0	0%
D	0	0%	0	0%
Non-rated	0	0%	2	1%
Captives and statutory pool solutions	160	73%	140	57%
Total	**220**	**100%**	**246**	**100%**

Because the recoverables and pooled solutions reported above are not covered by collaterals the whole amount is exposed to counterparty risk.

The Reinsurance Security Committee ("RSC") shall give input and suggestions to decisions in respect of various issues regarding reinsurance default risk and risk exposure, as well as proposed deviations from the Reinsurance Security Policy. The Chairman is responsible for reporting policy deviations and other issues dealt with by the committee. If P&C has a Reinsurance Security Policy that sets requirements for the reinsurers' minimum credit ratings and the maximum exposure to individual reinsurers. Also, the own credit-analysis plays a central role when counterparties are selected.

As seen from above table most of the reinsurers are having either AA- or A- rating. The ten largest individual reinsurance recoverables amounted to EUR 165 million, representing 72 per cent of the total reinsurance recoverables. If P&C's largest non-captive individual reinsurer is Munich Re (AA-) accounting for 39 per cent of the total non-captive reinsurance recoverables.

The cost of risk transfer related to the reinsurance recoverables and pooled solutions amounted to EUR 52.3 million. Of this amount, 100 per cent was related to reinsurance counterparties with a credit rating of A- or higher.

Counterparty Risk Related to Financial Derivatives

In If P&C, the default risk of derivative counterparties is a by-product of managing market risks. In If P&C the role of long term interest rate derivatives has been immaterial and counterparty risk stems mainly from short-term FX-derivatives. The counterparty risk of bilaterally settled derivatives is mitigated by careful selection of counterparties; by diversification of counterparties to prevent risk concentrations and by using collateral techniques, e.g. ISDA Master Agreements backed by Credit Support Annexes. During 2016 If P&C started to settle interest rate swaps in central clearing houses, which while further mitigating bilateral counterparty risk also exposes If P&C to the systemic risk related to centralised clearing parties.

Operational Risks

Operational risks are identified and assessed through the Operational and Compliance Risk Assessment (OCRA) process. Self-assessments to identify, measure, monitor and manage operational risks are performed and reported by the line organization periodically. Identified risks are assessed from a likelihood and impact perspective. The residual risk for each risk is assessed using a traffic light system. The process is supported by an operational risk coordinator network and the results are challenged and aggregated by the Risk Management function. The most significant risks are reported to the Operational Risk Committee (ORC), the Own Risk and Solvency Assessment Committee (ORSA committee) and to the Board of Directors.

A system is implemented for incident reporting procedures and follow up. Incident data is used to analyse risk and severe incidents are tracked to ensure proper actions are taken.

If P&C has issued a number of steering documents which are relevant for the management of operational risk. These include but are not limited to the Operational Risk Policy, Business Continuity Policy and Security and Information Policy. If P&C also has processes and instructions in place to manage the risk of external and internal fraud. Internal training on ethical rules and guidelines is provided to employees on a regular basis. Policies and other internal steering documents are reviewed and updated on a regular basis.

Capitalization

If P&C Group companies calculate their solo regulatory Solvency Capital Requirements (SCR) as follows:

- If P&C Insurance Ltd (publ) is applying internally developed methods approved by the Swedish FSA (SFSA) for the calculation of the main non-life underwriting risks written in Sweden, Norway and Denmark. The Company is in the process of extending the scope of the approval to include also the Finnish non-life insurance operations merged into the company in October 2017. The standard formula (SF) with transitional equity measures is applied for other risk modules. From these module-specific SCRs the company level solo SCR is calculated by process approved by the SFSA. The end-result is a Partial Internal Model (PIM) SCR.
- Other companies use pure SF when calculating SCRs.

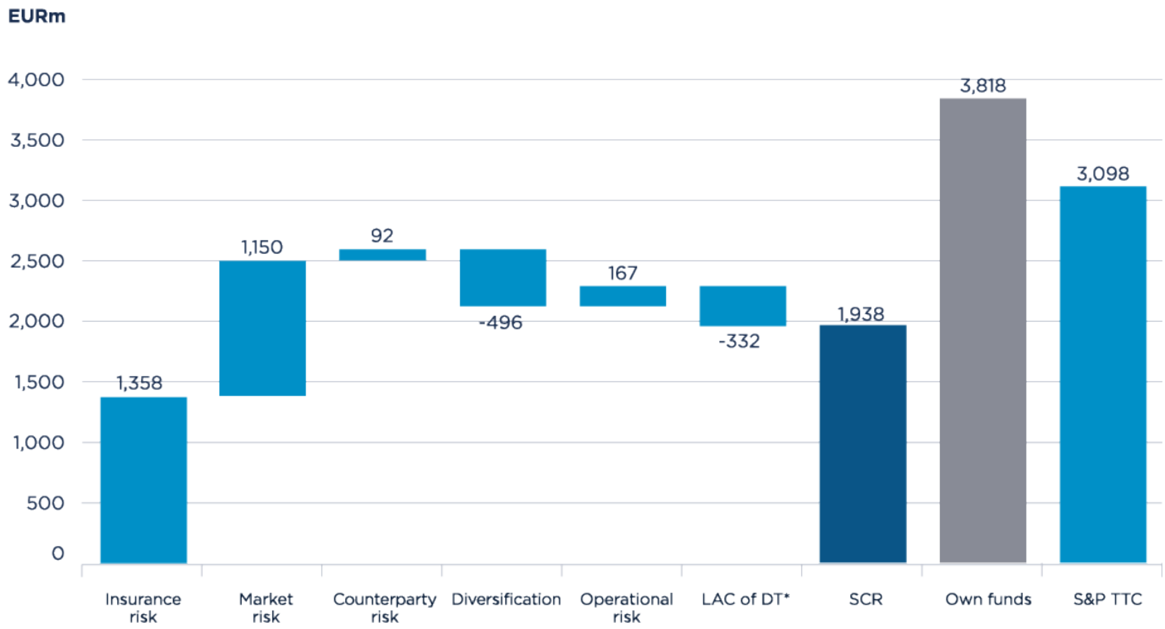
For If P&C Group there is no regulatory requirement to calculate SCR or own funds. However, for management purposes a so called Economic Capital (EC) is calculated by applying internal methods for the main non-life underwriting risks in all geographical areas and for market risks as well. SF is applied for other risks. Economic capital is used for different purposes, for instance as an internal basis for capital allocation.

As in input to the Sampo Group level capital requirement If P&C applies the SF with transitional equity measures. Since the SF SCR does not take into account any geographical diversification between countries the contribution of underwriting risks of If P&C are very conservative at Sampo Group level.

In order to maintain consistency within this Sampo Group risk report, only the SF figures applying transitional equity measures of If P&C are disclosed in the following paragraphs.

In If P&C, own funds at the end of 2017 were EUR 3,818 million (EUR 3,822 million) while the SF SCR applying transitional measures on equity holdings was EUR 1,938 (1,942) million. Hence, the solvency ratio was 197 (197) per cent and the buffer was EUR 1,880 (1,880) million. In the figure If P&C's Solvency, 31 December 2017, SCR is divided into risk contributions. The diversification benefit between risks is also presented in the figure.

If P&C's Solvency
31 December 2017



* Loss absorbing capacity of deferred taxes

The graph above includes also the rating requirement from Standard & Poor's for an A rating. Because capital need based on rating agency criteria – Total Target Capital ("TTC") for Single-A - is higher than capital need based on SCR, If P&C's internally set capital floor is based on TTC being EUR 3,098 (2,967) million as of 31 December 2017.

If P&C's structure of OF as presented in table If P&C's own funds, 31 December 2017 is strong. Tier 1 items are covering 84 per cent of OF and the role of Tier 3 items is immaterial. Norwegian Natural Perils Fund ("NNPF") is a material part of Tier 2 untaxed reserves covering 33 per cent.

Over the latest years If P&C has paid over 80 per cent of its net profit as dividends to Sampo plc. As a result the retained earnings – part of the reconciliation reserve - have consistently been a source of Tier 1 growth.

If P&C's Eligible Own Funds
31 December 2017

If P&C		EURm
Tier 1	**Total**	**3,192**
	Ordinary Share Capital	277
	Reconciliation Reserve	2,915
	Subordinated Liabilities	0
Tier 2	**Total**	**625**
	Subordinated Liabilities	321
	Untaxed reserves	304
Tier 3	**Total**	**1**
	Deferred tax assets	1
Eligible own funds, consolidation method		**3,818**

EUR 321 (420) million i.e. 8.4 (11.0) per cent of OF consisted of subordinated debt at the end of 2017. The subordinated debt of nominal amount EUR 90 million issued by If P&C Insurance Company Ltd (Finland) was repaid in September 2017, prior to the merger between If P&C Insurance Company Ltd (Finland) and If P&C Insurance Ltd. As of 31.12.2017 Sampo plc holds If P&C subordinated liabilities with a nominal value of EUR 98.9 million, as presented in the table Solvency II Compliant Subordinated Liabilities of If P&C, 31 December 2017.

Solvency II Compliant Subordinated Liabilities of If P&C
31 December 2017

Issuer	Instrument	Nominal amount	Carrying amount in EUR	First Call	Tiering	In Sampo's portfolio
If P&C Insurance Ltd (publ) (Sweden)	30NC10	EUR 110 000 000	109,501,816	8.12.2021	Tier 2	98,935,000
If P&C Insurance Holding Ltd (Sweden)	30NC5	SEK 500 000 000	50,510,699	1.12.2021	Tier 2	0
If P&C Insurance Holding Ltd (Sweden)	30NC5	SEK 1 500 000 000	151,535,327	1.12.2021	Tier 2	0
			311,547,842			

As a summary, the solvency of If P&C is adequate and the capital structure is strong. High and stable profitability and capacity to issue subordinated debt if needed puts If P&C in a strong position to generate capital and to maintain a capital level needed for operations in the future as well.

Topdanmark Group

Topdanmark Group is a Danish insurance group concentrating on the Danish insurance market writing non-life, life- and pension policies through its operative insurance companies Topdanmark Forsikring and Topdanmark Livsforsikring.

At the group level the current emphasizes are (i) to create synergies by having both non-life and life insurance business within the same group, and (ii) to improve customer experience and cost efficiency by digitalization, innovation and new technology. Products are marketed through a diversified net of distribution channels including Topdanmark's own sales staff consisting of both tied agents and sales centres, and external partners, insurance brokers and online sales.

Underwriting Risks and Performance

Topdanmark Forsikring is the second largest Danish non-life insurance company with a market share of 17 per cent. It operates mainly within personal-, SME- and agriculture client segments having approximately 500,000 household customers and respectively 100,000 SME and agriculture customers. The market share within the industrial segment has been low and it has further decreased in 2016 and 2017. This is in line with Topdanmark's strategy to have the material part of its risks in Denmark, as industrial customers typically have the material risk outside Denmark. All in all approximately 300,000 claims are handled on a yearly basis.

Topdanmark Livsforsikring is the fifth largest commercial life insurance company in Denmark with a market share of 8 per cent. Topdanmark Livsforsikring offers pension schemes with participating features and market interest pensions products, including life insurance covers and health insurance. The number of personal customers is around 50,000 and the number of customers within company pension schemes is around 80,000. The main source of the profit is the risk return from with-profit schemes.

Non-Life Underwriting Performance and Risks

The premiums and underwriting performance by Solvency II lines of business are presented in the table Topdanmark Underwriting Performance, 31 December 2017 and 31 December 2016.

Topdanmark Underwriting Performance
31 December 2017 and 31 December 2016

Underwriting performance by SII LoB (EURm)	Premiums written 2017	Premiums written 2016	Premiums earned 2017	Premiums earned 2016	Claims incurred 2017	Claims incurred 2016	Operating expense 2017	Operating expense 2016	Reinsurers share per LoB 2017	Reinsurers share per LoB 2016	Total underwriting performance direct insurance 2017	Total underwriting performance direct insurance 2016
Medical expense insurance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income protection insurance	204.6	197.2	200.0	193.2	135.5	135.5	25.5	25.2	1.8	2.1	37.2	30.4
Workers' compensation insurance	85.0	77.4	82.8	79.3	75.7	59.1	11.7	11.4	1.4	0.6	-5.9	8.3
Motor vehicle liability insurance	88.0	89.1	92.0	91.8	54.2	53.0	16.7	16.9	0.4	0.4	20.8	21.5
Other motor insurance	191.4	192.8	192.4	194.7	114.0	113.8	28.6	28.9	1.3	0.8	48.5	51.1
Marine, aviation and transport insurance	7.0	6.4	7.1	6.3	5.8	3.9	1.5	1.5	0.1	0.4	-0.2	0.5
Fire and other damage to property insurance	535.9	521.5	532.5	532.7	292.2	379.3	91.9	92.1	44.4	9.4	104.1	51.9
General liability insurance	73.3	62.0	70.0	63.4	39.7	32.5	12.3	11.7	3.0	3.2	14.9	16.0
Assistance	30.4	28.3	30.0	28.5	23.5	20.7	4.7	4.5	0.0	0.0	1.8	3.3
Other Life insurance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Annuities stemming from non-life insurance contracts and relating to health insurance obligations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Annuities stemming from non-life insurance contracts and relating to insurance obligations other than health insurance obligations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**1,215.6**	**1,174.6**	**1,206.8**	**1,189.8**	**740.6**	**797.7**	**192.8**	**192.3**	**52.3**	**16.9**	**221.1**	**182.9**

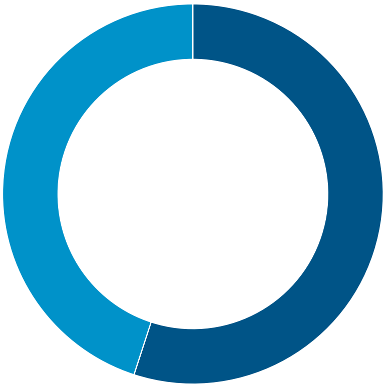
There was a moderate growth in premiums of 1.4 per cent in 2017, being a result of company's actions to maintain a balance between growth and profitability in a competitive market. The combined ratio was 85.8 before run-off gains and 82.0 respectively after run-off gains. These figures exceeded the company's expectations mainly due to better weather than expected, a low level of large-scale claims and an improved claims trend mainly in the SME segment, an improved claims trend in theft, fewer and smaller fire claims and an improved claims trend in workers' compensation.

Topdanmarks non-life insurance risk is measured and monitored by a partial internal model, which was approved in 2015 by the Danish supervisory authorities for the SCR calculation.

The claims provisions are mostly exposed to judicial decisions or changed recognition practices of the Labor Market Occupational Insurance. These events, if happened, may change compensation practices and thus increase claims from previous periods.

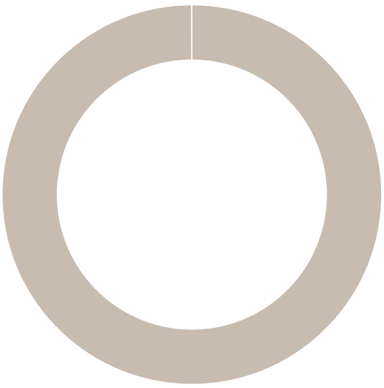
As shown in the below figure Breakdown of Gross Written Premiums by Business Area, Country and Line of Business, Topdanmark's insurance portfolio is diversified across Business Areas and Lines of Business.

Breakdown of Gross Written Premiums by Business Area
Topdanmark, 2017, total EUR 1,216 million



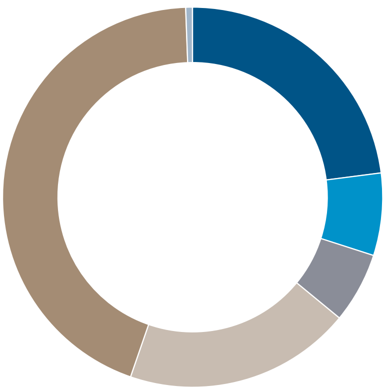
- Private **669**
- Commercial **547**
- Industrial **0**
- Baltic **0**

Breakdown of Gross Written Premiums by Country
Topdanmark, 2017, total EUR 1,216 million



- Norway **0**
- Sweden **0**
- Finland **0**
- Denmark **1,216**
- Baltic **0**

Breakdown of Gross Written Premiums by Line of Business
Topdanmark, 2017, total EUR 1,216 million



- Motor other and motor third party liability **279**
- Workers' compensation **85**
- Liability **73**
- Accident **235**
- Property **536**
- Marine, aviation, transport **7**

Premium and Catastrophe Risk and Their Management and Control

The main underwriting risk that influence the performance is catastrophe events. However, Topdanmark Forsikring has a very comprehensive reinsurance programme in place contributing to the low level of underwriting risk. The largest retention level of DKK 100 million plus reinstatement for each event is on storm events. The maximum retention on fire events is DKK 25 million and in workers' compensation up to DKK 1 billion is covered with a retention of DKK 50 million.

With certain restrictions, terror is covered by the reinsurance contracts. A national guarantee scheme of DKK 15 billion covering terror claims including an element of NBCR (nuclear, biological, chemical, radiological) has been established. In January 2017, the market retention was DKK 9.9 billion. To cover this market retention the Danish non-life companies have established a NBCR terror pool. In this pool for 2017, reinsurance cover was DKK 4.5 billion after DKK 0.5 billion.

Premium risk reduction measures taken at different levels of operations are as follows:

- Collection of data on risk and historical damage
- Use of collected and processed data in profitability reporting, risk analyzes and in the internal model
- Ongoing follow-up on risk developments as well as quarterly forecasts for future risk development
- Correct pricing using statistical model tool including customer scoring tools
- Reinsurance cover that reduces the risk especially for disaster damage
- Ongoing follow-up on the risk picture and reinsurance coverage in the Risk Committee.

In order to maintain product and customer profitability, Topdanmark monitors changes in its customer portfolios. Provisions are recalculated and the profitability reports are updated in the same context on a monthly basis. Based on this reporting, trends in claim levels are carefully assessed and price levels may be adjusted if considered necessary.

In the private market segment, customer scoring is used and customers are divided into groups according to their expected profitability levels. The customer scoring has two roles. First it helps to maintain the balance between the individual customer's price and risk. Secondly it facilitates the fairness between individual customers by ensuring that no customers are paying too large premiums to cover losses from customers who pay too small premiums.

The historical profitability of major SME customers with individual insurance schemes is monitored using customer assessment systems.

In addition to the above described analysis Topdanmark continuously improves its administration systems to achieve more detailed data which in turn enables it to identify the claims trends at an earlier point in time and compile information on the constituent parts of the various types of claims.

The non-life risk scenarios can be found in the next table.

Non-Life Insurance Risk Scenarios Topdanmark Forsikring
31 December 2017 and 31 December 2016

Risk scenarios EURm after taxation and pension return tax	2017	2016
Non-life insurance		
Underwriting risk		
Combined ratio - 1bp increase	-9.4	-9.3
Provision risk		
Provision on own account - 1% increase	-13.1	-13.2
Storm claims up to DKK 5,100m	-10.5	-10.5

Reserve Risk and Its Management and Control

The insurance lines of business are divided into short-tail i.e. those lines where the period from notification until settlement is short and long-tail i.e. those lines where the period from notification until settlement is long. Examples of short-tail lines in Topdanmark Forsikring are building, personal property and comprehensive motor insurance. Long-tail lines relate to personal injury and liability such as workers' compensation, accident, motor third party insurance and commercial liability.

Composition of Topdanmark's Non-Life Overall Provisions for Outstanding Claims
31 December 2017 and 31 December 2016.

Provisions for outstanding claims, %	2017	2016
Short-tail	11.0	12.7
Annuity provisions in workers' compensation	23.0	24.3
Other claims provisions in workers' compensation	25.2	23.0
Accident	27.2	25.6
Motor personal liability	10.0	10.7
Commercial liability	3.5	3.6

Due to the longer period of claims settlement the long-tail lines of business are generally riskier than the short-tail lines. It is not unusual that claims in long-tail lines are settled three to five years after notification and in rare cases up to ten to fifteen years.

The reserve risk is calculated using Topdanmark's partial internal model for insurance risk. Workers' compensation claims provision has by far the biggest risk, followed by the other long-tail claims provisions which mainly consist of personal injury claims.

During such a long period of settlement, the levels of compensation could be significantly affected by changes in legislation, case-law or practice in the compensation of damages adopted by, for example, the Danish Labour Market Insurance which decides on compensation for injury and loss of earnings potential in all cases of serious industrial injuries. The practice adopted by the Danish Labour Market Insurance also has some impact on the levels of compensation for accident and personal injury within motor, liability and commercial liability insurance.

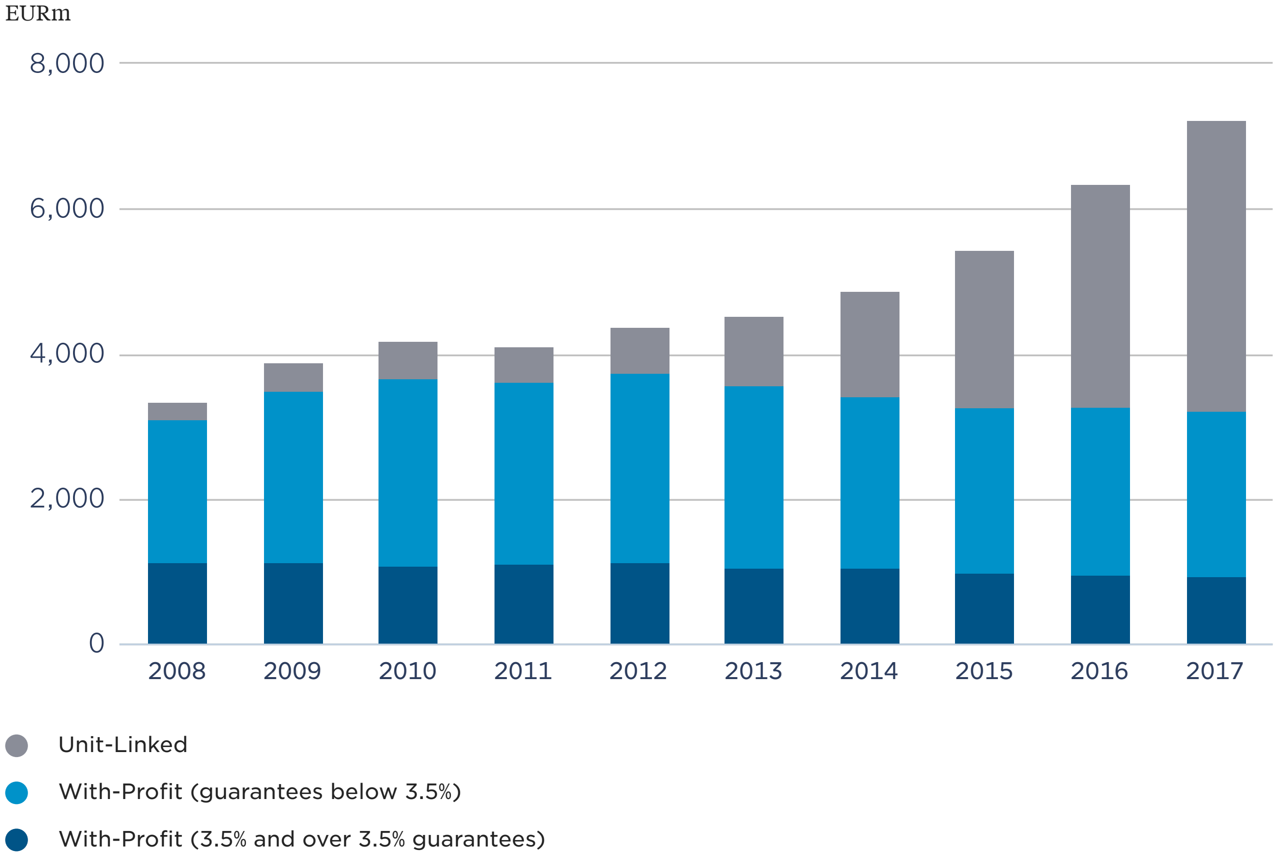
The provisioning risk represents mostly the ordinary uncertainty of calculation and claims inflation, i.e. an increase in the level of compensation due to the annual increase in compensation per policy being higher than the level of general indexation or due to a change in judicial practice/legislation. The sufficiency of the provisions is tested in key lines by calculating the provisions using alternative models as well, and then comparing the compensation with information from external sources.

The actuarial team has a continuous dialogue with the claims departments on any changes in the practices regarding new legislation, case law or compensation practices as well as on the impact of such changes on the routines used to calculate individual provisions.

Life Underwriting Performance and Risks

The development of the provisions for with profit and for unit-link business during the years 2008-2017 is illustrated in the graph below.

Development of With Profit and Unit-Linked Technical Provisions
Topdanmark, 2008–2017



During the latest two years, premiums were split between products as follows.

Sources of Gross Life Premiums
Topdanmark, 2017 and 2016

EURm	2017	2016
With-profits schemes	74.9	89.2
Unit-linked schemes	220.7	195.3
Group life	68.3	71.8
Regular premiums	**363.9**	**356.4**
With-profits schemes	52.9	63.5
Unit-linked schemes	691.3	578.2
Single Premiums	**744.2**	**641.7**
Gross premiums	**1,108.2**	**998.0**

The focus of new sales is on unit-linked schemes and their premiums are almost 83 per cent of the gross premium income. The above table also shows that single premium products are more common than regular premium products. However, the regular premiums are growing steadily while the single premiums are fluctuating more from year to year.

The risk inherent in the life business is first of all related to the with profit technical provisions. When the majority of new contracts are written as unit-linked contracts, the risk will not increase as much as the volume of premiums and total provisions.

In 2017, the investment return was sufficient to cover obligations to policyholders in all interest rate groups and hence the full risk return to shareholders' equity was recognized as income. Risk return on shareholders' equity together with other main components of life business result are shown in the table Result of Life Insurance, Topdanmark, 2017 and 2016.

Result of Life Insurance
Topdanmark, 2017 and 2016

EURm	2017	2016
Investment return on shareholders' equity	14.6	9.6
Sales and administration	-3.4	-5.7
Insurance risk	2.3	1.7
Risk premium	19.8	19.8
Profit on life insurance	**33.4**	**25.4**

The main risks of Topdanmark Livsforsikring can be summarized as follows:

- Limited loss-absorbing buffers combined with low interest rates environment
- Disability risk
- Longevity risk

Falling interest rates and, in particular, sustained low interest rates along with prolonged lives represent a significant risk scenario for insurers with guaranteed benefits as there will be a reduction of the individual bonus potentials used for loss absorption.

When an insured event occurs, the effect on the profit will depend on the size of loss absorbing capacity (LAC) of the reserves. When the loss absorbing capacity is higher than the losses, the customers themselves cover the losses.

Life Insurance Underwriting Risk Control

In general Topdanmark Livsforsikring has continuous focus on the solvency position, the changes in the individual risks and the development of the loss-absorbing buffers. The latter is important because over time it can level out the market and insurance risks within the individual risk groups. Hence, the loss-absorbing buffers are a crucial part of the with profit concept in leveling of yields and claims over time.

The scenario-based Solvency Capital Requirement is calculated quarterly. When deemed necessary, due to market developments, the frequency of calculation is increased and, if necessary, the number and type of scenarios are increased.

Trends in product claim levels are assessed on top of the calculation of the insurance provisions. Profitability models are applied systematically as a follow-up on customer and portfolio levels. This assessment is used to identify price adjustment needs.

Loss Absorbing Buffers in the Event of Low Interest Rates

Customers' individual and collective bonus potential together creates the loss absorbing buffers in life insurance against any losses incurred by customers on investment activities.

Low interest rates mean that the market value of the guarantees granted is high, and hence the related individual bonus potential is low. The lower the individual bonus potential, the higher the risk of any losses to be absorbed wholly or partially by shareholder's equity. If interest rates are high, the same losses could, to a larger degree, be absorbed by the bonus potential.

Declines in the collective bonus potential are most frequent, due to the investment return being lower than the annual addition of interest to deposits. Declines in collective bonus potential are also possible if interest rates are relatively high.

In order to protect shareholders' equity, in general it will be relevant to reduce market risks in the event of lower interest rates.

All policies have been split into contribution groups according to the guaranteed benefit scheme. For all contribution groups there are separate loss absorbing buffers and hence in each contribution group, the separate investment policy must be in line with risk taking capacity to ensure the ability to meet the guaranteed benefits. Market risk is adjusted continuously in accordance with the risk capacity of the contribution groups, and the movements in interest rates are monitored so that risk reducing actions can be taken when needed.

Disability

Disability risk is the risk of increased disability intensity or declines in the rates of resumption of work. Losses may incur due to an increase in disability frequency or due to inadequate health evaluation when the policy is written.

Extra costs, due to a permanent change in disability risk, will be partially covered by individual and collective bonus potential. The remainder affects profit/loss for the year and consequently shareholders' equity.

Longevity

Longevity risk is the risk that customers with life dependent policies, primarily annuities, live longer than expected. That will increase provisions for lifetime products. Extra costs, due to longer lifetimes, will be partially covered by individual and collective bonus potential. The remainder affects profit/loss for the year and consequently shareholders' equity.

Following risk reduction measures and methods are used in Topdanmark Livsforsikring:

- All policies in the average return environment are divided according to the granted benefit guarantee and the investment policy is organized to ensure the ability to honor the guarantees
- Market risk can be adjusted freely in relation to the individual customer groups' risk capacity
- Normal fluctuations in ROI and risk results in the average interest rate environment are captured by bonus potentials per contribution group
- The individual bonus potentials in the average return environment are protected by cross-border protection
- Reinsurance
- Prices for death and disability are adjusted continuously in relation to the market situation and the observed injury history
- New subscription basis changes as needed
- Establishment of business processes that ensure that the products are sold at the right price / risk mix

The life risk scenarios can be found in the next table.

Risk Scenarios in Life Insurance
Topdanmark, 31 December 2017 and 31 December 2016

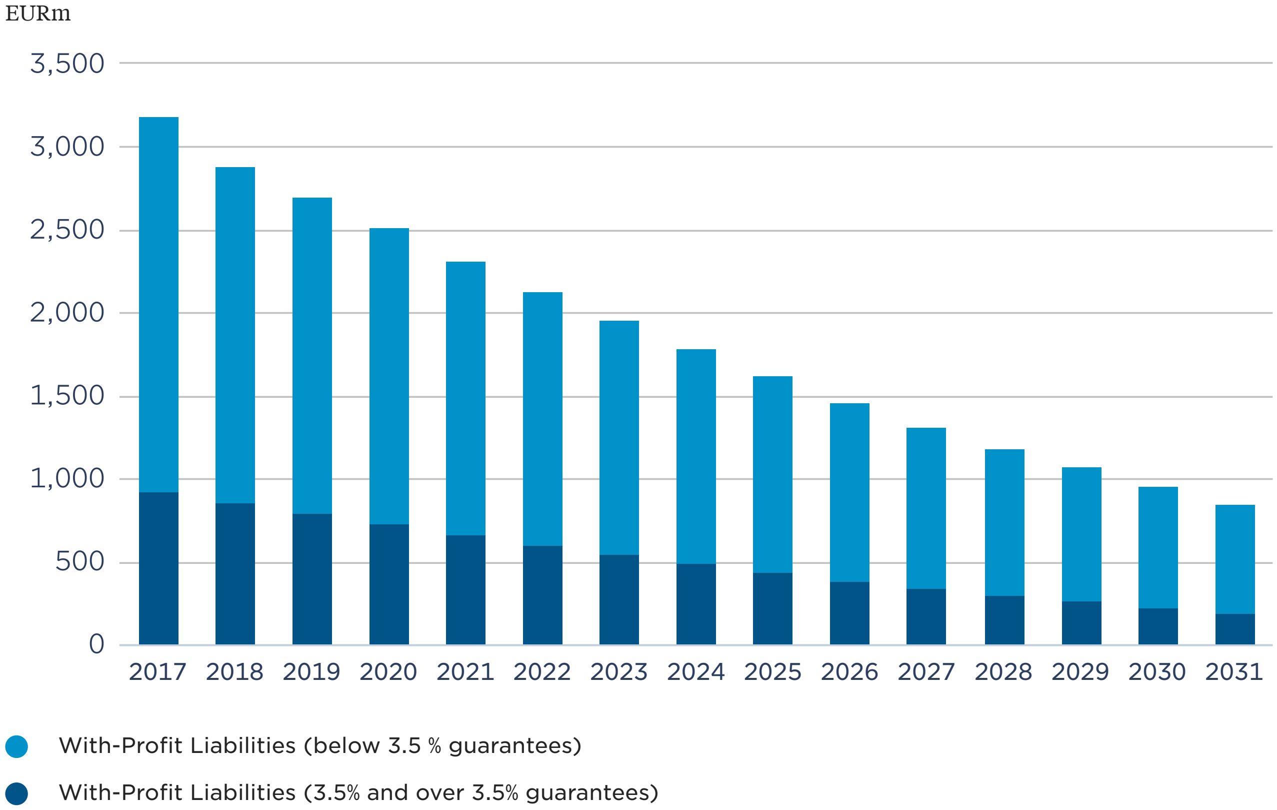
Risk scenarios EURm after taxation and pension return tax	2017	2016
Life insurance		
Disability intensity - 35% increase*	-1.4	-1.6
Mortality intensity - 20% decline	-3.7	-4.2

*35% increase first year, subsequently 25%, coincident with 20% decline in reactivation rates

To monitor effectivity of the above risk reduction methods over time Topdanmark Risk Committee continuously monitors the company's risk profile and reinsurance cover. Also forecasts are followed up.

The run-off profile of the life insurance with profit liabilities shows that the provisions on high guarantees are decreasing. New with profit policies are written, but only with a very low guaranteed accumulated return.

Forecast of Run-off With-Profit Liabilities
Topdanmark Livsforsikring, 31 December 2017 – 31 December 2031



Market Risks and Investment Performance

In general, the long term value creation shall be based mainly on the acceptance of insurance risks. However, to supplement the group's profit from its insurance activities, Topdanmark accepts a certain level of financial market risks as well, given its strong liquidity position and stable, high earnings from insurance operations. Hence, in addition to fixed income instruments Topdanmark has invested, among other things, in equities, properties and CDOs in order to improve the average investment return.

However, market risks shall be limited to the extent that is considered appropriate, even if it is highly probable that the company gains the profit even in the very unfavourable financial market scenarios. In addition, large risk exposures or highly correlated risks shall be covered to prevent unnecessary losses and market risks originating from insurance operations. The investment portfolio shall be managed in a way that market risk taking shall not endanger the normal operations or implementation of planned actions in unfavourable market conditions.

To reach the above general goals, the Investment Policy sets the company's objectives, strategies, organization and reporting practices on investments. The investment strategy is more precisely determined in terms of market risk limits and specific requirements for certain types of positions and sub-portfolios (risk appetite). The investment strategy is determined by the Board and revised at least once a year. Appropriate financial risk mitigation techniques are used.

When selecting the investment assets, a portfolio composition that matches the risk features of the corresponding liabilities is sought. The purpose of the policy is also to ensure that the company has implemented effectively the organization, systems and processes necessary to identify, measure, monitor, manage and report on investment risks to which it is exposed.

At the same time, the policy sets the framework for investment of customers' savings, schemes of right to bonus and link savings (customer funds) in Topdanmark Livsforsikring, so that the company can continue to offer attractive savings products to its clients with competitive returns in relation to the accepted investment risks.

In addition to Investment Policies, companies have a capital plan and a capital emergency plan if sudden changes occur in the asset or liability side.

When market risks are measured and managed, all exposures are included, regardless of whether they arise from active portfolio management on the investment side or from annuities which are considered as market risk.

Asset Allocations and Investment Performance - Topdanmark Group Excluding Life Insurance

As described earlier, in life insurance different contribution groups have their own investment strategies and their loss absorbing buffers and hence it is not relevant to assess allocations and returns of these assets in isolation to their respective contribution groups.

Hence, in the two below tables the assets' allocations and annual investment returns without assets covering life insurance liabilities are presented.

Investment Allocation, Topdanmark Group Excluding Life Insurance
31 December 2017 and 31 December 2016

	Topdanmark 31 Dec 2017		Topdanmark 31 Dec 2016	
Asset class	**Market value, EURm**	**Weight**	**Market value, EURm**	**Weight**
Fixed income total	**2,218**	**78%**	**2,081**	**77%**
Government and mortgage bonds	1,874	66%	1,672	62%
Credit bonds	6	0%	29	1%
Index linked bonds	38	1%	52	2%
CDOs	78	3%	75	3%
Money market securities and cash	223	8%	253	9%
Listed equity total	**127**	**4%**	**122**	**5%**
Danish equities	36	1%	40	1%
Equities outside Denmark	91	3%	82	3%
Alternative investments total	**187**	**7%**	**177**	**7%**
Real estate	145	5%	134	5%
Private equity	42	1%	43	2%
Assets related to I/A	**327**	**11%**	**310**	**12%**
Asset classes total	**2,859**	**100%**	**2,690**	**100%**

The exposure in equities outside Denmark and credit bonds has been adjusted by the use of derivatives. Private Equity also includes direct holdings in non-listed equities. The class of "Assets related to I/A" (illness/accident) comprises the investments in Topdanmark Livsforsikring, (the life insurance company) corresponding to the size of the illness/accident provisions.

The equity portfolios are well diversified and without major single positions, when associated companies are disregarded.

The main investment assets are government and mortgage bonds, which comprise primarily Danish government and mortgage bonds. The assets of this asset class are interest rate sensitive - to a significant extent equivalent to the interest rate sensitivity of the non-life insurance provisions. Consequently, the return on government and mortgage bonds should be assessed in connection with return and revaluation of non-life insurance provisions.

Credit bonds are composed of a well-diversified portfolio, primarily exposed to businesses in Europe and in the United States, predominantly in the investment grade segment.

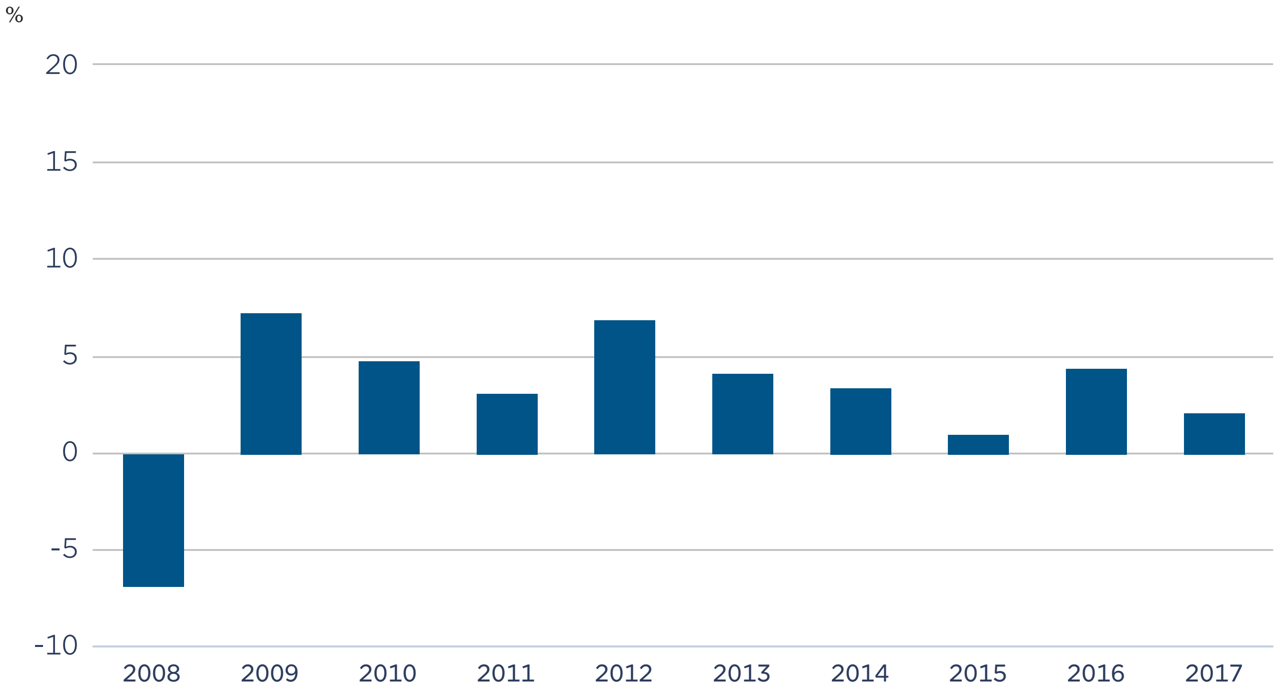
Index linked bonds comprise bonds – primarily Danish mortgage bonds – for which the coupon and principal are index-linked.

The CDO category primarily includes positions in CDO equity tranches. The underlying assets consist for the most part of senior secured bank loans, while the remaining part consists primarily of investment grade investments in corporate bonds. The real estate portfolio comprises mainly owner-occupied real estate.

Assets related to illness/accident insurance comprise the investments in Topdanmark Livsforsikring corresponding to the size of the illness/accident provisions.

The annual investment return for 2017 compared to earlier years is presented in the graph Annual Investment Returns at Fair Values, Topdanmark Group, Excluding Life, 2008-2017.

Annual Investment Returns at Fair Values
Topdanmark Group Excluding Life, 2008-2017



The investment return in the Topdanmark Group excluding life insurance was DKK 539 million in 2017 (DKK 910 million).

Investment Allocation: Life Insurance

The asset allocation covering life insurance liabilities over all contribution groups is presented in the below table.

Investment Allocation
Topdanmark Livsforsikring, 31 December 2017 and 31 December 2016

Asset class	Topdanmark 31 Dec 2017 Market value, EURm	Weight	Topdanmark 31 Dec 2016 Market value, EURm	Weight
Fixed income total	**2,021**	**66%**	**2,040**	**65%**
Government and mortgage bonds	1,614	52%	1,540	49%
Index linked bonds	129	4%	149	5%
Credit and emerging market bonds	278	9%	351	11%
Listed equity total	**489**	**16%**	**592**	**19%**
Listed shares	489	16%	592	19%
Alternative investments total	**702**	**23%**	**543**	**17%**
Land and buildings	498	16%	479	15%
Unlisted shares	152	5%	14	0%
Shares in associated companies	52	2%	50	2%
Other investments	**-127**	**-4%**	**-49**	**-2%**
Other investments assets	-107	-3%	-34	-1%
Derivates to hedge against the net change in assets and liabilities	-19	-1%	-15	-0%
Asset classes total	**3,085**	**100%**	**3,125**	**100%**

Assets total relates to the products with guarantees and profit sharing. The exposure in equities outside Denmark and credit bonds has been adjusted by the use of derivatives. Unlisted shares include Private Equity and Hedge funds. Other investments assets include money markets securities, cash and derivatives.

Market Risks of Balance Sheet

Interest Rate Risk

Interest rate risk exposure is net of assets, liabilities and derivative instruments whose carrying amount is dependent on the interest rate level. In regards to insurance liabilities Topdanmark is exposed to interest rate risk due to provisions for outstanding claims in non-life insurance and guaranteed benefits in life insurance.

Shifting the market yield curve upwards and downwards and/or changing its shape leads to changed market values of assets and derivatives and thus to unrealized losses / gains.

When assessing the value and sensitivity of insurance provisions Topdanmark uses the Solvency ll discount curve that has its basis on market yield curve with volatility adjustment (VA). The VA component of DKK yield curve comprises a corrective element based on the spreads of Danish mortgage bonds and European credit bonds. The VA component was 51bp at the end of 2016 and 30bp at end of 2017.

Generally, the interest rate risk is limited and controlled by investing in interest-bearing assets in order to reduce the overall interest rate exposure of the assets and liabilities to the desired level. Therefore the Danish Mortgage Bonds and Government bonds have a central role in the asset portfolios. To further decrease the interest rate sensitivity of balance sheet, swaps and standard swaptions have been used for hedging purposes.

Equity Risk

The Danish part of the equity portfolio is composed on the basis of OMXCCAP index. The rest of the equity holdings are in the foreign equity portfolio that is based on MSCI World DC in its original currency. As a net result Topdanmark Group's equity holdings are well-diversified.

Breakdown of Listed Equity Investments by Geographical Regions
Topdanmark Group, 31 December 2017 and 31 December 2016

	31 Dec 2017		31 Dec 2016	
Topdanmark	**%**	**EURm**	**%**	**EURm**
Denmark	20%	162	23%	176
Norway	1%	8	1%	8
Sweden	1%	8	1%	8
Finland	0%	0	0%	0
Western Europe	22%	177	19%	148
East Europe	0%	0	0%	0
North America	55%	438	55%	420
Latin America	0%	0	0%	0
Far East	0%	0	0%	0
Japan	0%	0	0%	0
Total		**793**		**761**

Real Estate Risk

The real estates are all located in Denmark, with the material part in the areas of Copenhagen and Århus. The holding on group level is diversified over office buildings and residential buildings.

Spread Risk

Most of Topdanmark's interest-bearing assets comprise of AAA rated Danish mortgage bonds and debt issued or guaranteed by top-rated European states. The risk of losses is considered to be minor due to the high credit quality of the issuers and because investments have been made at spreads in balance with the company's desired risk ratio levels. The portfolio is well diversified both geographically and with regard to type of debtor and therefore the exposure to the concentration of risks is insignificant.

Investment policy stipulates that the portfolio must be well-diversified also in counterparties and that the portfolio must not be particularly exposed to individual counterparties. The main source of spread risk is the government and mortgage bonds. Due to high allocation of these investments in the portfolios, spread risk is the most material source of market risk SCR. SCR was DKK 1,372 million on 31 December 2017.

Concentration Risk

Topdanmark's fixed income investments by rating classes are presented in the table Interest-bearing Assets by Rating, Topdanmark, 2017 and 2016.

Interest-bearing Assets by Rating, Topdanmark
31 December 2017 and 31 December 2016

Interest-bearing assets by rating, %	2017	2016
AAA+AA	77.8	77.8
A	2.9	2.7
BBB	0.6	0.3
<BBB	11.6	12.6
Money market deposits	7.1	6.7

The company has no significant concentrations on the investment side, except for the category "Treasury and mortgage bonds" that consists primarily of Danish government and AAA-rated Danish mortgage bonds. In terms of SCR the concentration risk was DKK 145 million on 31 December 2017.

As earlier described, these assets have an interest rate sensitivity that significantly corresponds to the interest rate sensitivity of the technical provisions.

Currency Risk

In practice the only source of currency risk is investment assets, because insurance liabilities are in Danish Krones. The currency risk is mitigated by derivatives and net exposures in different currencies are minor except in Euros.

Currency risk is assessed based on SCR. The value of base currency is shocked by 25 per cent against most of the currencies except 2.39 per cent against EUR where the largest exposure exists.

Currency Risk SCR was DKK 31 million on 31 December 2017.

Inflation Risk

Future inflation is implicitly included in a number of the models Topdanmark uses to calculate its provisions. The general principles regarding the inclusion of an allowance for inflation differs between Workers' compensation and illness/accident insurance. In the former the provisions are calculated on the basis of the expected future indexation of wages and salaries, and in latter on the basis of the expected net price index.

An expected higher future inflation rate would generally be included in the provisions with a certain time delay, while at the same time the result would be impacted by higher future indexation of premiums. In order to reduce the risk of inflation within workers' compensation and illness/accident insurance, Topdanmark uses index-linked bonds and derivatives to hedge a significant proportion of the expected cash flows sensitive to future inflation.

Market Risk Sensitivities

In the below table is a summary of selected market risks sensitivities. It can be seen from the table that the net effect of 1 percentage point parallel change in interest rates would be less than 10 per cent drop in equity or property prices.

Market Risk Sensitivities
Topdanmark, 31 December 2017 and 31 December 2016

Risk scenarios EURm After taxation and pension return tax		2017	2016
Market risk			
Interest-bearing assets	1 bp increase	-62.4	-79.5
Provisions for claims and benefits etc.	in effective interest rate	68.8	90.3
Index-linked bonds	5% loss	-2.8	-4.9
Equities	10% loss	-10.6	-11.0
CDOs < AA	10% loss	-8.0	-7.2
Properties	10% loss	-17.7	-16.7
Annual currency loss with an up to 2.5% probability		-0.8	-2.8

Liquidity Risk

Topdanmark Group has a strong liquidity position. Firstly, as premiums are paid prior to the beginning of the risk period the liquidity risk related to customers' payments is very limited. Secondly, the combination of insurance businesses is of a character in which it is highly unlike that liquidity shock could occur, because insurance liabilities are by their nature stable liabilities and in asset portfolios money market investments are complemented by a large portfolio of liquid listed Danish government and mortgage bonds.

Experience from quite significant and sudden movements in long-term interest rates have confirmed that liquidity of these assets is not significantly affected by market shocks.

The maturity structure of technical provisions is presented in the next table.

Cash Flows for Provisions
Topdanmark, 31 December 2017 and 31 December 2016

EURm	Book value	1 year	2-6 years	7-16 years	17-26 years	27-36 years	>36 years
Provisions for claims							
2016	1,774	543	692	382	171	74	23
2017	1,748	542	701	390	160	76	11
Life insurance provisions guarantees and profitsharing							
2016	3,286	354	994	1,411	663	219	72
2017	3,232	347	938	1,424	689	219	61

In the table the discounted cash flows related to the insurance activities are shown in general level. In cash flows for life insurance provisions, repurchase and rewrite to paid-up policies are included in 2017. Comparative figures for 2016 have not been adjusted. Life insurance provisions for unit-linked products are covered by corresponding investment assets and therefore not stated in the table.

Because of the above reasons Topdanmark's liquidity risk is primarily related to the parent company Topdanmark A/S.

Topdanmark A/S finances its activities and dividend programme by receiving dividend from its subsidiaries.

Further financing requirements are covered by short term money market loans, typically with a maturity of one month or less.

Counterparty Default Risks

The default risk related to fixed income and equity investments is covered by spread-risk and equity-risk models in SCR calculations and hence they are not discussed in this context. Topdanmark is exposed to counterparty risk in both its insurance and investment activities.

The main sources of counterparty risk are deposits made to individual banks, derivative contracts with banks and current receivables from reinsurance companies with the addition of potential receivables that will arise in case of a 200-year event of disaster. Topdanmark's counterparty risk is assessed by the standard formula SCR, which was DKK 158 million on 31 December 2017.

Reinsurance

Within insurance activities the reinsurance companies' ability to pay is the most important risk factor. Topdanmark minimises this risk by primarily buying reinsurance cover from reinsurance companies with a minimum rating of A- and by spreading reinsurance cover over many reinsurers. Accordingly, almost all of its storm cover has been placed with various reinsurance companies with rating A- or better.

For reinsurance counterparties, the Board approves security guidelines for how large a portion of a reinsurance contract can be placed per a separate reinsurer. This portion is dependent on the reinsurer's rating as well as on Topdanmark’s own assessment of the reinsurer. Typically the largest risk concentrations may occur in case of catastrophe, including storms and cloudbursts, through one or more single major disaster events.

Financial Derivative Activities

To limit the counterparty risk of financial contracts, the choice of counterparties is restrictive, and collateral is required when the value of the financial contracts exceeds the predetermined limits. The size of the limits depends on the counterparty's credit rating and the terms of the contract.

Operational Risks

The Board of Directors has set the overall principles and framework for how to organize internal control activities and how to ensure independency between the various organizational functions.

These organizational functions include business areas and other functions that have ongoing responsibility for managing and limiting operational risks and thus minimizing the risk of errors or offenses which have economic and reputational loss consequences for the company. Full organizational independence is not required if it is not possible to organize it or if it is considered appropriate not to have full independence. In case there is no established full organizational independence, there is a requirement for compensatory checks.

With well-documented business practices and procedures as well as effective control environment, Topdanmark minimizes the risk of errors in internal processes and insurance fraud. There are contingency plans for the most important areas. In addition, business practices and procedures in all critical areas are continuously reviewed by Internal Audit. Internal Audit assesses risks and may make recommendations for limiting individual risks.

Topdanmark continuously develops its IT systems. Responsibility for risk management in this connection lies with the responsible business entities. Projects must always prepare a risk assessment containing a description of risks, possible consequences and measures to limit these risks.

Topdanmark monitors and regularly reports on operational risks. For this purpose the company has a process of recording operational risk events. The events are collected centrally into a register and communicated further in the management system. This way the organization can learn from its errors.

Topdanmark has numerous documents in which instructions regarding operational risks are given. The most important ones are Policy and Guidelines for Operational Risks, Compliance and Internal Control, Information Security Policy, IT-Preparedness Strategy and IT-Preparedness plan.

Operational risks are included as part of Topdanmark's ORSA and reported to the Risk Committee in Topdanmark's Risk Registry.

Capitalization

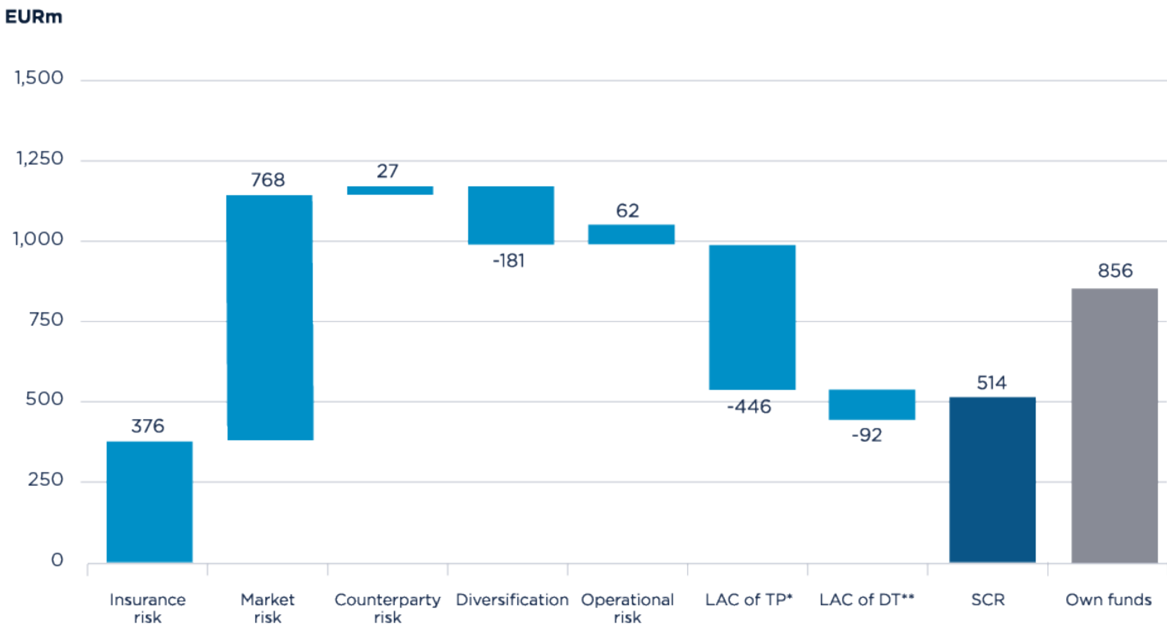
Solvency Capital Requirement

In Topdanmark Group statutory Solvency Capital Requirement is calculated as follows:

- Topdanmark Forsikring A/S calculates most of its non-life and health risks and their respective capital requirement by model that has been developed in-house. Other risks and their respective SCRs are calculated by Solvency II standard formula (SF). Then these module specific SCR´s are used as inputs to calculate company's SCR. This calculation process is called Partial Internal Model (PIM) and it has been approved by the Danish Financial Supervisory Authority (DFSA). Topdanmark Livsforsikring A/S and Nykredit Liv A/S calculate their module specific SCRs and total SCR using solely SF.
- The DFSA has permitted Topdanmark to use the volatility adjusted Solvency II interest rate curve.
- Topdanmark Group SCR is calculated by PIM and module specific SCRs of companies are used as inputs.

When Topdanmark applies its internal model for non-life insurance the PIM SCR for Topdanmark Group is DKK 710 million lower than respective figure if Topdanmark would have used solely SF. Because SF SCR figures of Topdanmark Group are used as inputs when Sampo Group SCR is calculated, also in this context the respective SF SCR figures are disclosed. Hence, separate SF SCR figures in below table are gross figures for risks and the effect of LAC of TP is shown as one figure. However, in Topdanmark's own SCR disclosure, company concentrates on PIM figures that are net figures to give more accurate picture of risks. Later in its Solvency and Financial Condition Report Topdanmark also discloses its Standard Formula figures. The SF solvency requirement and its components at year end 2017 was EUR 514 million as presented below and as reported to the DFSA. The reported SCR is the same whether it is calculated on gross or on net basis.

Topdanmark's Solvency
31 December 2017



* Loss absorbing capacity of technical provisions
** Loss absorbing capacity of deferred taxes

Own Funds

The purpose of the capital plan is - based on Topdanmark's strategy and risk appetite - to estimate future capital base, or own funds and solvency capital requirements, assuming that companies continue their operations in line with their own expectations. The future capital base is affected by earnings, capital expansion, changes in subordinated loan instruments or risk transfers using for example reinsurance. The capital base estimate is updated with the latest forecast at the time for the next 5 years.

At the company and group level, the starting point of eligible own funds is equity that is adjusted by some corrective items of which the most significant are:

Own Funds:

Shareholders' equity
- Proposed dividend
+ Deferred tax on security funds
+ Profit margin
- Intangible assets
+ Tax effect
+ Usable share, subordinated loan Tier 1 (max. 20% of Tier 1 capital)
+ Usable share, subordinated notes (max. 50% of SCR)
Own funds

Dividends are deducted on the balance sheet date. Extraordinary dividends are deducted when decided by the Board of Directors on the basis of authorization from the general meeting.

At the end of 2017, Topdanmark's own funds were DKK 6,370 million (DKK 6,348 million) as presented in the table Topdanmark's Eligible Own Funds, 31 December 2017 and 31 December 2016.

Topdanmark's Eligible Own Funds
31 December 2017 and 31 December 2016

Topdanmark		EURm 2017	EURm 2016
Tier 1	**Total**	**674.3**	**670.3**
	Ordinary Share Capital	12.1	12.8
	Reconciliation Reserve	608.5	602.4
	Subordinated Liabilities	53.7	55.1
Tier 2	**Total**	**181.2**	**182.4**
	Subordinated Liabilities	181.2	182.4
	Untaxed reserves	0.0	0.0
Tier 3	**Total**	**0.0**	**0.0**
	Deferred tax assets	0.0	0.0
Eligible own funds, consolidation method		**855.6**	**852.7**

Eligible own funds include the following Solvency II Compliant Subordinated Liabilities of Topdanmark as of 31 December 2017. Sampo Group's holdings in these assets are:

Solvency II Compliant Subordinated Liabilities of Topdanmark
31 December 2017

Issuer	Instrument	Nominal amount	Carrying amount in EUR	First Call	Tiering	In Sampo's portfolio
Topdanmark Forsikring A/S (Denmark)	10NC5	DKK 500 000 000	67,051,970	11.12.2020	Tier 2	DKK 135 000 000
Topdanmark Forsikring A/S (Denmark)	10NC5.5	DKK 850 000 000	114,172,118	11.06.2021	Tier 2	DKK 270 000 000
Topdanmark A/S (Denmark)	PerpNC5	DKK 400 000 000	53,728,055	23.11.2022	Tier 1	DKK 120 000 000
			234,952,143			

Mandatum Life Group

Mandatum Life operates in Finland and in the Baltic countries and offers savings and pension policies with life risk features as well as policies covering mortality, morbidity and disability risks.

Mandatum Life is a leading pension provider in corporate segment which is the cornerstone in Mandatum Life's customer strategy. Management and personnel of these corporate customers comprise major highly net worth individual and retail customer potential for other focus business areas e.g. wealth management and unit-linked business and life and health risk business. During last few years Mandatum Life has extended its business area outside the life insurance licence e.g. to mutual fund and consulting business, but these areas are still small from performance and risk management point of view.

Existing with profit liabilities and assets backing these liabilities are still the most critical areas from risk management point of view. Mandatum Life's strategy is to maintain a sufficiently strong solvency position, which makes it possible to seek a higher long-term investment return than average guarantees.

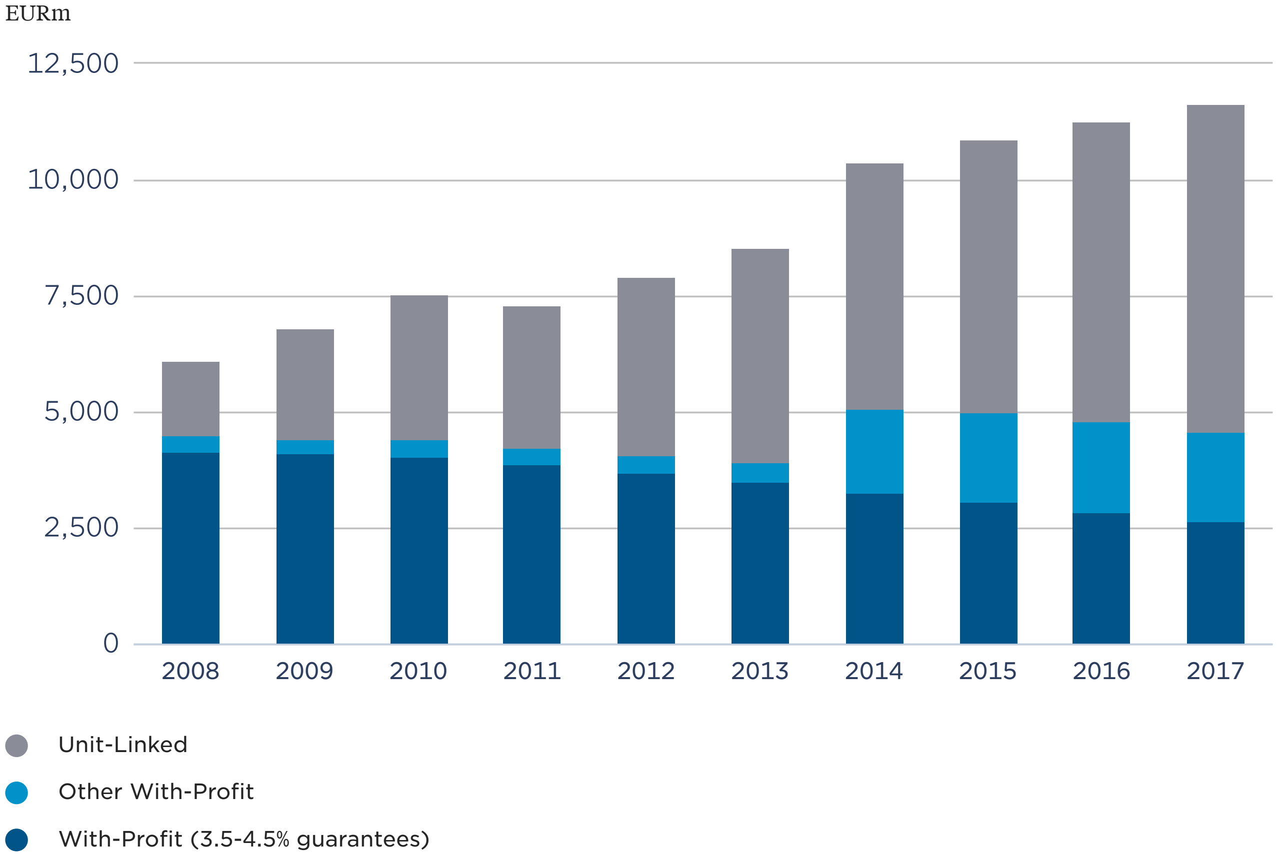
Underwriting Risks and Performance

In this section the underwriting risks and performance as well as the development of technical provisions are presented. Further details of technical provisions can be found in Appendix 5 (Valuation for solvency purposes).

The unit-linked business has been Mandatum Life's main focus area since 2001. Since then the trend of unit-linked technical provisions has been upward and the average annual growth in unit-linked technical provisions has been over 20 per cent per annum. Due to the nature of the unit-linked business, volatility between the years has been relatively high. Around EUR 3,100 million of current unit-linked liabilities totaling EUR 7,066 million were sold through Danske Bank. These liabilities, together with around EUR 200 million of with profit liabilities, will be transferred to Danske Bank A/S. Transfer date is expected to be before year end 2018.

In contrast to the unit-linked trend, the trend of with profit technical provisions has been downward since 2005 (with the exception of year 2014 when group pension portfolio from Suomi Mutual was transferred to Mandatum Life). In particular, the parts of technical provisions with the highest guarantees (4.5 per cent and 3.5 per cent) have decreased. The development of with profit and unit-linked portfolios is presented in the figure Development of With Profit and Unit-linked Technical Provisions, Mandatum Life, 2008–2017.

Development of With Profit and Unit-Linked Technical Provisions
Mandatum Life, 2008–2017



The above mentioned group pension portfolio transferred from Suomi Mutual and related assets are separated from the rest of the Mandatum Life balance sheet into a segregated group pension portfolio. The segregated group pension portfolio has its own profit sharing rules, investment policy and asset liability management committee. The with profit liabilities other than in the segregated group pension portfolio are hereafter referred to as the "original" with profit liabilities.

During the year 2017 insurance liabilities developed as planned. Unit-linked business increased and with profit liabilities with the highest guarantees decreased. The technical provisions with the highest guarantees fell by EUR 226 million. In total the with profit technical provisions decreased by EUR 248 million and is EUR 4,573 million due to increased discount rate reserves.

The development of insurance liabilities during 2017 is shown in the table Analysis of the Change in Provisions before Reinsurance, Mandatum Life, 2017.

Analysis of the Change in Provisions before Reinsurance

Mandatum Life, 31 December 2017

EURm	Liability 2016	Premiums	Claims paid	Expense charges	Guaranteed interest	Bonuses	Other	Liability 2017	Share %
Mandatum Life									
Unit-linked, excl. Baltic	**6,279**	**827**	**-544**	**-70**	**0**	**2**	**407**	**6,901**	**59%**
Individual pension insurance	1,313	60	-18	-15	0	0	69	1,411	12%
Individual life	2,346	243	-219	-22	0	0	143	2,491	21%
Capital redemption operations	1,977	454	-304	-25	0	0	130	2,231	19%
Group pension	643	71	-4	-9	0	2	65	768	7%
With profit and others, excl. Baltic	**4,804**	**116**	**-452**	**-35**	**131**	**1**	**-7**	**4,558**	**39%**
Group pension insurance. segregated portfolio	**1,142**	**4**	**-59**	**-1**	**24**	**0**	**-45**	**1,065**	**9%**
Basic liabilities. guaranteed rate 3.5%	715	4	-59	-1	24	0	5	687	6%
Reserve for decreased discount rate (3.5% -> 0.50%)	275	0	0	0	0	0	-14	261	2%
Future bonus reserves	153	0	0	0	0	0	-36	117	1%
Group pension	**2,117**	**35**	**-208**	**-6**	**67**	**1**	**-9**	**1,997**	**17%**
Guaranteed rate 3.5%	1,885	4	-179	-3	64	0	-27	1,744	15%
Guaranteed rate 2.5%. 1.5% or 0.0 %	232	31	-29	-3	4	0	18	253	2%
Individual pension insurance	**899**	**10**	**-139**	**-5**	**33**	**0**	**26**	**825**	**7%**
Guaranteed rate 4.5%	695	6	-86	-4	28	0	-16	624	5%
Guaranteed rate 3.5%	137	3	-27	-1	4	0	17	134	1%
Guaranteed rate 2.5% or 0.0%	67	1	-27	0	1	0	26	67	1%
Individual life insurance	**180**	**32**	**-33**	**-10**	**6**	**0**	**-12**	**162**	**1%**
Guaranteed rate 4.5%	58	4	-6	-1	3	0	-4	54	0%
Guaranteed rate 3.5%	86	10	-11	-3	3	0	-5	80	1%
Guaranteed rate 2.5% or 0.0%	35	18	-16	-6	0	0	-3	28	0%
Capital redemption operations	**28**	**0**	**-2**	**0**	**0**	**0**	**0**	**26**	**0%**
Guaranteed rate 3.5%	0	0	0	0	0	0	0	0	0%
Guaranteed rate 2.5% or 0.0%	28	0	-2	0	0	0	0	26	0%
Future bonus reserves	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0%**
Reserve for decreased discount rate	**273**	**0**	**0**	**0**	**0**	**0**	**52**	**325**	**3%**
Longevity reserve	**105**	**0**	**0**	**0**	**0**	**0**	**0**	**105**	**1%**
Assumed reinsurance	**2**	**1**	**-1**	**0**	**0**	**0**	**-2**	**1**	**0%**
Other liabilities	**59**	**34**	**-11**	**-13**	**0**	**0**	**-18**	**51**	**0%**
Total, excl. Baltic	**11,083**	**943**	**-996**	**-104**	**131**	**2**	**399**	**11,459**	**98%**
Baltic	**178**	**24**	**-27**	**-3**	**1**	**0**	**6**	**180**	**2%**
Unit-linked liabilities	161	21	-23	-2	0	0	9	165	1%
Other liabilities	17	3	-3	0	1	0	-2	15	0%
Mandatum Life group total	**11,261**	**967**	**-1,023**	**-107**	**132**	**2**	**406**	**11,638**	**100%**

In most of the original with profit policies the guaranteed interest rate is 3.5 per cent. In individual policies sold in Finland before 1999, the guaranteed interest rate is 4.5 per cent, which is also the statutory maximum discount rate of these policies. Mandatum Life has sold policies with lower guaranteed rates as well but their share is small.

With respect to with profit policies with the 4.5 per cent guaranteed rate, the maximum discount rate used when discounting technical provisions has been decreased to 3.5 per cent over the lifetime of these policies. As a result, technical provisions were supplemented by a reserve of EUR 43 million at the end of 2017 (EUR 48 million in 2016).

In addition, there are reserves for years 2017-2021 to lower interest rates of with profit liabilities as follows:

- EUR 264 million has been reserved to lower the interest rate to 0.25 per cent for years 2018-2020; and

- EUR 18 million for the year 2021 to lower the interest rate to 2.75 per cent.

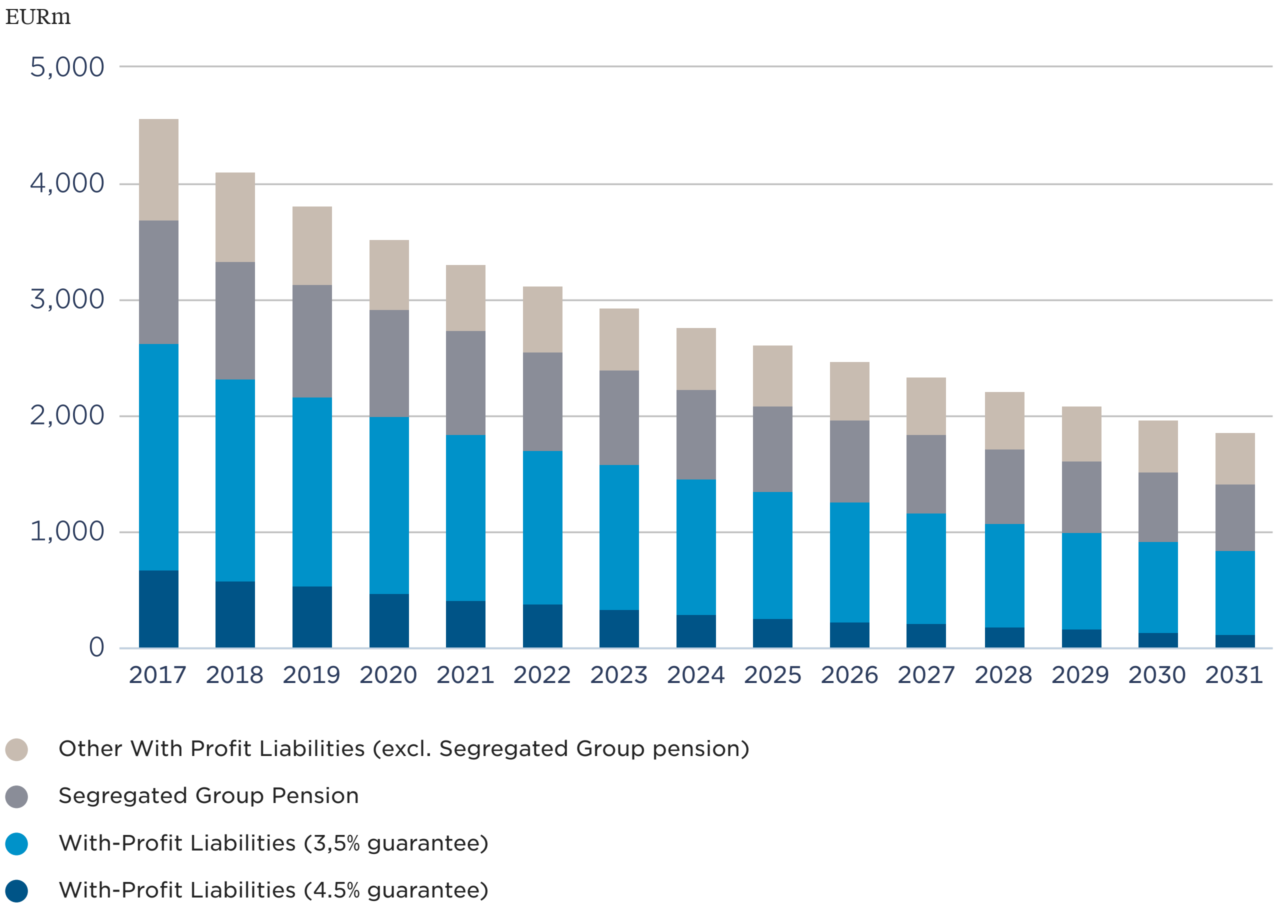
In total, Mandatum Life has set up an extra reserve of EUR 325 million as part of the original insurance portfolio's technical provisions.

The guaranteed interest for the segregated group pension policies is mainly 3.5 per cent. More important from a risk management point of view is that the discount rate of liabilities is 0.50 per cent and related discount rate reserve EUR 261 million (275). The future bonus reserve has an important role in the risk management of the segregated group pension portfolio. The reserve amounts to EUR 117 million, which can be used to cover possible investment losses or to finance possible changes in the discount rate of segregated technical provisions.

The decreasing trend of with profit liabilities is expected to continue. Liabilities with the highest guarantees and highest capital consumption are expected to decrease from EUR 2,635 million to below EUR 900 million during the remaining Solvency II transitional period of the technical provision (1 January 2018–31 December 2031). Duration of segregated group pension portfolio is around 11 years and duration of original with profit portfolio is around 10 years.

The figure Forecast of With Profit Liabilities, 31 December 2017–31 December 2031 shows the expected trend of existing with profit liabilities.

Forecast of With Profit Liabilities
Mandatum Life, 31 December 2017-31 December 2031



Biometric Risks

Mandatum Life's main biometric risks are longevity, mortality and disability. In general the long duration of policies and restriction of Mandatum Life's right to change policy terms and conditions and tariffs increases biometric risks. A definition of the biometric risk can be found in Appendix 2 (Risk Definitions). If the premiums turn out to be inadequate and cannot be increased, technical provisions have to be supplemented by an amount corresponding to the increase in expected losses.

Longevity risk is the most critical biometric risk in Mandatum Life. Most of the longevity risk arises from the with profit group pension portfolio. With profit group pension policies have mostly been closed for new members for years and due to this the average age of members is relatively high, almost 70 years. In the unit-linked group pension and individual pension portfolio the longevity risk is less significant because most of these policies are fixed term annuities including death cover compensating the longevity risk.

The annual longevity risk result and longevity trend is analyzed regularly. For the segregated group pension portfolio, the assumed life expectancy related to the technical provisions was revised in 2014 and for the other group pension portfolios in 2002 and 2007. In total, these changes increased the 2017 technical provision by EUR 105 million (105) including a EUR 87 million longevity reserve for the segregated group pension portfolio. The cumulative longevity risk result has been positive since these revisions. The longevity risk result of group pension for the year 2017 was EUR 6.8 million (2.9).

The mortality risk result in life insurance is positive. A possible pandemic is seen as the most significant risk that could adversely affect the mortality risk result.

The insurance risk result of other biometric risks has been profitable overall, although the different risk results vary considerably. In the longer term, disability and morbidity risks are mitigated by the company's right to raise insurance premiums for existing policies in case the claims experience deteriorates.

The table Claim Ratios after Reinsurance, Mandatum Life, 2017 and 2016 shows the insurance risk result in Mandatum Life's Finnish life insurance policies. The ratio of the actual to expected claims costs was 76 per cent in 2017 (79). Sensitivity of the insurance risk result can also be assessed on the basis of the information in the table. For instance the increase of mortality by 100 per cent would increase the amount of benefit payments from EUR 12 million to EUR 24 million.

Claim Ratios After Reinsurance

Mandatum Life, 2017 and 2016

	2017			2016		
EURm	**Risk income**	**Claim expense**	**Claim ratio**	**Risk income**	**Claim expense**	**Claim ratio**
Life insurance	**47.6**	**23.5**	**49%**	**43.2**	**21.2**	**49%**
Mortality	29.0	12.0	41%	24.8	11.8	48%
Morbidity and disability	18.6	11.5	62%	18.4	9.4	51%
Pension	**85.6**	**77.5**	**91%**	**80.8**	**76.2**	**94%**
Individual pension	12.8	13.5	105%	12.0	12.8	107%
Group pension	72.8	64.0	88%	68.8	63.4	92%
Mortality (longevity)	68.2	61.4	90%	63.9	61.0	95%
Disability	4.6	2.6	57%	4.9	2.4	49%
Mandatum Life	**133.2**	**101.0**	**76%**	**124.0**	**97.4**	**79%**

The underwriting portfolio of Mandatum Life is relatively well diversified and does not include any major concentration of biometric risks. To further mitigate the effects of possible risk concentrations, Mandatum Life has catastrophe reinsurance in place.

In general biometric risks are managed by careful risk selection, by setting prices to reflect the risks and costs, by setting upper limits for the protection granted and by use of reinsurance. Mandatum Life's Underwriting Policy sets principles for risk selection and limits for sums insured. The Reinsurance Policy governs the use of Reinsurance. The Board approves the Underwriting policy, Reinsurance Policy, pricing guidelines and the central principles for the calculation of technical provisions.

The Insurance Risk Committee is responsible for maintaining the Underwriting Policy and monitoring the functioning of the risk selection and claims processes. The Committee also reports all deviations from the Underwriting Policy to the RMC. The Insurance Risk Committee is chaired by the Chief Actuary who is responsible for ensuring that the principles for pricing policies and for the calculation of technical provisions are adequate and in line with the underwriting and claims management processes.

Reinsurance is used to limit the amount of individual mortality and disability risks. The Board of Directors annually approves the Reinsurance Policy and determines the maximum amount of risk to be retained on the company's own account. The highest retention of Mandatum Life is EUR 1,5 million per insured. Mandatum Life has catastrophe cover to mitigate the effect of possible catastrophes.

The risk result is followed actively and thoroughly analyzed annually. Mandatum Life measures the efficiency of risk selection and the adequacy of tariffs by collecting information about the actual claims expenditure for each product line and each type of risk and comparing it to the claims expenditure assumed in insurance premiums of every risk cover.

Technical provisions are analyzed and the possible supplemental needs are assessed regularly. Assumptions related to technical provisions are reviewed annually. The adequacy of the technical provisions is tested quarterly. Tariffs for new policies are set and the Underwriting Policy and assumptions used in calculating technical provisions are updated based on adequacy tests and risk result analysis. Tariffs and prices, as well as the reinsurance principles and reserving principles are reviewed and approved annually by the Board of Directors of Mandatum Life.

Policyholder Behavior and Expense Risks

From an Asset and Liability Management point of view surrender risk is not material because in Mandatum Life around 90 per cent of with profit technical provisions consist of pension policies in which surrender is possible only in exceptional cases. Surrender risk is therefore only relevant in individual life and capital redemption policies of which the related technical provisions amounts to less than 5 per cent (below EUR 200 million) of the total with profit technical provisions. Furthermore, the supplements to technical provisions are not paid out at surrender which also reduces the surrender risk related to the with profit policies. Due to the limited surrender risk, the future cash flows of Mandatum Life's insurance liabilities are quite predictable.

Policy terms and tariffs cannot usually be changed materially during the lifetime of the insurance, which increases the expense risk. The main challenge is to keep the expenses related to insurance administrative processes and complex IT infrastructure at an effective and competitive level. In year 2017, the expense result of Mandatum Life Group was EUR 33 million (26). Mandatum Life does not defer insurance acquisition costs. Since 2012 the expense result has grown significantly, especially due to increased fee income from unit-linked business, as presented in the table Expense result, Mandatum Life Group, years 2008-2017.

Expense Result
Mandatum Life Group, years 2008-2017

Year	Expense result, EURm
2017	33.2
2016	26.1
2015	26.8
2014	19.6
2013	15.3
2012	6.8
2011	9.8
2010	7.8
2009	5.2
2008	7.3

Market Risks and Investment Performance

This section covers market risk related to the Mandatum Life's with profit business i.e. that part of the business where Mandatum Life carries investment risk.

In Mandatum Life, the approach to market risk management is based on an analysis of technical provisions' expected cash flows, interest level and current solvency position. A common feature for all with profit technical provisions is the guaranteed rate and bonuses. The cash flows of Mandatum Life's technical provisions are relatively well predictable because in most of the company's with profit policies, surrenders and extra investments are not possible.

Mandatum Life's market risks arise mainly from equity investments and interest rate risk related to fixed income assets and insurance liabilities with a guaranteed interest rate. The most significant interest rate risk in the life insurance business is that fixed income investments will not, over a long period of time, generate a return at least equal to the guaranteed interest rate of technical provisions. The probability of this risk increases when market interest rates fall and stay at a low level. The duration gap between balance sheet's technical provisions and fixed income investments is constantly monitored and managed. Control levels based on internal risk capacity model are used to manage and ensure adequate capital in different market situations

Mandatum Life has prepared for low interest rates on the liability side by e.g. reducing the minimum guaranteed interest rate in new contracts and by supplementing the technical provisions by applying a lower discount rate. In addition, existing contracts have been changed to accommodate improved management of reinvestment risk. Guarantees and other main features of with profit liabilities are presented in Section Underwriting risks and performance.

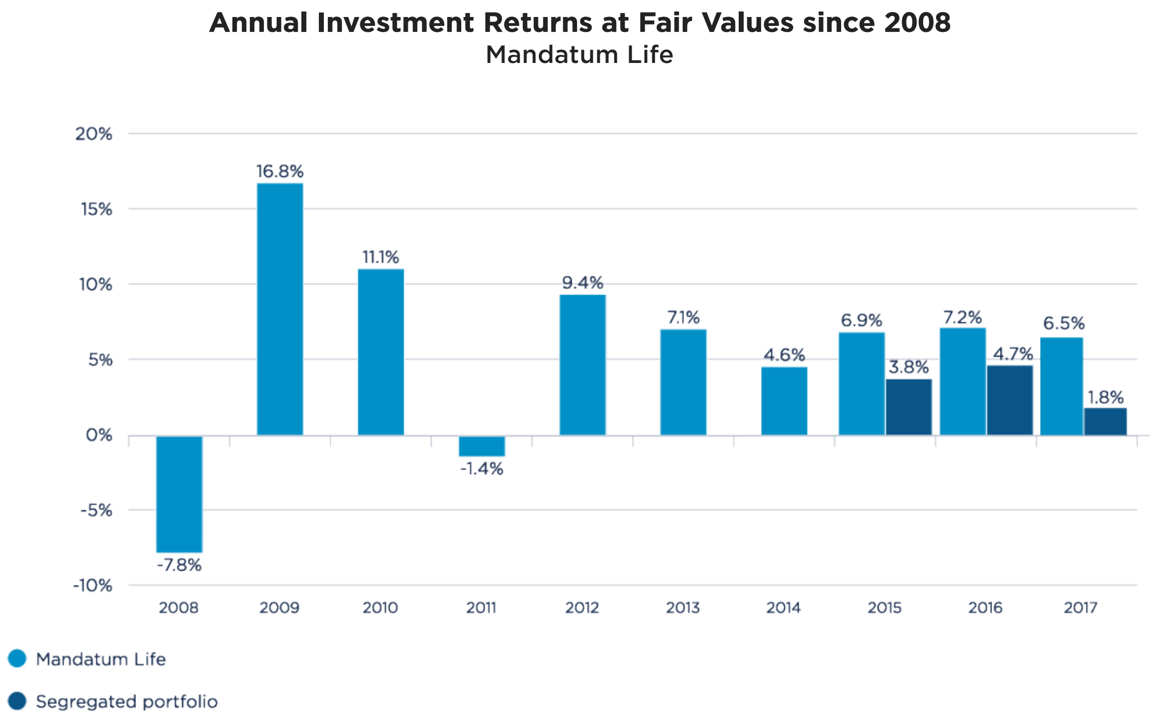
Fixed income investments and listed equity instruments form a major part of the investment portfolio, but the role of alternative investments - real estate, private equity, biometric and other alternative investments – is also material being 11.7 per cent.

Investment allocations and average maturities of fixed income investments as at year-end 2017 and 2016 are presented in the table Investment Allocation Mandatum Life, 31 December 2017 and 31 December 2016.

Investment Allocation
Mandatum Life, 31 December 2017 and 31 December 2016

	Mandatum Life 31 Dec 2017			Mandatum Life 31 Dec 2016		
Asset Class	**Market value, EURm**	**Weight**	**Average maturity, years**	**Market value, EURm**	**Weight**	**Average maturity, years**
Fixed income total	**3,953**	**63%**	**2.5**	**3,938**	**60%**	**2.7**
Money market securities and cash	904	14%	0.0	859	13%	0.5
Government bonds	54	1%	2.5	64	1%	5.1
Credit bonds, funds and loans	2,994	48%	3.2	3,009	46%	3.3
Covered bonds	163	3%	2.0	178	3%	2.6
Investment grade bonds and loans	1,793	29%	2.8	1,586	24%	2.7
High-yield bonds and loans	760	12%	3.2	884	13%	3.7
Subordinated / Tier 2	55	1%	7.3	52	1%	8.1
Subordinated / Tier 1	223	4%	6.6	310	5%	4.7
Hedging swaps	0	0%	-	0	0%	-
Policy loans	0	0%	1.8	6	0%	1.9
Listed equity total	**1,578**	**25%**	**-**	**1,737**	**26%**	**-**
Finland	494	8%	-	623	9%	-
Scandinavia	0	0%	-	1	0%	-
Global	1,084	17%	-	1,114	17%	-
Alternative investments total	**731**	**12%**		**907**	**14%**	**-**
Real estate	214	3%	-	278	4%	-
Private equity*	226	4%	-	269	4%	-
Biometric	16	0%	-	26	0%	-
Commodities	0	0%	-	0	0%	-
Other alternative	274	4%	-	334	5%	-
Trading derivatives	**2**	**0%**	**-**	**0**	**0%**	**-**
Asset classes total	**6,263**	**100%**	**-**	**6,582**	**100%**	**-**
FX Exposure, gross position	**679**	**0%**	**-**	**833**	**-**	**-**

*Private Equity also includes direct holdings in non-listed equities



Market Risks of Fixed Income and Equity Exposures

Fixed income and equity exposures are presented by Sector, Asset Class and Rating together with counterparty risk exposures relating to reinsurance and derivative transactions.

Counterparty default risks are described in more detail in section Counterparty Default Risks. Due to differences in the reporting treatment of derivatives, the figures in the table may not be fully comparable with other tables in this annual report.

Exposures by Sector, Asset Class and Rating

Mandatum Life, 31 December 2017

EURm	AAA	AA+ - AA-	A+ - A-	BBB+ - BBB-	BB+ - C	D	Non-rated	Fixed income total	Listed equities	Other	Counterparty risk	Total	Change 31 Dec 2016
Basic Industry	0	0	13	8	24	0	38	82	63	0	0	145	-124
Capital Goods	0	0	38	10	0	0	101	148	160	0	0	308	36
Consumer Products	0	24	104	79	30	0	33	270	238	0	0	508	-77
Energy	0	27	0	0	0	0	18	45	7	0	0	52	-28
Financial Institutions	0	481	1,463	244	24	0	0	2,212	38	1	2	2,253	191
Governments	0	0	0	0	0	0	0	0	0	0	0	0	-18
Government Guaranteed	0	0	0	0	0	0	0	0	0	0	0	0	0
Health Care	0	29	17	8	42	0	58	153	47	0	0	200	11
Insurance	0	0	1	52	0	0	0	54	3	8	0	64	-14
Media	0	0	14	0	0	0	16	30	0	0	0	30	-11
Packaging	0	0	0	0	19	0	9	28	1	0	0	28	-40
Public Sector, Other	0	37	42	0	0	0	0	80	0	0	0	80	9
Real Estate	0	0	1	32	0	0	37	70	0	185	0	255	-56
Services	0	0	0	20	49	0	66	135	86	0	0	221	-10
Technology and Electronics	15	0	44	0	27	0	11	96	119	0	0	215	-17
Telecommunications	0	0	0	45	8	0	16	69	32	0	0	102	-6
Transportation	0	0	4	3	11	0	8	26	27	0	0	53	9
Utilities	0	2	1	115	25	0	0	142	0	0	0	142	-24
Others	0	0	0	0	4	0	2	7	0	36	0	42	-37
Asset-backed Securities	0	0	0	0	0	0	0	0	0	0	0	0	0
Covered Bonds	141	12	0	10	0	0	0	163	0	0	0	163	-15
Funds	0	0	0	0	0	0	142	142	760	500	0	1,402	-120
Clearing House	0	0	0	0	0	0	0	0	0	0	4	4	-1
Total	**155**	**612**	**1,741**	**626**	**263**	**0**	**555**	**3,952**	**1,578**	**731**	**6**	**6,267**	**-342**
Change 31 Dec 2016	**-22**	**-223**	**485**	**-90**	**-220**	**0**	**84**	**14**	**-159**	**-176**	**-21**	**-342**	

The role of non-investment grade bonds is material in Mandatum Life's portfolio although it has decreased from its highs. Within fixed income investments part of the money market securities issued by Nordic banks and cash in Nordic banks form a liquidity buffer within fixed income investments. At the moment the total amount of these investments is higher than what is needed for liquidity purposes.

Nordic equity exposure include almost only direct investments to Finnish equities and they account for almost one third of equity exposure. Two thirds of equity investments are globally allocated consisting mainly of fund investments, but the role of direct investments are increasing in that part of the portfolio as well.

Breakdown of Listed Equity Investments by Geographical Regions
Mandatum Life, 31 December 2017 and 31 December 2016

	31 Dec 2017		31 Dec 2016	
Mandatum Life	**%**	**EURm**	**%**	**EURm**
Denmark	0%	0	0%	0
Norway	0%	0	0%	0
Sweden	0%	0	0%	1
Finland	31%	494	36%	623
Western Europe	40%	637	31%	541
East Europe	1%	20	1%	19
North America	16%	251	24%	420
Latin America	0%	0	0%	0
Far East	11%	176	8%	135
Japan	0%	0	0%	0
Total		**1,578**		**1,737**

Alternative Investments

The role of alternative investments has been material in Mandatum Life over the years. The current allocation weight is 12 per cent. The weight of these investments will be maintained at current levels.

Within total portfolio the size of private equity investments has declined. At the same time Mandatum Life has increased its commitments in selectively picked high yield credit funds. These asset classes have been managed, in most cases, by external asset managers with the exception of the real estate portfolio which is managed by Sampo Group's own real estate management unit. The real estate portfolio includes both direct investments in properties and indirect investments in real estate funds as well as in shares of real estate companies and it has been quite stable.

Market Risks of Balance Sheet

The Board of Directors of Mandatum Life annually approves the Investment Policies for both segregated assets and other assets regarding the company's investment risks. These policies set principles and limits for investment portfolio activities and they are based on the features of insurance liabilities, risk taking capacity and shareholders return requirements.

The Investment Policy for segregated assets defines the risk bearing capacity and the corresponding control levels. Since the future bonus reserves of the segregated group pension portfolio is the first buffer against possible investment losses, the risk bearing capacity is also based on the amount of the future bonus reserve. Different control levels are based on the fixed stress scenarios of assets.

The Investment Policy for other investment assets defines the control levels for the maximum acceptable risk and respective measures to manage the risk. The control levels are set above the Solvency II SCR and are based on predetermined capital stress tests. The general objective of these control levels and respective guidelines is to maintain the required solvency. When the above mentioned control levels are breached, the ALCO reports to the Board which then takes responsibility for the decisions related to the capitalization and the market risks in the balance sheet.

The cash flows of Mandatum Life's with profit technical provisions are relatively predictable, because in most of the company's with profit products, surrenders and premiums are restricted. In addition the company's claims costs do not contain a significant inflation risk element.

The long-term target for investments is to provide sufficient return to cover the guaranteed interest rate plus bonuses based on the principle of fairness as well as the shareholder's return requirement with an acceptable level of risk. In the long run, the most significant risk is that fixed income investments will not generate an adequate return compared to the guaranteed rate.

In addition to investment and capitalization decisions, Mandatum Life has implemented active measures on the liability side to manage the balance sheet level interest rate risk. The company has reduced the minimum guaranteed interest rate in new contracts, supplemented the technical provisions with discount rate reserves and adjusted policy terms and conditions as well as policy administration processes to enable more efficient interest rate risk management.

Interest Rate Risk

Mandatum Life is negatively affected when rates are decreasing or staying at low levels, because the duration of liabilities is longer than the duration of assets. Growing part of Mandatum Life's business, i.e. unit-linked and life and health business, is not interest rate sensitive, which partially mitigates whole company's interest rate risk.

The average duration of fixed income investments was 2.1 years including the effect of hedging derivatives. The respective duration of insurance liabilities was around 10 years. Interest rate risk is managed at the balance sheet level by changing the duration of assets and by using interest rate derivatives.

Currency Risk

Currency risk can be divided into transaction and translation risk. Mandatum Life is exposed to transaction risk, which refers to currency risk arising from contractual cash flows in foreign currencies. For more detailed risk definition of currency risk see Appendix 2 (Risk Definitions).

In Mandatum Life, transaction risk arises mainly from investments in currencies other than euro as the company's technical provisions are almost completely denominated in euro. Mandatum Life does not automatically close its FX position in foreign currencies, but the currency risk strategy is based on active management of the currency position. The objective is to achieve a positive return relative to a situation where the currency risk exposure is fully hedged.

The transaction risk positions of Mandatum Life against EUR is shown in the table Transaction Risk Position, Mandatum Life, 31 December 2017. The table shows the net transaction risk exposures and the changes in the value of positions given a 10 per cent decrease in the value of the base currency.

Transaction Risk Position
Mandatum Life, 31 December 2017

	Base currency	EUR	USD	JPY	GBP	SEK	NOK	CHF	DKK	Other	Total, net
Mandatum Life	**EURm**										
Technical provisions		0	0	0	0	-2	0	0	0	0	-2
Investments		0	2,054	4	136	52	9	186	20	143	2,603
Derivatives		0	-1,744	-3	-134	77	102	-182	-13	-30	-1,928
Total transaction risk, net position, Mandatum Life		**0**	**310**	**1**	**2**	**127**	**111**	**4**	**7**	**113**	**674**
Sensitivity: EUR -10%		0	31	0	0	13	11	0	1	11	67

Liquidity Risks

Liquidity risk is relatively immaterial because liability cash flows in most lines of business are fairly stable and predictable and an adequate share of the investment assets are in cash and short-term money market instruments.

In life companies in general, a large change in surrender rates could influence the liquidity position. However in Mandatum Life, only a relatively small part of the insurance policies can be surrendered and it is therefore possible to forecast short-term cash flows related to claims payments with a very high accuracy.

The maturities of technical provisions and financial assets and liabilities are presented in the table Cash Flows According to Contractual Maturity, Mandatum Life, 31 December 2017. The average maturity of fixed income investments was 2.5 years in Mandatum Life.

The table shows the financing requirements resulting from expected cash inflows and outflows arising from financial assets and liabilities as well as technical provisions.

Cash Flows According to Contractual Maturity
Mandatum Life, 31 December 2017

EURm	Carrying amount total			Cash flows						
	Carrying amount total	Carrying amount without contractual maturity	Carrying amount with contractual maturity	2018	2019	2020	2021	2022	2023-2032	2033-
Mandatum Life										
Financial assets	6,210	3,287	2,923	486	381	773	345	768	397	16
of which interest rate swaps	2	0	2	0	0	0	0	0	1	2
Financial liabilities	168	0	168	-9	-4	-5	-5	-5	-64	-215
of which interest rate swaps	-1	0	-1	0	0	0	0	1	-2	0
Net technical provisions	4,026	0	4,026	-503	-328	-328	-300	-275	-1,908	-1,391

In the table, financial assets and liabilities are divided into contracts that have an exact contractual maturity profile, and other contracts. Only the carrying amount is shown for the other contracts. In addition, the table shows expected cash flows for net technical provisions, which by their nature, are associated with a certain degree of uncertainty.

Mandatum Life has one issued financial liability and thus refinancing risk is immaterial.

Counterparty Default Risks

In Mandatum Life the major three sources of counterparty risk are financial derivatives, reinsurance, and other receivables. Counterparty default risk arising from reinsurance or receivables from policyholders and other receivables related to commercial transactions is very limited.

Counterparty Risk Related to Financial Derivatives

In Mandatum Life, the default risk of derivative counterparties is a by-product of managing market risks. This stems from the fact that Mandatum Life is a frequent user of long-term interest rate derivatives in addition to FX-forwards and options.

The counterparty risk of bilaterally settled derivatives is mitigated by careful selection of counterparties; by diversification of counterparties to prevent risk concentrations and by using collateral techniques, e.g. ISDA Master Agreements backed by Credit Support Annexes. During 2016 Sampo Group companies started to settle interest rate swaps in central clearing houses, which while further mitigating bilateral counterparty risk also exposes Sampo Group companies to the systemic risk related to centralised clearing parties.

Operational Risks

The objective of operational risk management in Mandatum Life is to recognize the risks proactively, manage the risks efficiently and to minimize the potential effects of realized risks in as cost-effective a manner as possible.

Business units are responsible for the identification, assessment and management of their own operational risks, including organizing adequate internal controls. The Operational Risk Committee (ORC) monitors and coordinates risk management issues regarding operational risks within Mandatum Life, such as policies and recommendations concerning operational risk management. The committee ensures that risks are identified and internal control and risk management have been organized in a proper way. The committee also analyses deviations from operational risk management policies and monitors operational risks identified in the self-assessments as well as in occurred incidents. The committee meets three times a year at a minimum. Significant observations on operational risks are submitted to the Risk Management Committee ("RMC") and the Board of Directors on a quarterly basis.

The Operational Risk Committee analyzes and handles operational risks, e.g. in relation to new products and services, changes in processes and risks as well as realized operational risk incidents. Significant observations are reported to the Risk Management Committee and to the Board of Directors quarterly. The ORC is also responsible for maintaining and updating the continuity and preparedness plans as well as the Internal Control Policy.

In order to limit operational risks, Mandatum Life has approved a number of policies including e.g. Internal Control Policy, Compliance Policy, Security Policies, Continuity Plan, Procurement and Outsourcing Policy, Complaints Handling Policy and a number of other policies related to ongoing operative activities. Deviations against different policies are followed up independently in each business unit and are reported to the Compliance Officer and the ORC.

The internal control system aims at preventing and identifying negative incidents and minimizing their impact. In addition, would there be an operational risk event or a near miss, this must be analyzed and reported to ORC.

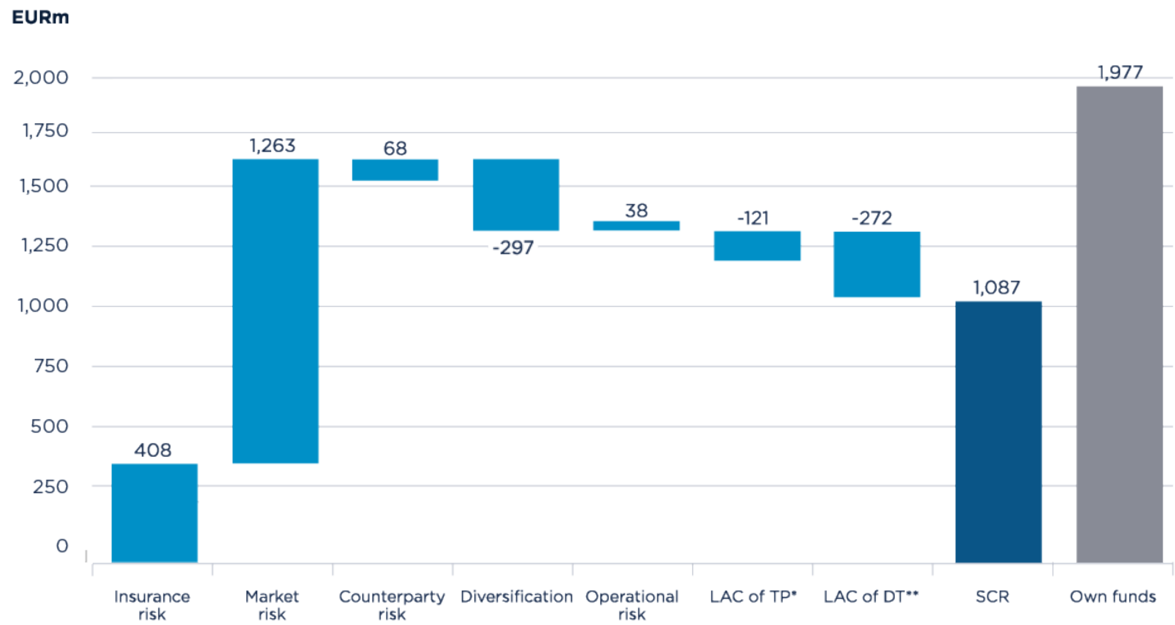
Capitalization

Mandatum Life applies the Solvency II standard formula with transitional measures on equity to the calculation of SCR. Solvency II Own Funds (OF) is also affected by transitional measures, because Mandatum Life applies transitional measures on its technical provisions in regards to its original pension policies with 3.5 per cent and 4.5 per cent guarantees. Also, a volatility adjustment is applied when technical provisions are calculated. The size of SII liabilities with transitional measures of EUR 10,876 million is less than the respective figure without transitional measures (EUR 11,403 million). Hence the transitional measures increase the amount of OF. Mandatum Life does not apply any undertaking-specific parameters in the underwriting risk modules or apply simplified calculations for any of the risk modules of the standard formula.

The OF of Mandatum Life was EUR 1,977 million while the SCR was EUR 1,087 million. The solvency ratio (OF/SCR) was 182 per cent and the buffer was EUR 890 million. OF without transitional measures on Technical Provisions would be EUR 1,555 million, and the SCR without transitional measures on equity risk would be EUR 1,220 million. Danske Bank-related portfolio transfer is expected to improve solvency position by reducing SCR around EUR 100 million and increasing OF by tens of millions.

In the figure Mandatum Life's Solvency, 31 December 2017 SCR is divided into risk contributions. The diversification benefit between risks is also presented in the figure.

Mandatum Life's Solvency
31 December 2017



* Loss absorbing capacity of technical provisions
** Loss absorbing capacity of deferred taxes

The solvency position without the transitional measures is expected to develop favorably during the transitional period. The amount of with profit liabilities is decreasing (see figure Forecast of With Profit Liabilities, 31 December 2017–31 December 2031 within chapter Underwriting Risks and Performance) and liabilities with the highest guarantees are expected to fall relatively most, from EUR 2,635 million to around EUR 900 million during the transitional period. Hence, the most capital consuming with profit liabilities will decrease during the period and their duration will shorten as well. This creates a decreasing trend to the SCR and simultaneously a positive trend to own funds without transitional measures. Internally Mandatum Life is forecasting solvency ratios with and without the transitional measures; both forecasts affect the company's business decisions.

Mandatum Life's structure of OF as presented in the table Mandatum Life's Own Funds, 31 December 2017 consist of only Tier 1 items of which EUR 100 million (i.e. 5.1 per cent of OF) was subordinated debt at the end of 2017. This subordinated debt is classified as a restricted Tier 1 item due to Grandfathering principles. Transitional measures on technical provisions contribute EUR 422 million to OF at the end of 2017. Due to sale of Danske Bank-related portfolio the quality of own funds will improve further as part of the expected, but uncertain, future profit component of OF will turn to a Shareholder equity.

Mandatum Life's Own Funds
31 December 2017

Mandatum		EURm
Tier 1	**Total**	**1,977**
	Ordinary Share Capital	181
	Reconciliation Reserve	1,696
	Subordinated Liabilities	100
Tier 2	**Total**	**0**
	Subordinated Liabilities	0
	Untaxed reserves	0
Tier 3	**Total**	**0**
	Deferred tax assets	0
Eligible own funds		**1,977**

In summary, the solvency and the capital structure of Mandatum Life with transitional measures are adequate. During the transitional period on technical provisions the liabilities with high guarantees will decrease remarkably which will also support future capital level needs.

Risk Considerations at Sampo Group Level and Sampo plc

Sampo Group is first and foremost exposed to general performance of Nordic economies. However, Nordic economies typically are at any given time in different stages of their economic cycles, because of reasons like different economic structures and separate currencies. Also geographically Nordics as a large area is more a source of underwriting diversification than a concentration. Hence, inherently Nordic area is a good basis for diversified business.

To further maintain diversification of businesses Sampo Group proactively prevents concentrations to the extent possible by segregating the duties of separate business areas. As a result, separate companies have very few overlapping areas in their underwriting and investments activities. In spite of proactive strategic decisions on segregation of duties, concentrations in underwriting and investments may appear and hence liabilities and assets are monitored at the Group level to identify potential concentrations at single-name or risk factor level.

It is regarded that current business model where all companies have their own processes and agreements with counterparties is preventing accumulation of counterparty default risks and operational risks. Hence, these risks are managed at company level and it is considered that need to monitor them at group level is remote.

In addition to “segregation of duties at strategic level” - principle Sampo Group has two principles proactively preventing the group-risks. The amount of intragroup exposures between group companies are few and parent company is the only source of liquidity and the main source of capital within Group. These principles effectively prevent the contagion risk and hence potential problems of one company will not affect directly the other group companies.

Underwriting and market risk concentrations and their management are described in the next sections as well as parent company's role as risk manager of group-wide risks and as a source of liquidity.

Underwriting Risks at Sampo Group

With respect to the underwriting businesses carried out in the subsidiary companies, it has been established that If P&C, Topdanmark and Mandatum Life all operate within Nordics, but mostly in different geographical areas and in different lines of business and hence their underwriting risks are different by nature. There are some common risk factors like the life expectancy in Finland. Also in Denmark If P&C and Topdanmark have some overlapping areas. However, there are no material underwriting risk concentrations in the normal course of business.

Consequently, business lines as such are contributing diversification benefits rather than a concentration of risks. This general risk picture has not changed with increased holding in Topdanmark, because it underwrites mainly Danish risks with focus on client bases which only marginally overlap with If P&C's client bases.

On the following table Underwriting Solvency Capital Requirements of Insurance Sub-group, 31 December 2017, underwriting activities and sensitivities to related risks of three operative insurance companies are compared to each other based on their standard formula gross SCRs, because the reported Sampo Group underwriting SCR is based on them. In Topdanmark's section, the company has presented net SCR numbers. Standard formula SCRs do not either reflect risks as well as internal models used by If P&C and Topdanmark, but in this context they can be used as a common basis for comparison purposes.

Underwriting Solvency Capital Requirement of Insurance Sub-group
31 December 2017

Underwriting risk	If P&C	Topdanmark	Mandatum Life	Sampo Plc	Diversified Sampo Group	Sum of the parts	Delta
Life underwriting	74	105	406	0	561	584	-23
Health underwriting	513	238	2	0	747	754	-6
Non-life underwriting	1,248	248	0	0	1,494	1,496	-1
Underwriting Risk gross	**1,835**	**591**	**408**	**0**	**2,803**	**2,833**	**-30**
Diversification	-477	-214	-2	0	-982	-693	-289
Underwriting Risk net	**1,358**	**376**	**406**	**0**	**1,821**	**2,141**	**-319**

In terms of SCRs If P&C is contributing most to the group SCR and it has clear focus on non-life underwriting and related health underwriting. Business is well spread over all Nordic countries, but having smallest portion of business in Denmark. Geographical diversification is not taken into account by SF and hence internally assessed capital need of EUR 672 million is much smaller.

Mandatum Life has focus on Finnish life insurance risks and hence it has practically no lines of business or geographical diversification benefits within underwriting. In Topdanmark capital consumption is most evenly spread over underwriting risks written solely in Denmark and its company specific diversification benefit over lines of businesses is relatively largest compared to other Sampo Group companies.

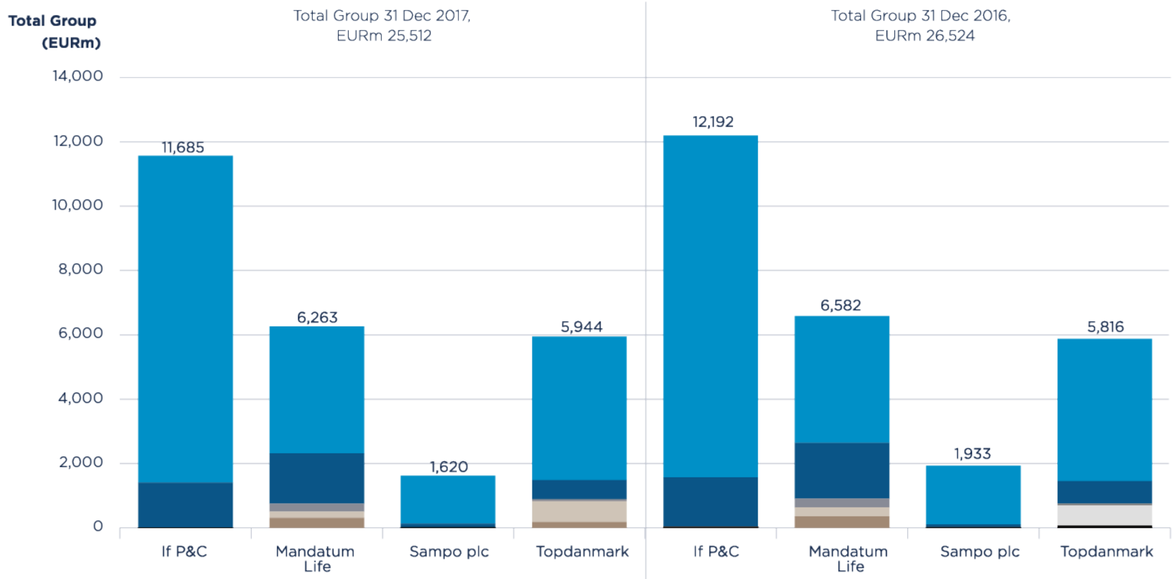
All in all at Sampo Group level, the underwriting activities are well-diversified by lines of businesses, geographical areas and client groups. At Sampo Group level the SF gives diversification benefit of EUR 319 million because underwriting activities at group level are more evenly distributed over lines of businesses than in separate companies. Sampo considers that diversified Group SCR of EUR 1,821 million is relatively conservative measure of the underwriting capital requirement, because SF at sub-group and Sampo Group level does not take into account geographical and client base diversification.

Market Risks at Sampo Group Level

For all subsidiaries, their insurance liabilities and the company specific risk appetite are the starting points for their investment activities. The insurance liabilities including loss absorbing buffers as well as the risk appetite of Mandatum Life, If P&C and Topdanmark differs, and as a result the structures and risks of the investment portfolios and balance sheet of the three companies differ respectively. Companies' average investment returns and volatilities of investment returns also differ as presented earlier in the Annual Investment Return at Fair Value -tables.

The total amount of Sampo Group's investment assets as at 31 December 2017 was EUR 25,512 million (EUR 26,524 million in 2016) as presented in the below figure. Mandatum Life's and Topdanmark's investment assets presented here do not include assets which cover unit-linked contracts.

Development of Investment Portfolios
If P&C, Mandatum Life, Sampo plc and Topdanmark, 31 December 2017 and 31 December 2016



	If P&C 2017	Mandatum Life 2017	Sampo plc 2017	Topdanmark 2017	If P&C 2016	Mandatum Life 2016	Sampo plc 2016	Topdanmark 2016
Fixed income	87%	63%	92%	75%	87%	60%	94%	76%
Listed equity	12%	25%	7%	10%	13%	26%	5%	12%
Private equity*	0%	4%	1%	1%	0%	4%	1%	1%
Real estate	0%	3%	0%	11%	0%	4%	0%	11%
Other alternative investments	0%	5%	0%	3%	0%	5%	0%	1%

Sampo plc's figures don't include debt instruments issued by the insurance subsidiaries.
* Private Equity also includes direct holdings in non-listed equites.

Investment activities and market risk taking are arranged pro-actively in such a way that there is virtually no overlap between the wholly-owned subsidiaries' single-name risks except with regards to Nordic banks where companies have their extra funds in forms of the short-term money market assets and cash. From asset side diversification perspective Topdanmark is a positive factor, because the role of Danish assets is dominant in portfolios and especially the role of Danish covered bonds is central. In Sampo Group's other insurance companies' portfolios the weight of Danish investments has been immaterial.

When Market risks of three operative insurance sub-groups and respective figures of parent company Sampo are compared to each other by their SCRs the following things can be seen at Sampo Group level.

Market Risk SCRs of Sub-groups and Sampo plc
31 December 2017

Market risk	If P&C	Topdanmark	Mandatum Life	Sampo Plc	Diversified Sampo Group	Sum of the parts	Delta
Interest rate / down shock	174	56	145	0	375	375	0
Equity	432	323	851	44	1,646	1,650	-4
Property	5	170	46	1	221	221	0
Spread	406	328	269	4	1,006	1,006	0
Concentration/Group Level	54	20	14	47	0	135	-135
Currency/Group Level	511	7	221	427	1,153	1,166	-13
Market risk gross	**1,582**	**904**	**1,545**	**522**	**4,401**	**4,553**	**-152**
Diversification	-433	-136	-282	-78	-1,018	-929	-90
Market risk net	**1,150**	**768**	**1,263**	**444**	**3,383**	**3,624**	**-242**

Mandatum Life takes the largest market risks both in absolute and relative terms and currently equity risk is its dominant risk contributor. In If P&C currency and spread risks are the main risk contributors and there is relatively larger diversification effect than in Mandatum Life because of more evenly spread risk profile. Topdanmark is matching its liabilities with assets and hence the role of interest rate risk and currency risk is minor and equity, spread and property risks are main contributors of market risk SCR. In all companies there is some concentration risk, but at Sampo Group level it does not exist, because the sub-groups' largest concentrations are not in same single names.

In the next paragraphs concentrations by homogenous risk groups and by single names are presented first and then balance sheet level risks are discussed shortly.

Holdings by Industry, Geographical Area and Asset Class

In regards to **Fixed Income and Equity Exposures** Financial Institutions and covered bonds have material weight in group-wide portfolios whereas the role of public sector investments is quite limited. Most of these assets are issued by Nordic corporates and institutions. Most corporate issuers, although being based in Nordic countries, are operating at global markets and hence their performance is not that dependent on Nordic markets. This together with steadily growing portion of non-Nordic names in portfolios, is decreasing the concentration risk related to Nordics.

Exposures by Sector, Asset Class and Rating
Sampo Group excluding Topdanmark, 31 December 2017

EURm	AAA	AA+ - AA-	A+ - A-	BBB+ - BBB-	BB+ - C	D	Non-rated	Fixed income total	Listed equities	Other	Counterparty risk	Total	Change 31 Dec 2016
Basic Industry	0	0	44	66	25	0	113	248	104	0	0	351	-78
Capital Goods	0	0	127	63	0	0	131	321	682	0	0	1,002	32
Consumer Products	0	131	326	380	30	0	109	976	549	0	0	1,525	-28
Energy	0	68	30	0	53	0	172	323	13	0	0	336	-165
Financial Institutions	0	2,100	3,258	930	46	0	26	6,360	118	1	9	6,489	-428
Governments	92	0	0	0	0	0	0	92	0	0	0	92	-49
Government Guaranteed	43	77	0	0	0	0	0	120	0	0	0	120	-36
Health Care	7	39	50	50	42	0	65	253	113	0	0	383	-55
Insurance	0	0	41	115	27	0	5	206	3	25	60	277	-19
Media	0	0	14	0	0	0	38	52	0	0	0	52	-25
Packaging	0	0	0	0	19	0	14	33	1	0	0	33	-40
Public Sector, Other	674	192	42	0	0	0	0	908	0	0	0	908	-114
Real Estate	0	6	92	112	8	0	526	744	0	207	0	951	35
Services	0	0	0	85	72	0	155	312	122	0	0	434	-15
Technology and Electronics	23	0	79	0	27	0	45	175	123	0	0	298	-37
Telecommunications	0	0	0	165	8	0	65	238	92	0	0	331	12
Transportation	0	72	11	55	11	0	203	353	34	0	0	387	-55
Utilities	0	2	32	359	70	0	44	506	0	0	0	506	-101
Others	0	26	0	0	4	0	15	45	0	36	0	82	-14
Asset-backed Securities	0	0	0	0	0	0	0	0	0	0	0	0	0
Covered Bonds	3,161	75	0	10	0	0	0	3,247	0	0	0	3,247	102
Funds	0	0	0	0	0	0	142	142	1,187	521	0	1,850	-96
Clearing House	0	0	0	0	0	0	0	0	0	0	17	17	13
Total, Excluding Topdanmark	**4,000**	**2,788**	**4,146**	**2,391**	**443**	**0**	**1,885**	**15,653**	**3,140**	**790**	**87**	**19,670**	**-1,163**
Change 31 Dec 2016	**-38**	**-1,198**	**641**	**163**	**-362**	**0**	**71**	**-722**	**-210**	**-182**	**-48**	**-1,163**	

Most of the financial institutions and covered bonds are in the Nordic countries as can be seen in the table Fixed Income Investments in Financial Sector, Sampo Group excluding Topdanmark, 31 December 2017.

Fixed Income Investments in Financial Sector
Sampo Group excluding Topdanmark, 31 December 2017

EURm	Covered bonds	Cash and money market securities	Long-term senior debt	Long-term subordinated debt	Total	%
Sweden	2,092	42	721	365	3,221	33.6%
Finland	108	1,584	243	6	1,942	20.3%
Norway	670		324	291	1,285	13.4%
United States			670		670	7.0%
Denmark	204	3	277	142	626	6.5%
United Kingdom	12	517	68	18	615	6.4%
France	21	179	58		258	2.7%
Netherlands			226	18	244	2.5%
Canada	111		113		224	2.3%
Switzerland			147		147	1.5%
Australia	17		92		109	1.1%
Iceland			91		91	1.0%
Germany			50	0	50	0.5%
Guernsey			25		25	0.3%
Estonia		22			22	0.2%
New Zealand			19		19	0.2%
Luxembourg	10				10	0.1%
Bermuda				10	10	0.1%
Cayman Islands			5		5	0.0%
Total	**3,247**	**2,348**	**3,129**	**852**	**9,576**	**100.0%**

The public sector exposure includes government bonds, government guaranteed bonds and other public sector investments as shown in the table Fixed Income Investments in Public Sector, Sampo Group excluding Topdanmark, 31 December 2017. The public sector has had a relatively minor role in Sampo Group's portfolios and these exposures have been mainly in the Nordic countries. In Topdanmark's portfolios AAA-rated government bonds and covered bonds have a material role.

Fixed Income Investments in Public Sector
Sampo Group excluding Topdanmark, 31 December 2017

EURm	Governments	Government guaranteed	Public sector, other	Total market value
Sweden	92		592	684
Norway			211	211
Finland		77	88	165
Germany		33		33
Japan			17	17
Denmark		10		10
Total	**92**	**120**	**908**	**1,120**

The exposures in fixed income instruments issued by non-investment grade issuers are significant, because a relatively small number of Nordic companies are rated. Further, many of the rated companies have a rating lower than triple-B (high yield) rating.

The listed equity investments of Sampo Group totaled EUR 3,934 million at the end of year 2017 (EUR 4,113 million). At the end of year 2017, the listed equity exposure of If P&C was EUR 1,448 million (EUR 1,527 million). The proportion of listed equities in If P&C's investment portfolio was 12.4 per cent. In Mandatum Life, the listed equity exposure was EUR 1,578 million at the end of year 2017 (EUR 1,737 million) and the proportion of listed equities was 25.2 per cent of the investment portfolio. In Topdanmark Group, the listed equity exposure was EUR 793 million at the end of year 2017 (EUR 761 million). Within Topdanmark Group, the allocation to listed equity is higher in the life company.

The geographical core of Sampo Group's equity investments is in the Nordic companies. The proportion of Nordic companies' equities corresponds to 46 per cent of the total equity portfolio. This is in line with Sampo Group's investment strategy of focusing on Nordic companies. However, these Nordic companies are mainly competing in global markets: only a few are purely domestic companies. Hence, the ultimate risk is not highly dependent on the Nordic economies. In the long run the proportion of investments outside of the Nordic countries has gradually increased, because the amount of companies issuing securities in the Nordic countries is limited and from a strategic point of view other geographical areas have recently provided interesting investment opportunities. A breakdown of the listed equity exposures of Sampo Group is shown in the figure Breakdown of Listed Equity Investments by Geographical Regions, Sampo Group 31.12.2017.

Breakdown of Listed Equity Investments by Geographical Regions

Sampo Group, 31 December 2017 and 31 December 2016

	2017		2016	
Sampo Group	**%**	**EURm**	**%**	**EURm**
Denmark	4%	167	5%	185
Norway	4%	157	5%	202
Sweden	24%	945	23%	953
Finland	14%	549	17%	700
Western Europe	25%	977	21%	861
East Europe	1%	20	0%	19
North America	20%	776	23%	929
Latin America	1%	28	1%	25
Far East	8%	313	6%	239
Japan	0%	0	0%	0
Total		**3,934**		**4,113**

Largest Holdings by Single Name

The largest exposures by individual issuers and counterparties are presented in the table Largest Individual Exposures by Issuer and by Asset Class, Sampo Group exluding Topdanmark, 31 December 2017. The largest single name investments in Topdanmark's portfolios are in AAA-rated Danish covered bonds.

Largest Individual Exposures by Issuer and by Asset Class
Sampo Group excluding Topdanmark, 31 December 2017

EURm Counterparty	Total fair value	% of total investment assets	Cash & short-term fixed income	Long-term fixed income, total	Long-term fixed income: Government guaranteed	Long-term fixed income: Covered bonds	Long-term fixed income: Senior bonds	Long-term fixed income: Tier 1 and Tier 2	Equities	Uncollateralized derivatives
Nordea Bank	1,606	8%	562	1,039	0	601	138	299	0	4
Danske Bank	1,134	6%	785	347	0	99	218	30	0	3
BNP Paribas	735	4%	698	37	0	0	37	0	0	0
Skandinaviska Enskilda Banken	675	3%	276	398	0	248	137	13	0	0
Svenska Handelsbanken	669	3%	-1	669	0	616	39	14	0	0
DnB	536	3%	0	536	0	226	205	105	0	0
Sweden	519	3%	0	519	0	0	519	0	0	0
Swedbank	516	3%	-1	517	0	352	154	11	0	0
Norway	320	2%	0	320	0	0	218	102	0	0
Volvo	256	1%	0	103	0	0	68	36	153	0
Total Top 10 Exposures	**6,965**	**36%**	**2,319**	**4,485**	**0**	**2,143**	**1,733**	**609**	**153**	**8**
Other	12,408	64%								
Total investment assets	**19,372**	**100%**								

The largest high-yield and non-rated fixed income investment single-name exposures are presented in the table Ten Largest Direct High Yield and Non-rated Fixed Income Investments, Sampo Group excluding Topdanmark, 31 December 2017. Furthermore, the largest direct listed equity exposures are presented in the table Ten Largest Direct Listed Equity Investments, Sampo Group, 31 December 2017.

Ten Largest Direct High Yield and Non-rated Fixed Income Investments and Direct Listed Equity Investments

Sampo Group excluding Topdanmark, 31 December 2017

Largest direct high yield and non-rated fixed income investments	Rating	Total fair value, EURm	% of total direct fixed income investments
High Street Shopping	NR	117	0.8%
Sponda	NR	89	0.6%
Teollisuuden Voima	BB+	80	0.5%
SkandiaBanken	NR	76	0.5%
IVG Polar	NR	57	0.4%
Ellevio	NR	52	0.3%
YIT	NR	46	0.3%
Grönlandet Södra	NR	44	0.3%
Aker BP	BB	44	0.3%
Nets	BB	40	0.3%
Total top 10 exposures		**646**	**4.2%**
Other direct fixed income investments		14,630	95.8%
Total direct fixed income investments		15,276	100.0%

Top 10 listed equity investments	Total fair value, EURm	% of total direct equity investments
Volvo	153	7.8%
Nobia	125	6.4%
Amer Sports	100	5.1%
ABB	90	4.6%
Veidekke	87	4.4%
Asiakastieto	70	3.6%
Sectra	66	3.4%
Husqvarna	64	3.3%
Hennes & Mauritz	61	3.1%
TeliaSonera	60	3.1%
Total top 10 exposures	**875**	**44.9%**
Other direct equity investments	1,076	55.1%
Total direct equity investments	1,952	100.0%

Balance Sheet Concentrations

In general Sampo Group is structurally dependent on the performance of Nordic economies as already described earlier. Sampo Group is also economically exposed to the low level of interest rates. The lower the rates and the “flatter” the yield curve, the more challenging the environment is for the current business models especially when duration of insurance liabilities is longer than asset duration in If P&C and Mandatum Life. In Topdanmark interest rate risk of balance sheet is minor and hence Topdanmark is not increasing interest rate risk at group level.

Sampo Group would benefit materially in case interest rates would rise, because economic value of insurance liabilities would decrease more than value of assets backing them. At the same time net interest income of Nordea should increase as well. During 2017 interest rates have continued their slow rise that started at the end of Q3/16.

The Role of Sampo plc

Sampo plc is the long-term investor in Nordic financials and source of liquidity within the group. Hence, the healthy funding structure and the capacity to generate funds if needed are on continuous focus.

As of 31 December 2017 Sampo had long term strategic holdings of EUR 8,958 million and they were funded mainly by capital of EUR 7,714 million and senior debt of EUR 3,177 million. Average remaining maturity of senior debt was 3.7 years and EUR 1,250 million of it had a maturity longer than 5 years. Senior debt is used to fund other financial assets as well. The average maturity of sub-ordinated loans and fixed income instruments of EUR 554 million was three years. Funding structure of strategic holdings and other holdings can be considered strong.

The capacity to generate funds is dependent on leverage and liquidity buffers which can be inferred from the table Sampo plc Balance Sheet Structure, 31 December 2017 and 31 December 2017.

Sampo plc Balance Sheet Structure
31 December 2017 and 31 December 2016

EURm	31 Dec 2017	31 Dec 2016
Assets total	**10,939**	**11,196**
Liquidity	**1,199**	**1,439**
Investment Assets	**235**	**179**
Real estate	2	2
Fixed income	58	28
Equity & Private equity	175	148
Sub-ordinated loans	**496**	**637**
Equity holdings	**8,958**	**8,900**
Subsidiaries	3,401	2,370
Associated	5,557	6,530
Other assets	**50**	**41**

EURm	31 Dec 2017	31 Dec 2016
Liabilities total	**10,939**	**11,196**
CP's issued	**293**	**671**
LT Senior debt	**2,884**	**2,877**
Private placements	138	132
Bonds issued	2,746	2,745
Sub-ordinated debt	**0**	**0**
Capital	**7,714**	**7,549**
Undistributable capital	98	98
Distributable capital	7,616	7,451
Other liabilities	**48**	**99**

Leverage of Sampo plc was modest at year end by several measures.

- The financial leverage measured as the portion of debt within all liabilities was 29 (32) per cent.
- Sampo's net debt of EUR 1,424 (1,443) million is modest when compared to Sampo's equity holdings and financial assets.
- The gross debt divided by estimated market value of equity holdings, the ratio would be around 15 per cent.

In regards to liquidity, the liquid funds of Sampo plc were EUR 1,199 (1,439) million. At the end of May 2018 when all expected cash flows from dividends and other transactions have been settled the liquidity will normalize to below EUR 100 million which is adequate for normal cash management purposes. Furthermore, a remarkable portion of sub-ordinated loans issued by group-companies (496) and other investment assets (235) can be sold in case liquidity is needed. Short-term liquidity can be considered to be adequate.

All in all, Sampo plc is in a good position to refinance its current debt and even issue more debt. This capacity together with the tradable financial assets, means that Sampo plc is able to generate liquid funds.

Sampo Group has also a buffer for own funds. Because subordinated loans presented in the table Sampo plc Balance Sheet Structure, 31 December 2017 and 31 December 2016 are issued by If P&C, Mandatum Life, Nordea and Topdanmark, they are eliminated from Group's own funds. In case these assets would be sold, in addition to liquidity in Sampo plc, also own funds would be created and Sampo Group Solvency ratio would increase marginally.

When Sampo plc is managing its funding and capital structure and liquidity it takes into account that some of its operative companies have other base currencies (SEK, DKK) than EUR and all its operative business areas are exposed to low interest rates. These risks may affect Sampo's decisions on issuance of debt instruments and composition of liquidity portfolio.

This is why part of Sampo plc's debt instruments are issued in SEK and interest rate duration is maintained relatively short. However, the market view is also affecting decisions and for instance at the moment SEK-dividends paid by If P&C are still in SEK and SEK debt is converted into EUR using cross-currency swaps, due to tactical market-view reasons.

Sampo Group Capitalization

The principles of Sampo Group capitalization and the calculation methods are described in Appendix 4 in detail.

Topdanmark treatment in Solvency II and FICO changed in 2017 and hence the 2016 figures are not comparable.

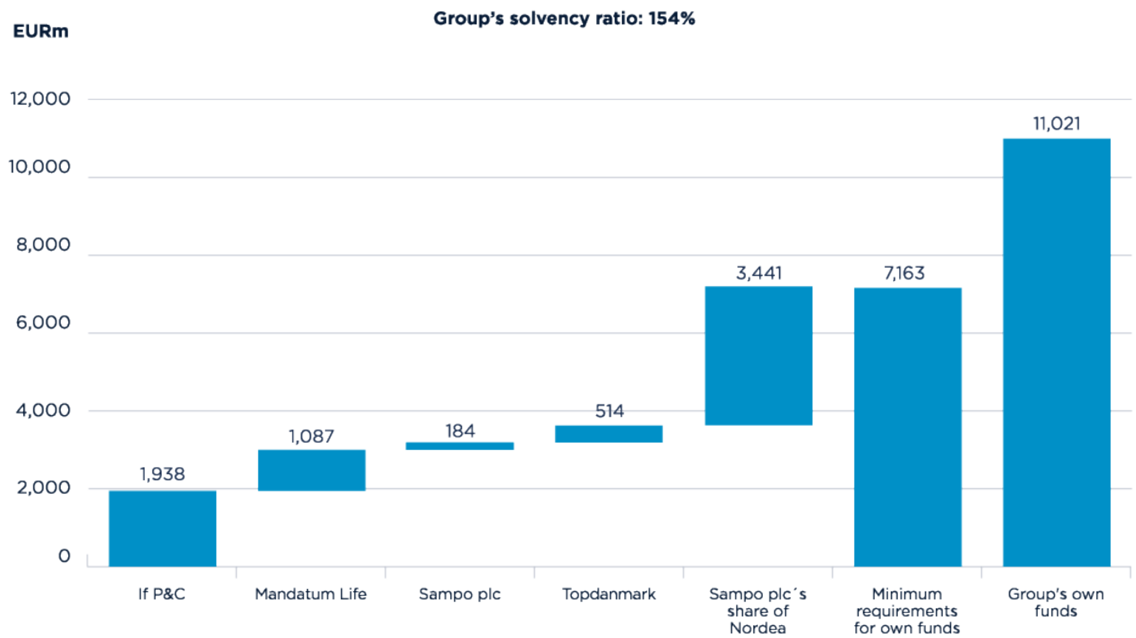
Group's Own Funds and Solvency According to Conglomerate Rules

Sampo Group's FICO solvency, calculated according to the Act on the Supervision of Financial and Insurance Conglomerates (2004/699), is presented in the figure Sampo Group's FICO solvency, 31 December 2017. The Group solvency ratio remained at the same level as year before and was 154 per cent. Topdanmark was consolidated to the Group's SCR and own funds in Q3/2017. Prior to that, the deduction and aggregation method was applied to the Topdanmark holding. This meant that the part corresponding to Sampo's share of Topdanmark's disclosed SCR was included in Sampo's SCR and own funds.

Both Group's own funds and minimum requirements for own funds grew in 2017. The consolidation of Topdanmark increased capital requirement by ca. EUR 300 million but at the same time the valuation gain from the consolidation increased group equity. In addition, non-controlling interest and intangible assets stemming from the consolidation were included in the own funds. The net effect of changes from Topdanmark was limited, however.

Group's profitability increased group equity and compensated the growing dividends to shareholders, which in total contributed to own funds growth. Net changes in other items affecting own funds were limited.

Sampo Group's FICO Solvency
31 December 2017



Group's own funds consist of Group consolidated equity and sectoral items of financial institutions and insurance companies, minus intangible assets, foreseeable dividends and other adjustments. Group consolidated equity including non-controlling interest, EUR 13,508 million as of 31.12.2017, accounts for most of the own funds and is considered as Tier 1 capital for solvency purposes. Sectoral items, most of which come from Nordea's additional Tier 1 and Tier 2 capital and from the valuation adjustments of If P&C, Mandatum Life and Topdanmark, accounted for EUR 2,517 million (EUR 2,254 million). The deductions in total were EUR 5,004 million (EUR 3,251 million).

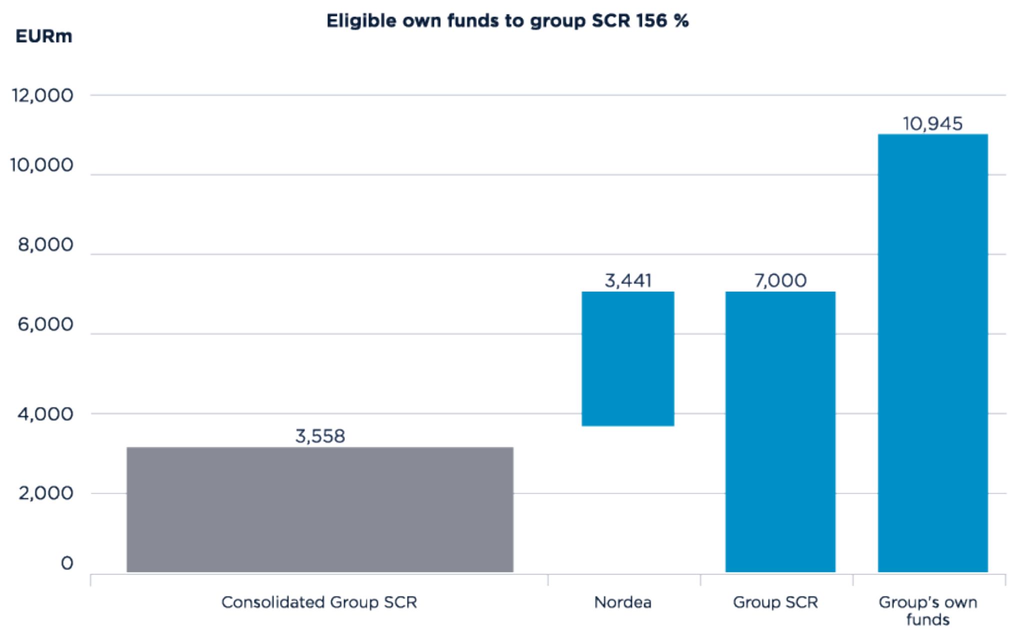
The Group level capital requirement is sum of the parts presented in the above figure and no diversification benefit between business areas is taken into account. As of 31.12.2017 the total minimum requirements for own funds were EUR 7,163 million (EUR 7,088 million). Group solvency (Group's own funds – minimum requirements for own funds) were EUR 3,858 million (EUR 3,849 million).

Group's Own Funds and Solvency According to Solvency II

Sampo Group's own funds and SCR are presented in the figure Sampo Group Solvency by Solvency II rules, 31 December 2017. Sampo Group's Ratio of Eligible own funds to group SCR at the end of 2017 was 156 per cent (155 per cent). Solvency was adequate in every quarter during the year.

Topdanmark's standard formula SCRs is now fully included in Sampo's Consolidated Group SCR. Also the own funds of Topdanmark are now fully consolidated to Sampo's own funds with the exception of the part of the own funds, which exceeds Topdanmark's Standard Formula SCR, belonging to minority shareholders.

Sampo Group Solvency by Solvency II Rules
31 December 2017



The Group SCR decreased by EUR 51 million due to a decrease in the capital requirement for Nordea offset by an increase in Topdanmark's contribution to the Group SCR. Topdanmark was previously included in the Group SCR by adding Sampo's share of Topdanmark's partial internal model on top of the Consolidated Group SCR. The previous methodology did not grant any diversification benefits at Sampo Group level. At Q3 2017 Topdanmark's Standard Formula SCR was included in the consolidated Group SCR. The effects of the change in methodology are limited due to diversification benefits that the Standard Formula grants when calculating the Consolidated Group SCR. Topdanmark uses simplifications in the calculation of Standard Formula SCR.

The following table Sampo Group's Own Funds, 31 December 2017 and 31 December 2016 presents Sampo Group's Own Funds by tiers.

Sampo Group's Own Funds
31 December 2017 and 31 December 2016

EURm	2017	2016
Tier 1 total	**10,577**	**10,721**
Ordinary Share Capital	98	98
Reconciliation Reserve	10,753	10,520
Net effect of Nordea & Topdanmark	-274	103
Tier 2 (Subordinated Liabilities)	**368**	**230**
Tier 3 (Deferred tax assets)	**0**	**4**
Total eligible own funds	**10,945**	**10,955**

Group's own funds consists of ordinary share capital, reconciliation reserve as well as subordinated liabilities, which are eligible at the Group level. As of 31.12 2017 the Group's own funds were EUR 10,945 million.

The entire ordinary share capital of EUR 98 million and reconciliation reserve of EUR 10,753 million (EUR 10,520 million) fully meet with the requirements for inclusion in Tier 1 unrestricted items. In comparison IFRS consolidated group equity as of 31.12.2017 was EUR 13,508 million (Appendix 5 Valuation for Solvency II purposes). All in all the structure of own funds is very solid, because Tier 1 items are 90 per cent of all own funds and the reconciliation reserve is a major contributor.

The reconciliation reserve is a sum of retained earnings, net income for the financial year and other reserves deducted by foreseeable dividends and other distributions adjusted by Solvency II valuation differences, net deferred tax assets, own shares held directly and Topdanmark's minority interest. The composition of the reconciliation reserve is presented in the table Composition of the Reconciliation Reserve, 31 December 2017 and 31 December 2016.

Composition of the Reconciliation Reserve
31 December 2017 and 31 December 2016

EURm	2017	2016
Reserves, Retained earnings and Net income for the year (before SII adjustments)	13,410	11,836
Foreseeable dividends, distributions and charges	-1,444	-1,288
Own Shares (held directly and indirectly)	-149	-
Other non available own funds	-327	-
Net deferred tax assets shown separately in Tier 3	-	-4
Valuation adjustments, SII	-737	-24
Reconciliation reserve	**10,753**	**10,520**

Own funds items included in Sampo Group's Tier 2 capital, amounting to EUR 368 million as of 31.12.2017, consists of subordinated debt instruments held by external investors.

As of 31.12.2017 subordinated debt of EUR 100 million issued by Mandatum Life was completely in Sampo's investment portfolio and about one third of If P&C's subordinated debt of EUR 312 million was held by Sampo plc as well. Topdanmark has issued three subordinated debt instruments by nominal amount of DKK 1,750 million and 30 per cent of these are held in Sampo Group companies' investment portfolios. The details of subordinated debt instruments issued by If P&C,

Topdanmark and Mandatum are shown in the companies' respective tables. Full instrument details are available on Sampo's web-page www.sampo.com/publicdebt.

Topdanmark was the only group company issuing subordinated debt during 2017. This DKK 400 million instrument was classified to be Tier 1 item in Own Funds. In September 2017 If P&C Insurance Ltd (Finland) bought back its Tier 1 instrument from Sampo plc and cancelled it before its merge into If P&C Insurance Ltd (Publ) (Sweden).

Tier 3 own funds include net deferred tax assets (i.e. those deferred tax asset items which cannot be netted against available deferred tax liabilities, "DTL") from the Solvency II Balance sheet.

The Group's own funds decreased by EUR 9 million over the reporting period. Excess of assets over liabilities grew as a result of Topdanmark's consolidation and Group's profit for the period, but the total effect of Nordea's own funds items and increased intangible assets at the group level, which are not included in the SII balance sheet, resulted in the small negative net effect. Because of lower Group SCR, which decreased due to Nordea's lower capital requirement, Ratio of Eligible own funds to group SCR went up slightly to 156 per cent (155 per cent). There were no restrictions affecting the availability or transferability of own funds at the group level during the period.

Internal Considerations of Adequacy of Solvency

Sampo's regulatory group solvency ratios, 154 per cent (FICO) and 156 per cent (Solvency II), are relatively low compared to many other insurance groups. Conglomerate rules do not take into account any diversification benefits between Group's business areas. Solvency II rules take into account only the diversification within the consolidated group. Therefore, the diversification benefit from the associated company is not taken into account. Because material part of capital consumption and profits stem from the associated company Nordea, the lack of its diversification benefit has a material effect on reported Solvency ratios.

In order to include the diversification benefit between business areas into Group's capital need estimate, Sampo is using correlations of quarterly reported profits between business areas when assessing the diversification benefit in the context of Conglomerate Rules. With this adjustment the resulting diversified Sampo Group capital requirement would be EUR 5,541 (5,571) million and the Group solvency ratio would be 199 (196) per cent.

Correlation of Quarterly Reported Profits
2005 - 2017

Correlations of Quarterly Reported Profits	
Nordea/If	0.267
Nordea/Mandatum	0.147
Nordea/Topdanmark	0.366
If/Mandatum	0.854
If/Topdanmark	0.670
Mandatum/Topdanmark	0.687

Group's Diversification Benefit as Internally Assessed

31 December 2017

	FICO Solvency	Adjusted FICO Solvency	Diversification Benefit
Group's Own Funds, total	11,021	11,021	0
Minimum Requirements for Own Funds, Total	7,163	5,541	-1,622
Group Solvency Ratio	154%	199%	45%
Group Solvency	**3,858**	**5,480**	**1,622**

This internal Solvency Ratio estimate is more in line with reported figures of insurance groups, of which most do not have holdings in financial institutions to the level of Sampo Group's holdings. Based on this internally adjusted group solvency ratio, the Group solvency would be strong.

When Sampo is considering the Group Solvency based on the **adequacy of buffer at Group level** it is assessed that the buffer is more than adequate in light of the following facts.

- **Due to the business entities' adequate capitalization, good profitability and low volatilities, there is no need for extra buffers at Group level.** If P&C and Nordea have strong capitalization and sound profitability. OF of If P&C is maintained above the capital level based on the Single-A rating target. Nordea's amount of capital is governed by Swedish rules which are some of the strictest within European jurisdictions. In addition, both If P&C and Nordea have maintained high profitability and low volatility of profits. In Sampo plc's opinion, If P&C and Nordea have themselves relatively high buffers included in their capital, then the parent company needs only minor additional reserves, if any.

Mandatum Life is smaller company than If P&C and Nordea and its OF with transitional measures is relatively high compared to SCR. Mandatum Life's with profit business with high guarantees is decreasing annually by EUR 200 million. Hence the capital need is decreasing over time.

Topdanmarks result has been stable over the years and it is adequately capitalized.

- The companies also have **capacity to issue more instruments eligible for their own funds** and hence extra buffers at Group level are not required.

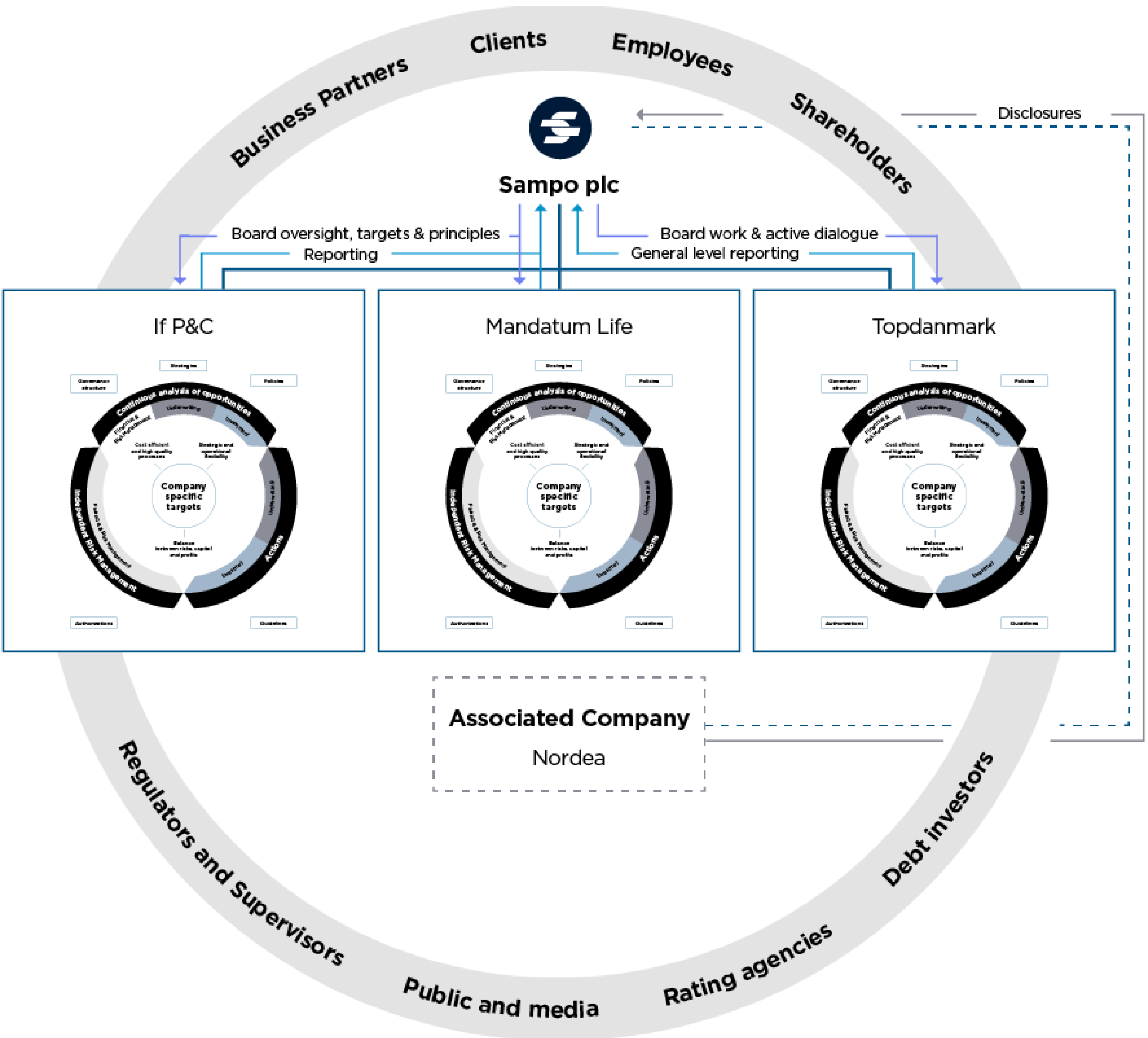
- There are **diversification benefits within Group**: The correlation of the business areas' reported profits are quite modest as presented in the table Group's Diversification Benefit as Internally Assessed, 31 December 2017. In particular, Nordea's profits are weakly correlated with If P&C's, Mandatum Life's and Topdanmark's profits. Hence, there is a clear diversification benefit within Group.

- **The parent company's capacity to generate liquidity is adequate.**

Appendix 1: Sampo Group Steering Framework and Risk Management Process

When Sampo Group is organizing its business and risk management activities, clear responsibilities and simple and flat operational structures are the fundamental principles. The responsibilities and operational structures followed in Sampo plc and wholly-owned subsidiaries, as illustrated in the figure Sampo Group's Steering Framework are described in the following paragraphs. In regards to Topdanmark, its Board and management share Sampo's view on how to prudently steer business activities and risk management process, although its current steering models and risk management processes do not have directly Sampo Group's practices as their basis. Hence, Topdanmark's current steering framework and risk management processes are not exactly the same as described next.

Sampo Group's Steering Framework



Parent Company's Guidance

Group's parent company steers the wholly-owned subsidiaries by setting targets for their capitalization and return on equity ("RoE") and by defining the main preconditions for the subsidiaries' operations in the form of the group-wide principles.

Target Setting: The Board of Directors of Sampo plc decides on the subsidiaries' return on equity targets which are currently 17.5 per cent for both If P&C and Mandatum Life. In addition, If P&C has a long-term target of maintaining the combined ratio below 95 per cent.

The parent company assesses the adequate level of capitalization and the suitability of the capital structure as described at the section "Capitalization at the sub-group level". Based on this analysis, the parent company estimates the amount of dividends distributed by the subsidiaries to the parent company. In Sampo Group, the excess capital from an operational point of view is held by the parent company which capitalizes the subsidiaries if needed.

The Board of Directors of Sampo plc decides on the main guidelines governing the subsidiaries' business activities and risk management. The most significant of these guidelines are the Code of Conduct, Risk Management Principles, Remuneration Principles and Compliance Principles. There are also further guidelines which are followed in order to prevent reputational and compliance risks, for example the Disclosure Policy.

Moreover, Sampo plc's Board of Directors' decisions and thereby also the guidance given to subsidiaries may be impacted by the external regulatory environment and expectations of different stakeholders on Sampo Group's operations. Further information on Sampo Group's relations with its stakeholders is available within the Code of Conduct at www.sampo.com/steeringsystem.

Subsidiaries' Activities and Risk Management

Subsidiaries organize their activities independently, taking into account the specific characteristics of their business operations and the guidance from the parent company relating to targets, capitalization and group-wide principles. The stakeholders' expectations and external regulations also have a direct effect on the subsidiaries' activities.

Sampo Group's subsidiaries decide independently on the governance structure of their operations. The executive management of the subsidiaries have extensive experience in the insurance industry, as well as in financial and risk management. The members of different committees and governing bodies represent expertise related to business and other functions. The subsidiaries' operations are monitored by the different governing bodies and ultimately by the Boards of Directors whose members are mainly in senior management positions in Sampo or in Sampo Group companies.

Since only the main guidelines are prepared by the parent company, the subsidiaries' management have the power and responsibility to incorporate the specific characteristics of their own operations into the company specific policies, limits, authorizations and guidelines.

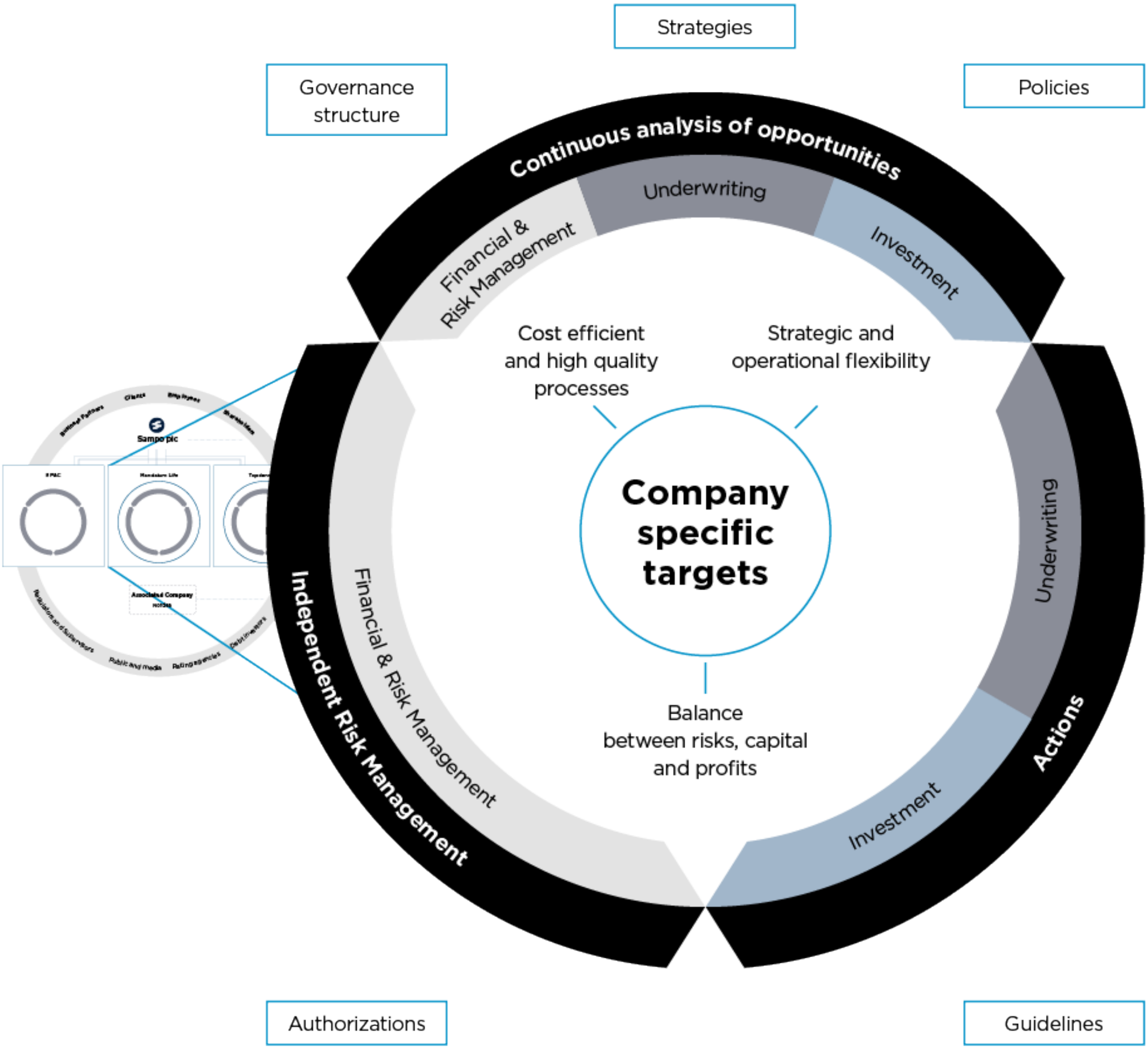
At the operative level, the subsidiaries focus on the effective execution of insurance operations and financial and risk management activities. Investments are managed according to the Investment Policies which are approved by the Boards of Directors of the respective subsidiaries. The parent company leads day-to-day management of investments; facilitates simultaneous effective execution of the subsidiaries' investment policies; and maintains group-wide oversight of the investment portfolios.

The risk management process consists of continuous activities that are partly the responsibility of the personnel involved in business activities and partly the responsibility of independent risk management specialists. Although the responsibilities of business lines and independent risk management are clearly segregated in Sampo Group, these functions are in continuous dialogue with each other. In Internal Control Policy Sampo Group has defined the roles and responsibilities of different internal stakeholders.

Parties independent of business activities are responsible for the risk management governance framework, risk policies, risk limits and authorizations which form the structure that sets the limits for business and investment units' risk taking as well as principles for risk monitoring. These structures are one prerequisite for the risk management process; they reflect capital adequacy targets and the risk appetite in general.

The figure Company Level Financial and Risk Management Process illustrates the (i) prerequisites, (ii) tasks together with the responsible functions and (iii) targets of company level risk management.

Company Level Financial and Risk Management Process



The central prerequisites for facilitating successful risk management include the following:

- Risk management governance structure and authorizations (see Risk Governance section) and clear division of responsibilities between business lines and independent functions
- Companies' own risk policies and more detailed instructions related to risk management
- Prudent valuation, risk measurement and reporting procedures.

The tasks included in the risk management process can be classified as follows:

Independent Risk Management

Financial and risk management functions are explicitly responsible for preparing the above prerequisites of risk management. Operationally they are responsible for independent measurement and control, including the monitoring of operations in general as well as profitability, risk and capitalization calculations. The following items are examples of these responsibilities:

- Detailed reporting on risks to subsidiaries' and Sampo's Risk Committees and the Boards of Directors
- Internal reporting on Capital need and actual available Capital at least on a quarterly basis
- Internal reporting on regulatory and rating agency capital charges and capital positions on a quarterly basis

- Disclosure of internal and regulatory capitalization figures quarterly.

Continuous Analysis of Opportunities and Risks

Both the business lines and the financial and risk management functions are active in supporting the business with continuous analysis and assessment of opportunities. This can be seen as a separate phase in the risk management process as the insurance and investment business units assess different business opportunities, especially their risk return ratios, on a daily basis. In the financial and risk management functions, on the other hand, a considerable amount of time is spent on risk assessment and capital planning.

This assessment of opportunities generates, for example, the following outputs:

- Identification of business opportunities (e.g. product and service development and investment opportunities) and analysis of respective earnings potential and capital consumption
- Intra-group and external dividend plans
- Hybrid and senior debt issuance initiatives.

Actions

Actions, i.e. transactions representing the actual insurance and investment operations are performed in accordance with the given authorizations, risk policies and other instructions. These actions are the responsibility of business and centralized functions such as the investment unit. Activities related to capitalization and liquidity positions are included in this part of the process. In Sampo Group, proactive actions to manage profitability, risks and capital are seen as the most important phase of the risk and capital management process. Hence, risk policies, limits and decision making authorizations, together with profitability targets, are set up in a way that they facilitate business and investment units to take carefully considered risks. Examples of the actions are as follows:

- Pricing of insurance policies and execution of investment asset transactions
- Dividend payments, share buy-backs, hybrid issuances and senior debt issuances
- Derivative and reinsurance transactions
- Business acquisitions and divestments.

High quality execution of the above tasks contributes to the achievement of the three central targets of the risk management process:

Balance Between Risks, Capital and Earnings

- The risks affecting profitability as well as other material risks are identified, assessed and analyzed.
- Capitalization is adequate in terms of risks inherent in business activities and strategic risks, taking into account the expected profitability of the businesses.
- Risk bearing capacity is allocated to different business areas in accordance with the strategy.
- Underwriting risks are priced to reflect their inherent risk levels, expected returns from investment activities are in balance with their risks, and consequential risks are mitigated sufficiently.

Cost Efficient and High Quality Processes

- Client service processes and internal operative processes are cost efficient and of high quality.
- Decision making is based on accurate, adequate and timely information.
- Continuity of operations is ensured and in the case of a discontinuity event, recovery is fast and comprehensive.

Strategic and Operational Flexibility

- External risk drivers and potential strategic risks are identified and the company is in a good position, in terms of capital structure and management skills, to react to changes in the business environment.
- Corporate structure, knowledge and processes in the companies facilitate effective implementation of changes.

When the above targets are met, risk management contributes positively to return on equity and mitigates the yearly fluctuations in profitability. The risk management process is therefore considered to be one of the contributors in creating value for the shareholders of Sampo.

Parent Company's Oversight and Activities

Sampo reviews Group as a business portfolio and is active especially in matters related to Group's capitalization and risks as well as related to the parent company's capital structure and liquidity.

Sampo reviews quarterly the performance of Sampo Group both on a company level and on a Group level based on the reporting provided by the subsidiaries and the associated company. The information on associated company is, however, based on publicly available material and is therefore less detailed. Reporting on the subsidiaries' performance to the Board of Directors and Audit Committee ("AC") of Sampo is based mainly on the reporting produced by the subsidiaries. The reporting concentrates on the balance between risks, capitalization and profitability. The parent company is responsible for reporting on its own activities. Reporting from wholly-owned subsidiaries is more detailed than reporting from Topdanmark.

At group level, the central focus areas are potential concentrations arising from Group companies' operations as well as Group's capitalization and the parent company's ability to generate liquidity. The parent company is also projecting and analyzing Group companies' profitability, risks and capitalization with uniform scenarios to have company specific forecasts that are additive at group level.

Based on the above sub-group level work and Sampo Group level internal work Sampo Group prepares annually or more often if needed a Single Own Risk and Solvency Assessment document ("Single ORSA report"). The Single ORSA report has virtually the same structure and contents as quarterly Audit Committee reporting. The only substance difference is the addition of Group-wide solvency forecasts, which are not normally part of the quarterly reporting.

Based on both the company and group level information, the Board of Directors of Sampo decides on Group's capitalization as well as sets the guidelines on the parent company's capital structure and liquidity reserve. The underlying objective for Sampo is to maintain a prudent capital structure and adequate liquidity in order to be able to arrange financing for strategic projects if needed. Strong liquidity and the ability to acquire financing are essential factors in maintaining Sampo Group's strategic flexibility.

Risk Governance

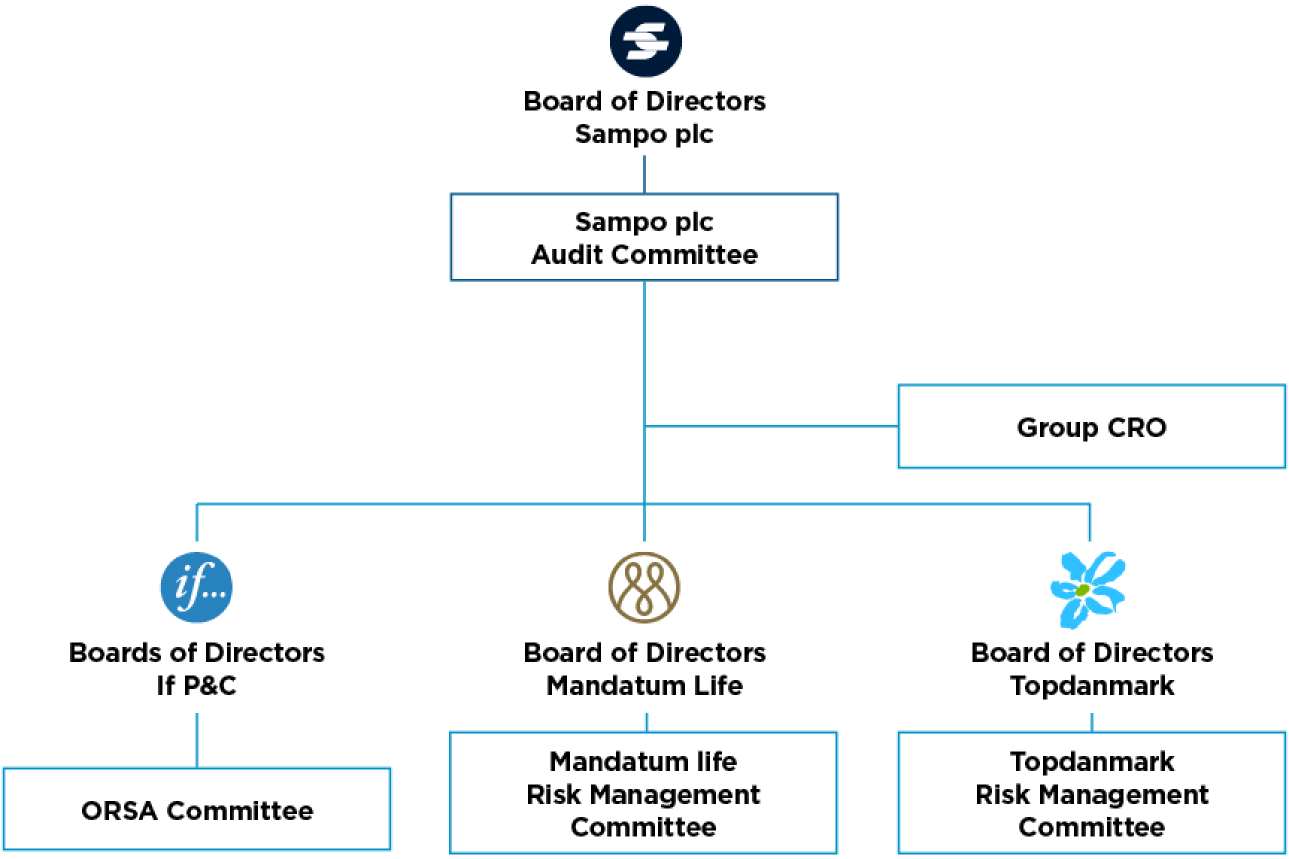
This section describes the governance framework of Sampo Group and its subsidiaries from a risk management perspective. A more detailed description of Sampo Group's corporate governance and internal control system is included in the Corporate Governance section.

Risk Governance at Group Level

The Board of Directors of Sampo is responsible for ensuring that Group's risks are properly managed and controlled. The Board of Directors of Sampo defines financial and capitalization targets for the subsidiaries and approves group level principles which steer the subsidiaries' activities. The risk exposures and capitalization reports of the subsidiaries are consolidated at group level on a quarterly basis and reported to the Board and to the Audit Committee of Sampo.

The reporting lines of different governing bodies at group level are described in the figure Risk Governance in Sampo Group.

Risk Governance in Sampo Group



The Audit Committee is responsible, on behalf of the Board of Directors, for the preparation of Sampo Group's risk management principles and other related guidelines. The AC shall ensure that the operations are in compliance with these guidelines, control Sampo Group's risks and risk concentrations as well as control the quality and scope of risk management in the Group companies. The committee shall also monitor the implementation of risk policies, capitalization and the development of risks and profit. At least three members of the AC must be elected from members of the Board who do not hold management positions in Sampo Group and are independent of the company. The AC meets on a quarterly basis.

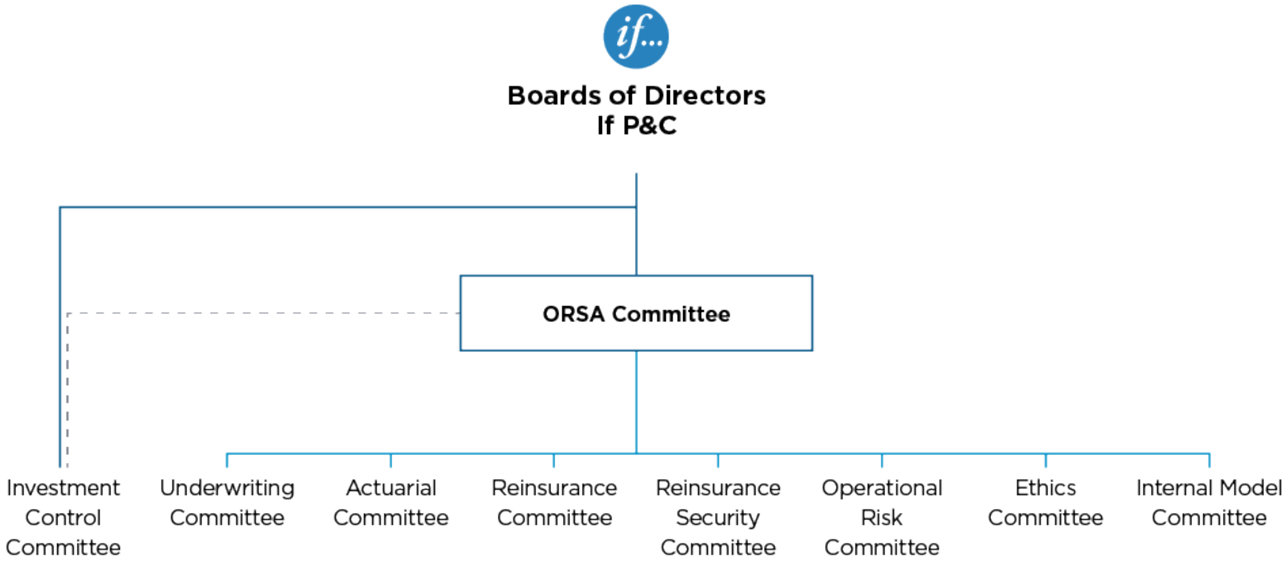
The Group Chief Risk Officer ("CRO") is responsible for the appropriateness of risk management at Group level. The CRO's responsibility is to monitor Sampo Group's aggregated risk exposure as a whole and coordinate and monitor company specific and group level risk management.

The Boards of Directors of If P&C and Mandatum Life are the ultimate decision making bodies of the respective companies and have the overall responsibility for the risk management process in If P&C and Mandatum Life respectively. The Boards of Directors appoint the If P&C ORSA Committee and the Mandatum Life Risk Management Committee, and are responsible for identifying any need to change the policies, principles and instructions related to risk management.

Risk Governance in If P&C

The main risk steering mechanism used by the Boards of Directors is the policy framework. As part of their responsibilities, the Boards of Directors approve the Risk Management Policy and the other risk steering documents; receive risk reports from the Chief Risk Officer and the Chief Executive Officers ("CEOs"); take an active part in the forward looking risk and solvency assessment process; and ensure that the management and follow-up of risks is satisfactory and effective. The reporting lines of different governing bodies in If P&C are described in the figure Risk Governance in If P&C.

Risk Governance in If P&C



The Own Risk and Solvency Assessment Committee assists the Chief Executive Officers of If P&C in fulfilling their responsibilities to oversee the risk management process. The ORSAC reviews reporting from If P&C's other committees within the Risk Management System as well as reporting from both corporate functions and the line organization. Furthermore, the ORSAC monitors If P&C's short-term and long-term aggregated risk profile to ensure it is aligned with its risk strategy and capital adequacy requirements. The Risk Management function is responsible for coordinating the risk management activities on behalf of the Boards of Directors and the CEOs.

The responsibility to identify, evaluate, control and manage risks lies within the line organization. There are separate committees in place for key risk areas which have the responsibility of monitoring the management and control risks to ensure compliance with the instructions of the Boards of Directors. The risk committees in If P&C do not have a decision mandate.

There are policies in place for each risk area which specify restrictions and limits chosen to reflect and ensure that the risk level is constantly in compliance with the overall risk appetite and capital adequacy constraints of If P&C. The committees also monitor the effectiveness of policies and give input to changes and updates if needed.

In addition to the risk specific committees, there are two other committees included in the Risk Governance structure. Their responsibilities are described as follows:

- The Ethics Committee ("EC") discusses and coordinates ethical issues in If P&C. The committee gives recommendations on ethical issues and proposes changes to the Ethics Policy. The Chairman is responsible for the reporting of ethics risk and other issues dealt with by the committee.
- The Internal Model Committee's tasks are to identify sources for potential model changes and to give its opinion to the Chairman on the assessment and classification of potential changes and on further validation activities or internal model development. In addition to the tasks above, the committee discusses and analyzes information related to the internal model from other committees as well as monitors the status of internal model use and development activities.

If P&C has also a Compliance Committee (CC), which is an advisory body for the Chief Compliance Officer regarding compliance issues. The task of the committee is to secure a comprehensive view of compliance risk and activities in If P&C.

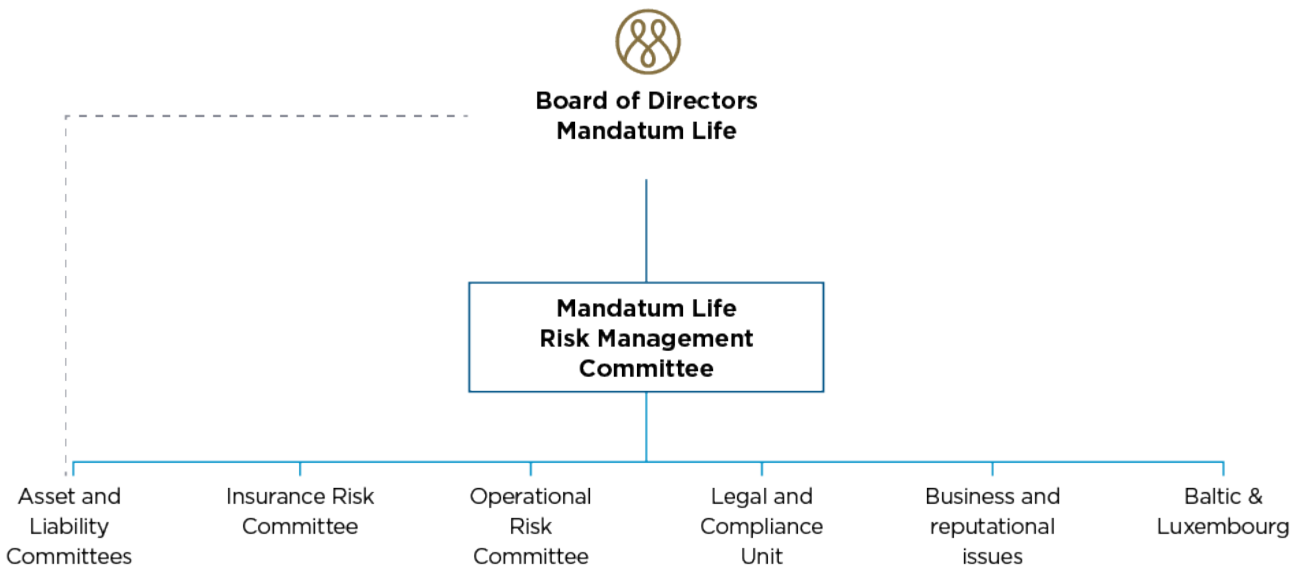
Risk Governance in Mandatum Life

In Mandatum Life the Board of Directors is responsible for risk management and the adequacy of internal control. The Board of Directors annually approves the Risk Management Plan, Investment Policy and other risk management and internal control instructions.

The Managing Director of Mandatum Life has the overall responsibility for risk management according to the Board of Directors' instructions. The Managing Director is the Chairman of the Risk Management Committee which coordinates and monitors all risks in Mandatum Life. The risks are divided into groups, the main groups being insurance, market, operational, legal and compliance risks as well as business and reputation risks. Each risk area has its own specialized committee or unit and a responsible person in the RMC.

The reporting lines of the main governing bodies in Mandatum Life are described in the figure Risk Governance in Mandatum Life.

Risk Governance in Mandatum Life



In addition to the risk specific committees, the duties related to compliance and risk management of the Baltic branches have been organized as follows:

- The Legal and Compliance Unit takes care of compliance matters with the Head of the Unit being a member of the Risk Management Committee.
- The Baltic branches has its own risk management procedures. All major incidents are also reported to Mandatum Life's Risk Management Committee.
- Internal Audit, through its audit recommendations, has a role to ensure that adequate internal controls are in place and provides Internal Audit's annual review to the Board of Directors.

Risk Governance in Topdanmark

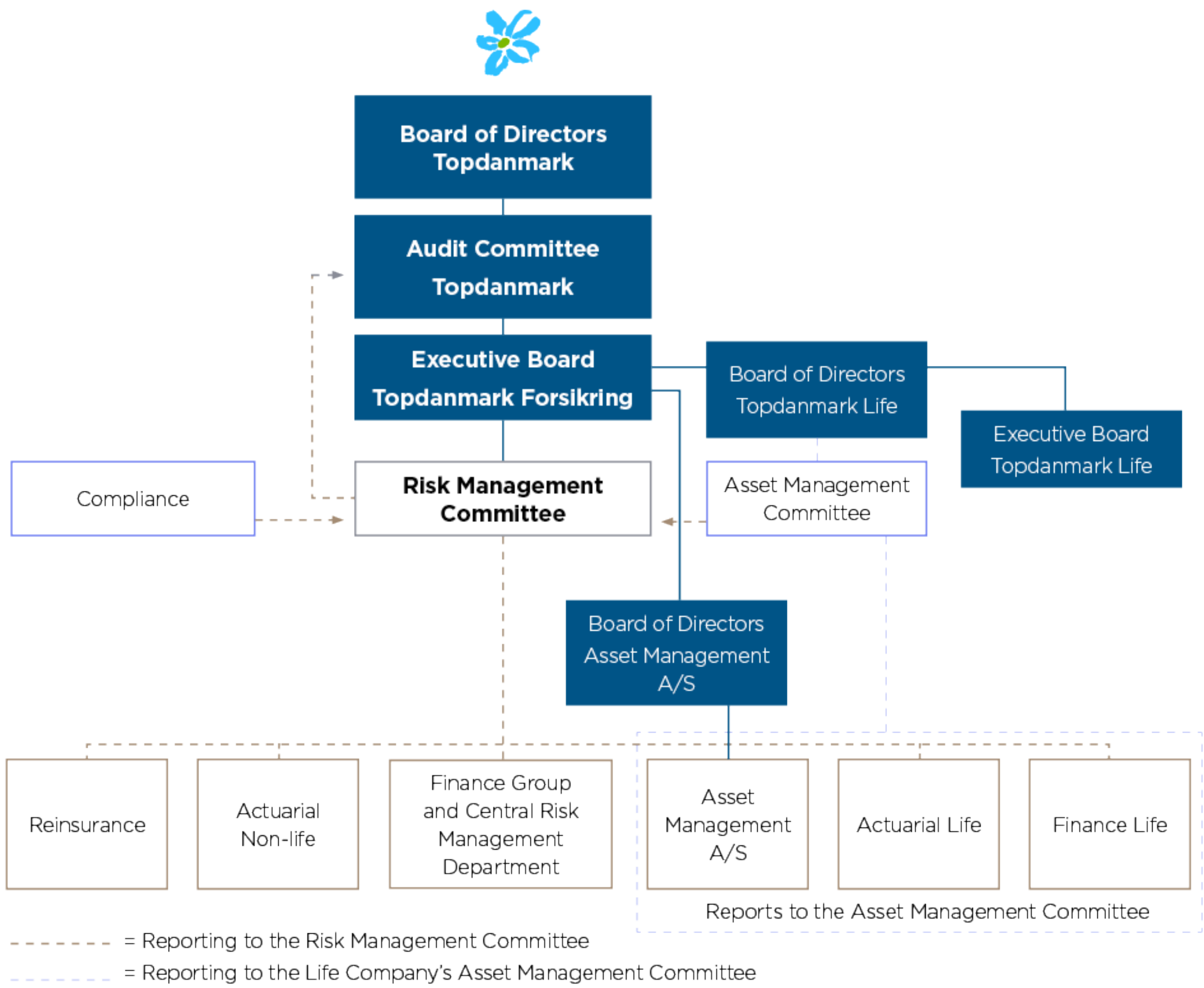
Topdanmark's policy is to hedge against risks arising from the Company's activities or to limit such risks to a level that allows the Company to maintain normal operations and implement its planned measures even in the case of highly unfavourable events in the outside world. As a consequence of this policy, for a number of years, the Company has identified and reduced or eliminated the risks which could potentially cause losses exceeding what Topdanmark considers to be acceptable. The Board of Directors determines the overall risk policies and limits. The internal auditors report to the Board of Directors and report on, among other things, the observance of these risk policies and limits.

Topdanmark's risk management function identifies, assesses and quantifies risks. It reports to the Risk Committee, which is responsible for risk policies, risk limits, solvency calculation, capital plans, Topdanmark's own risk and solvency assessment (ORSA), and Topdanmark's partial, internal model for non-life insurance risks. The members of the Risk Committee are the CFO of the Group, the head of the Compliance Function and the heads of the primary risk areas, which are: Asset Management, Statistical Services, Reinsurance, Finance, Life Actuarial Services and Life Finance. The Risk Committee reports and recommends to the Board of Directors via the Executive Board.

The Risk committee has set up the Model Committee, which is responsible for developing and operating Topdanmark's internal model for calculation of results probabilities and risks of the non-life insurance portfolio based on random simulation. The model is used for, among other things, optimising the reinsurance programme, calculation of cost of capital, forecast balancing and calculating capital requirements.

The reporting lines of the main governing bodies in Topdanmark are described in the figure Risk Governance in Topdanmark.

Risk Governance in Topdanmark



The risk management function implements an annual ORSA process identifying risks in the business, quantifying these risks and collecting them in a risk register. Additionally, the principles of solvency calculation are reviewed, and the risk management process is updated. An ORSA report has been prepared, which, together with the risk register and risk management process, was considered at a Board seminar in the autumn of 2017.

Appendix 2: Risk Definitions

Underwriting Risks

In general, the book value of insurance liabilities (technical provisions) and economic value of insurance liabilities are dependent on (i) the size and timing of future claims payments including expenses and (ii) the interest rates used to discount these claims payments to the current date.

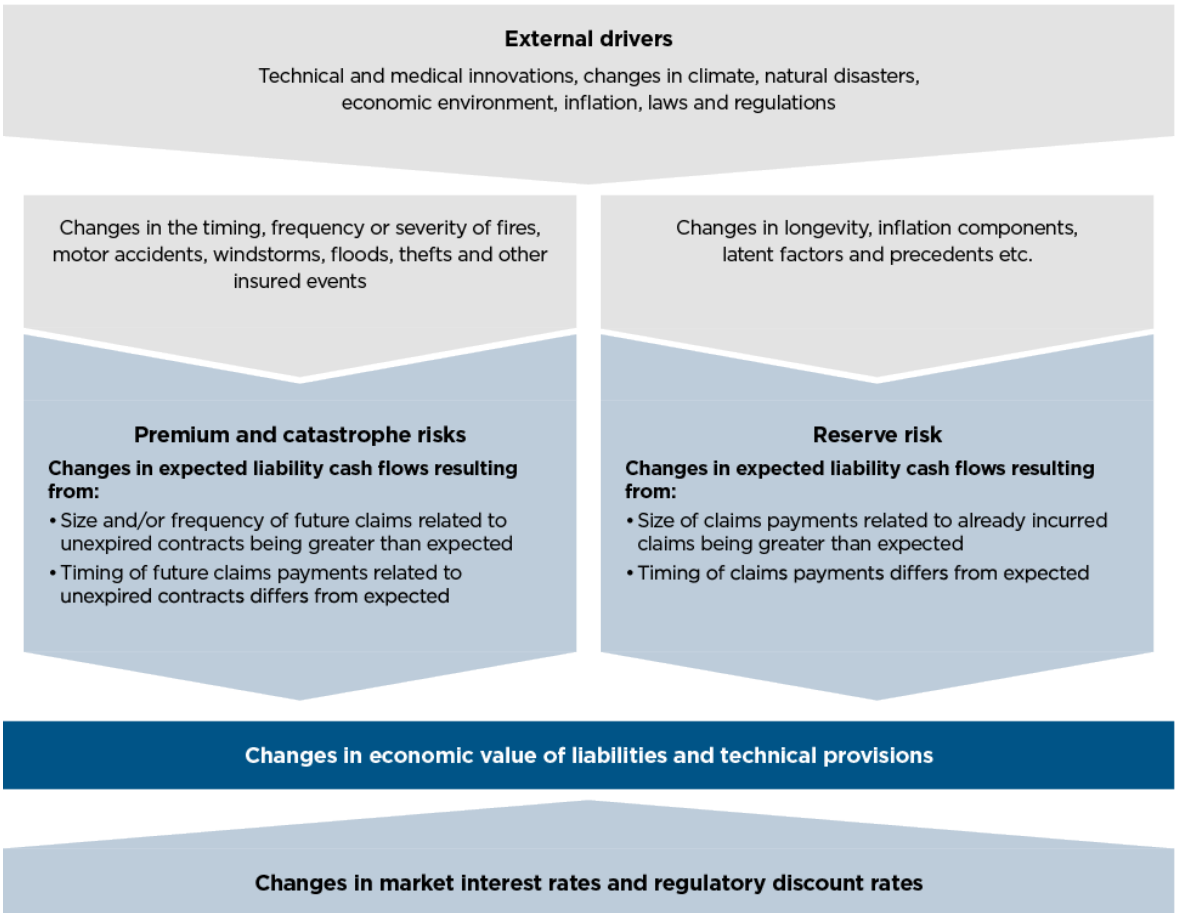
The first component is a source of underwriting risk and the second component affects the interest rate risk to the balance sheet.

Underwriting risk can be generally defined as a change in the value of insurance liabilities caused by variance between the final costs for full contractual obligations and the assumed costs when these obligations were estimated. Hence, underwriting risk is realized as unexpected liability cash flows or unexpected change in the value of insurance liabilities when the pricing and provisioning assumptions on claims payments differ to the actual payments.

Technical provisions and the 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 comprehensive run off statistics are not yet available, and for portfolios which include claims that take a long time to settle. Workers' compensation, motor other and motor third party liability, personal accident and liability insurance are examples of non-life products with the latter characteristics. In principle most of the Life products have the latter characteristics embedded within them also. Life insurance policies are also exposed to the behavior of policyholders, because policyholders can change their premium payment intensity or cancel the existing policy.

Non-life Insurance Underwriting Risks

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 from already incurred claims as illustrated in the table Non-life Insurance Underwriting Risks below.



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

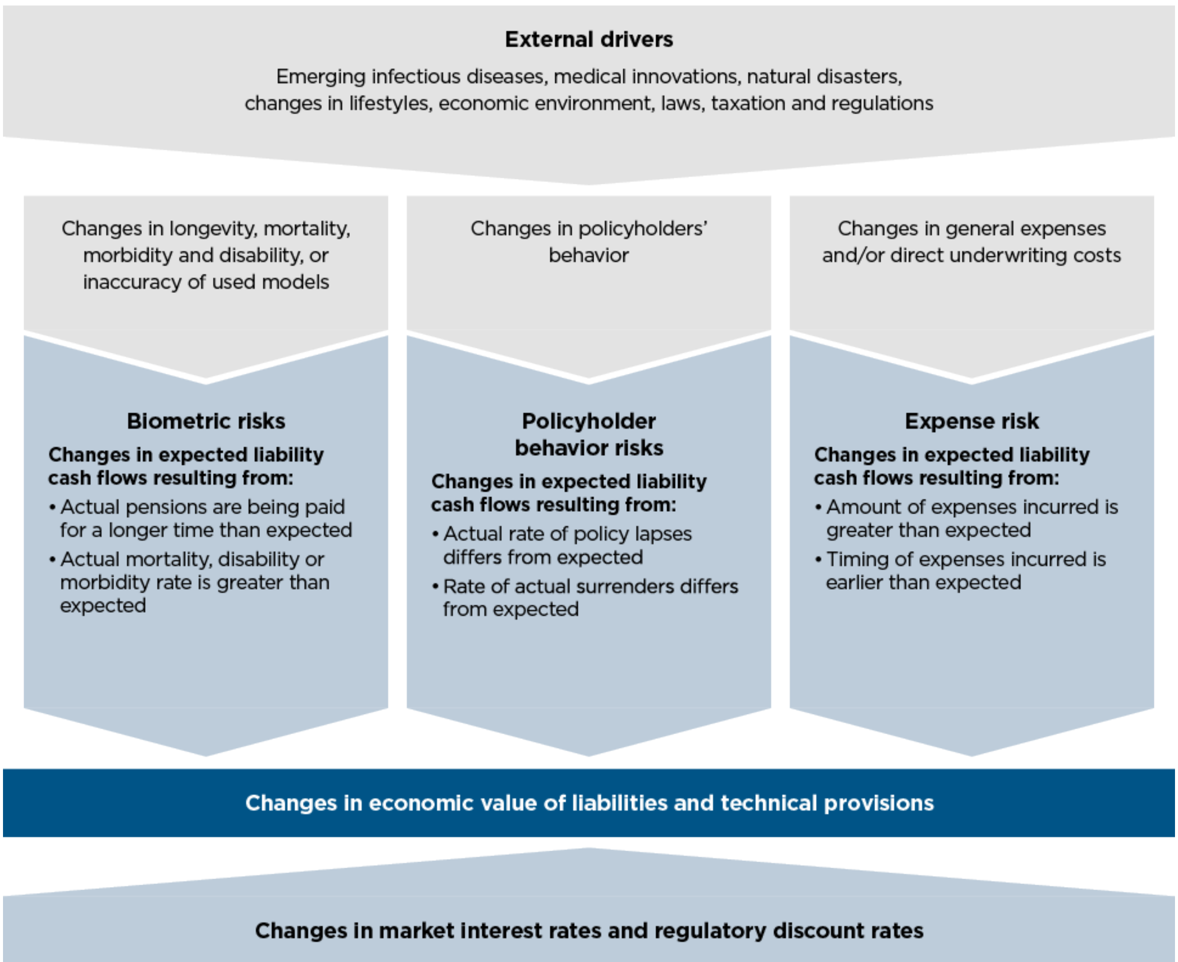
Reserve Risk

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.

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.

Life Insurance Underwriting Risks

The value of life insurance liabilities is sensitive to underwriting risks and interest rates. Underwriting risk includes biometric, policyholder behavior and expense risks as presented in the figure Life Insurance Underwriting Risks below.



Biometric Risks

Biometric risks refer to the risk that the company has to pay more mortality, disability or morbidity benefits than expected, or the company has to keep paying pension payments to the pension policy holders for a longer period (longevity risk) than expected originally when pricing the policy.

In life insurance, catastrophe events include – as in non-life insurance – rare single events or a series of events, usually over a short period of time and, albeit even less frequently, longer lasting events. When a low frequency, high severity event or series of single events lead to a significant deviation in actual benefits and payments from the total expected payments, an extreme case of biometric risk (i.e. a catastrophe risk) has been realized.

Policyholder Behavior and Expense Risks

Policyholder behavior risks arise from the uncertainty related to the behavior of policyholders. The policyholders have the right to cease paying premiums (lapse risk) and may have a possibility to withdraw their policies (surrender risk).

The company is also exposed to expense risk, which arises from the fact that the timing and/or the amount of expenses incurred differs from those expected at the time of pricing. As a result, expense charges originally assumed may not be enough to cover the realized expenses.

Discount Rate Risk in Technical Provisions

Discount rate risk in technical provisions is the main risk affecting the adequacy of technical provisions. The guaranteed interest rate in policies is fixed for the whole policy period. Thus, if market interest rates and expected investment returns fall, technical provisions may have to be supplemented.

Market Risks

In general, market risks refer to fluctuations in the financial results and capital base caused by changes in market values of financial assets and liabilities, as well as by changes in the economic value of insurance liabilities. The changes in market values and economic values are caused by movements in underlying market variables such as interest rates, inflation, foreign exchange rates, credit spreads and share prices.

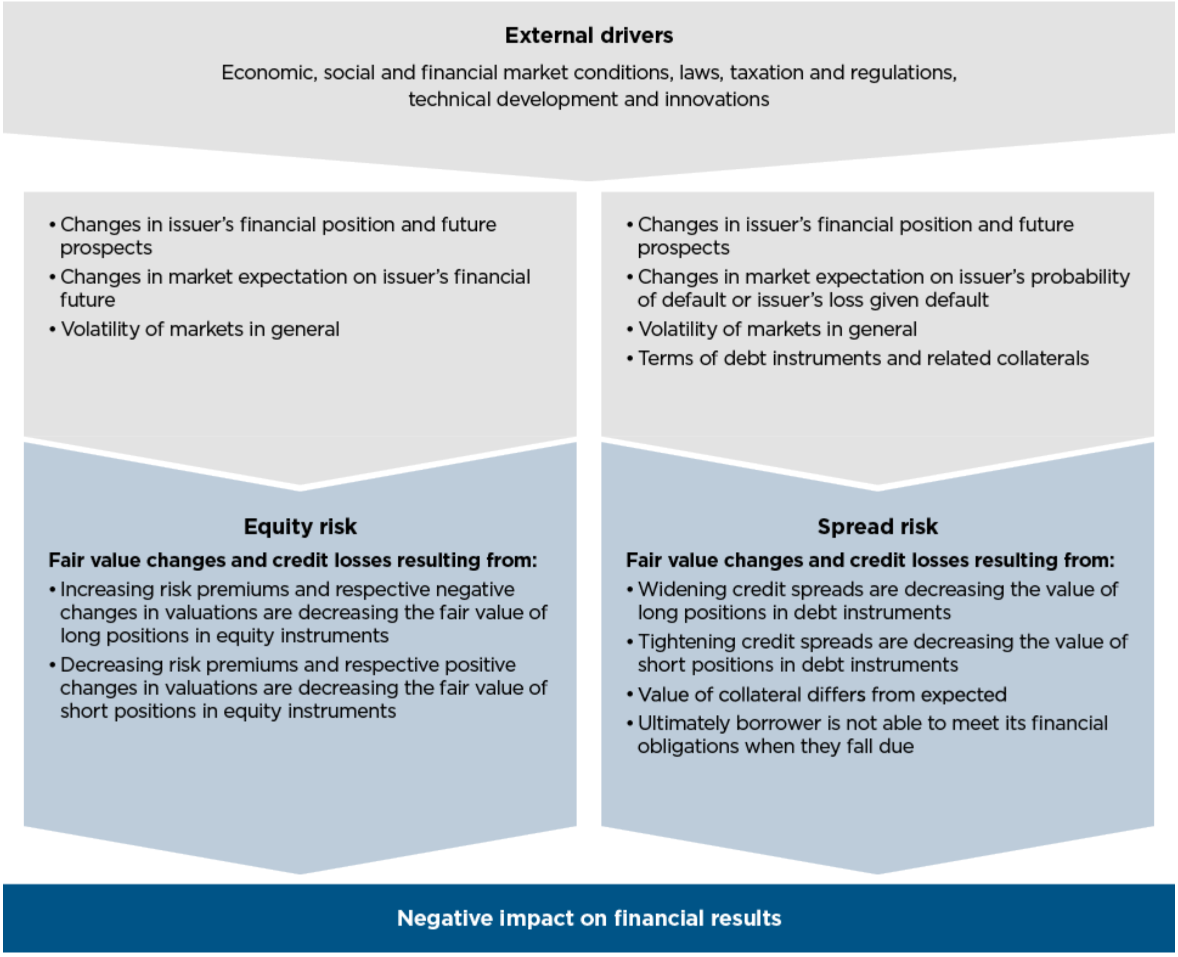
Furthermore, market risks also include the risk of worsening market liquidity in terms of widening bid-ask spreads and the risk of unexpected changes in the repayment schedules of assets. In both cases the market values of financial instruments in investment portfolios may change.

The risks caused by changes in interest rates, foreign exchange rates and inflation together with a general trend of credit spreads and equity prices are defined as **general market risks** and are managed by allocation limits and other risk limits. Interest rate, inflation and currency risks are balance sheet level market risks whereas trend of spreads and equity prices relates only to assets.

The risk related to debt and equity instruments issued by a specific issuer can be defined as issuer **specific market risk** that is managed by issuer specific limits.

Equity and Spread Risks

Sampo Group is exposed to price risk dependent on changes in equity prices and spreads arising from its fixed income and equity investments, as illustrated by the below table Equity and Spread Risks. Equity price and spread movements are affected by general market trends and by risk factors that are related specifically to a certain issuer or a specific issue.

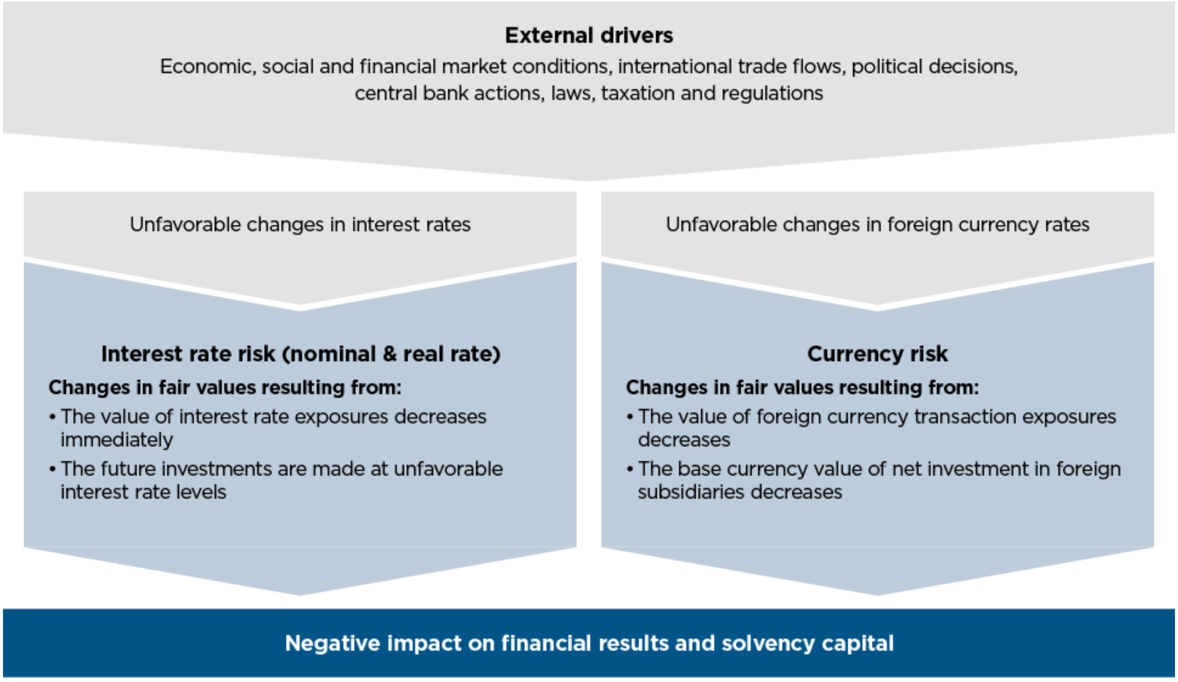


Balance Sheet Level Market Risks or ALM Risks

When changes in different market risk variables (interest rates, inflation, foreign exchange rates) cause a change in the fair values of investment assets and derivatives that is of a different size than the respective change in the economic value of the insurance liabilities, the company is exposed to ALM risk. It has to be noted that the cash flows of insurance liabilities are modelled estimates and are therefore uncertain in relation to both their timing and amount. This uncertainty is a central component of ALM risk. Interest rate risk was defined earlier in the connection of market risks and hence in this section only liquidity risk is defined.

Interest Rate and Currency Risks

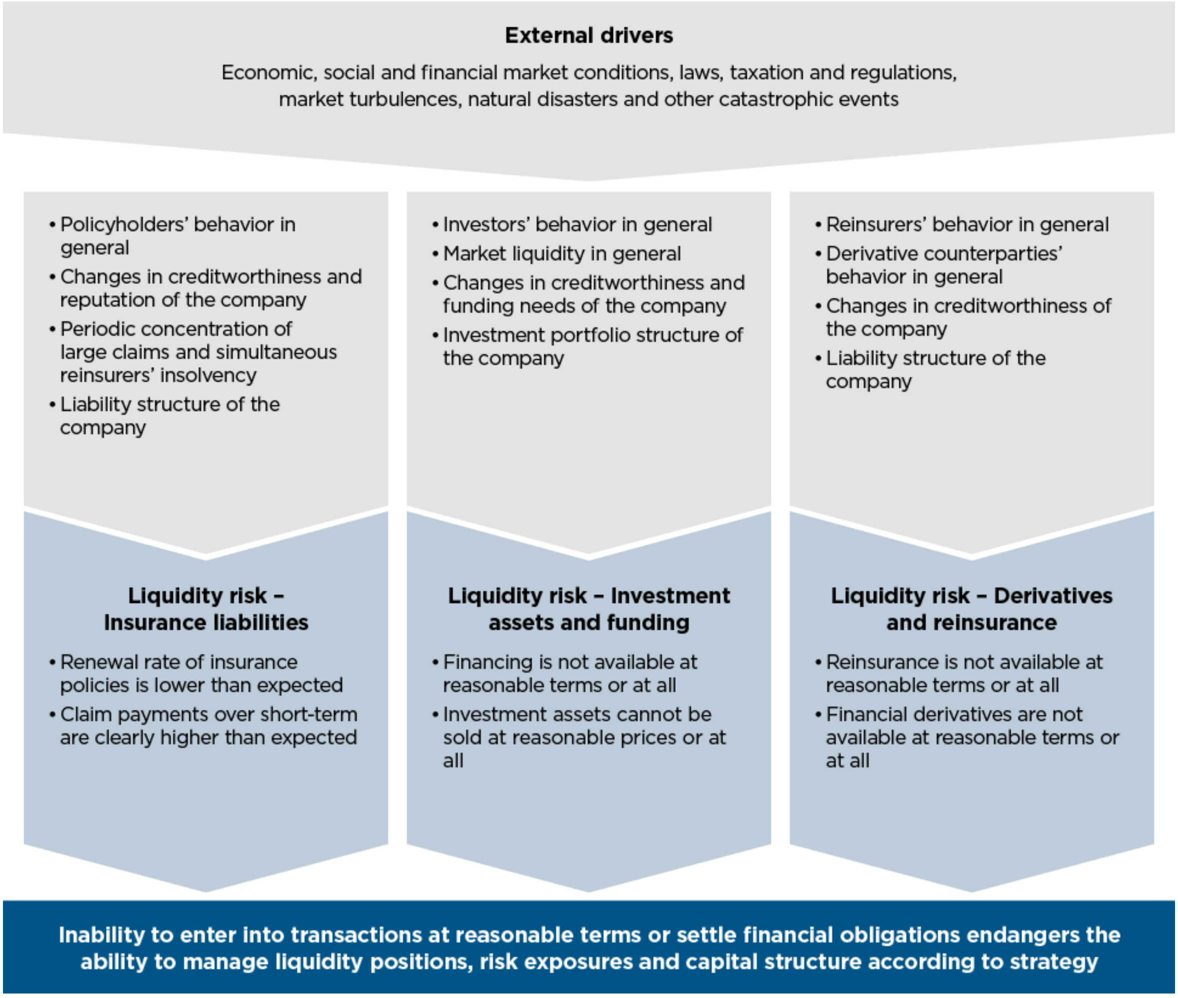
Many external drivers are affecting interest rates, inflation, inflation expectations and foreign exchange rates as illustrated by the following figure Interest Rate and Currency Risks.



Currency risk can be divided into transaction and translation risk. Transaction risk refers to currency risk arising from contractual cash flows in foreign currencies which are related to insurance activities, investment operations and foreign exchange transactions. Translation risk refers to currency risk that may realize when balance sheet values or measures such as SCRs expressed in base currency are converted to other currencies.

Liquidity Risks

Liquidity risk is the risk that Group companies are, due to a lack of available liquid funds or access to relevant markets, unable to conduct their regular business activities in accordance with the strategy, or in extreme cases, are unable to settle their financial obligations when they fall due.



The sources of liquidity risk in Sampo Group are either internal or external by their nature. If the company's rating declines or if the company's solvency otherwise appears jeopardized, its ability to raise funding, buy reinsurance cover or enter into financial derivatives at a reasonable price is endangered. Moreover, policyholders may also not be willing to renew their policies because of the company's financial challenges or in the case of reputational issues. If these risks, caused by internal reasons, are realized together with general market turmoil, which makes the selling of investment assets and the refinancing of debt difficult, maintaining adequate liquidity can be a challenge.

Counterparty Default Risks

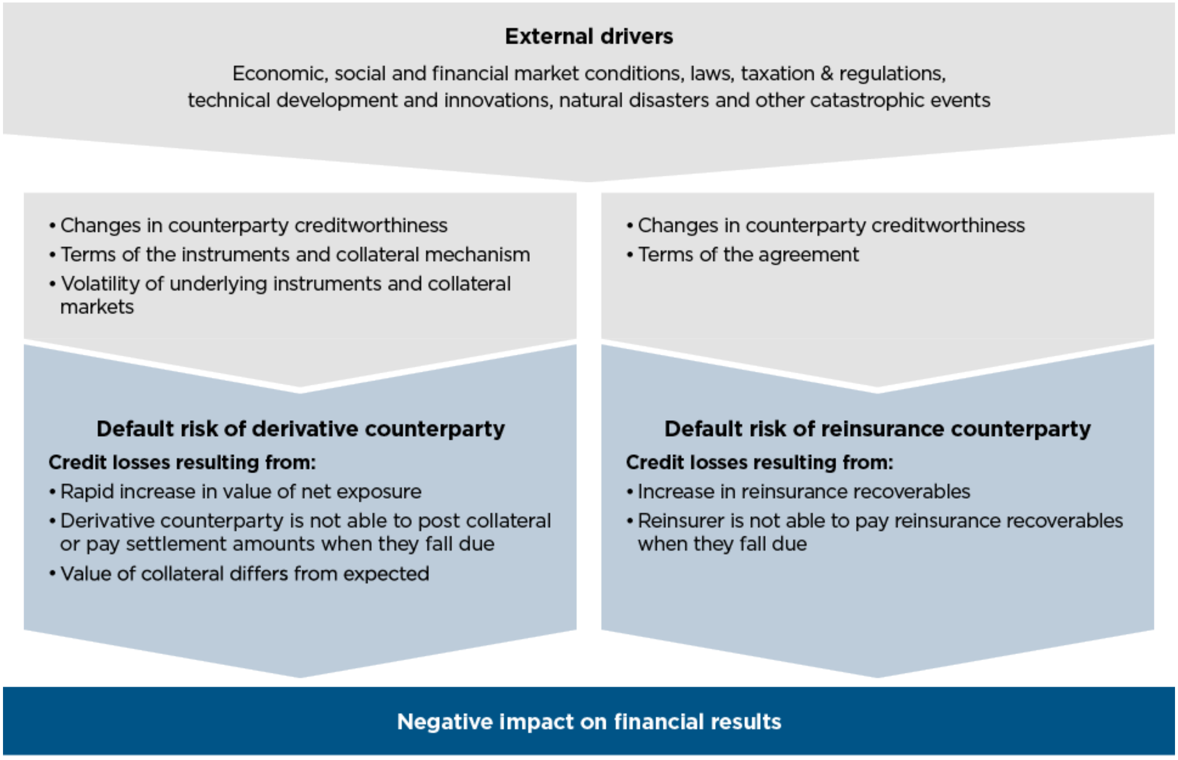
Credit risk by definition comprises default, spread and settlement risks. Default risk refers to losses arising from occurred defaults of contractual counterparties (counterparty risk) or debtors (issuer risk).

Counterparty Default Risk ("Counterparty Risk") is one type of consequential risk, which Sampo Group is exposed to through its activities. In the case of counterparty risk, the final loss depends on the positive mark-to-market value of derivatives or reinsurance recoverables at the time of default and on the recovery rate which is affected by collaterals.

In the case of issuer risk the final loss depends on the investor's holding of the security or deposit at the time of default, mitigated by the recovery rate.

Spread risk refers to losses resulting from changes in the credit spreads of debt instruments and credit derivatives. Credit spreads are affected when the market's estimation of the probability of defaults is changing. In essence, credit spread is the market price of default risk which is priced into the market value of the debt instrument. Hence the debt instrument's value should lower before the event of default occurs. Because of these features, spread risk, including also the default risk of debt instruments, is categorized in Sampo Group under investment portfolio market risks.

Settlement risk realizes when one party fails to deliver the terms of a contract with another party at the time of settlement. Settlement risk can be the loss associated with default at settlement and any timing differences in settlement between the two parties. Settlement risks are effectively mitigated by using centralized settlement and clearing systems by Sampo Group companies.



Operational Risks

Operational risk refers to the risk of loss resulting from inadequate or failed processes or systems, from personnel or from external events. This definition includes compliance risk but excludes risks resulting from strategic decisions. The risks may realize for instance as a consequence of:

- Internal misconduct;
- External misconduct;
- Insufficient human resources management;
- Insufficiencies in operating policies with regard to customers, products or business activities;
- Damage to physical property;
- Interruption of activities and system failures; or
- Defects in the operating process.

Materialized operational risks can cause an immediate negative impact on the financial results due to additional costs or loss of earnings. In the longer term, materialized operational risks can lead to a loss of reputation and, eventually, a loss of customers which endangers the company's ability to conduct business activities in accordance with the strategy.

Compliance risk is the risk of legal or regulatory sanctions, material financial losses or loss of reputation resulting from a company's failure to comply with laws, regulations and administrative orders as applicable to its activities. A compliance risk is usually the consequence of internal misconduct and hence it can be seen as a part of operational risk.

External drivers

Natural disasters, other catastrophic events, epidemics, unauthorized or criminal acts and technological developments

- Competence and integrity of human resources
- Hardware, software and data
- Work processes

Operative processes

High cost or low quality of client services or internal processes resulting from:

- Internal processes are not working as expected
- Client services are not working as expected

- Source data integrity
- Calculation procedures
- Reporting procedures
- Access to data and reports

Data and information

Deficiencies in decision-making and actions and non-compliance in reporting resulting from:

- Inadequate, inaccurate or untimely information and reporting

- Internal events, accidents, failures, misconduct etc.

Resource damages

Discontinuity of operations resulting from:

- Damage to personnel
- Damage to physical property or locations
- Damage to or loss of data

Negative impact on financial results arising from immediate costs or loss of earnings and inability to conduct business activities in accordance with strategy due to loss of reputation and customers

Appendix 3: Selected Management Principles

These principles are followed as such in wholly-owned subsidiaries and this description does not cover current principles followed in Topdanmark.

Principles of Balance Sheet Management (ALM)

Risk factors that are affecting both sides of balance sheet contribute considerably to economic values of insurance liabilities, market value of assets, risks and capital need. According to Sampo's definitions ALM risks include in addition to interest rate-, inflation- and FX-risk also liquidity risk and behavioural risks affecting maturities of insurance policies and some asset classes. Risk definitions related to ALM risks may be found in Appendix 2 (Risk Definitions).

ALM risk profiles are thoroughly analysed and taken into account for instance when investment policies are designed, insurance products are developed and internal capitalization targets are set.

In Sampo Group **companies,** insurance liabilities are the starting point for investment policy designing. Insurance liabilities are modelled and analysed to form an understanding of their expected future cash flows and their sensitivities to changes in factors such as inflation, interest rates and foreign exchange rates. Secondly, the solvency position at a time and its target levels (rating-agency and regulatory) and risk appetite define the general capacity and willingness to take market risks and liquidity risk. The stronger the solvency position and the higher the risk appetite, the more the investment portfolio can potentially differentiate from a portfolio replicating cash flows of insurance liabilities. Sampo Group companies manage their investment portfolios within the limits set on Investment Policies on a daily basis as described in more detail at section Principles of Investment Portfolio Management.

In Sampo Group, operative liquidity risk is managed by the legal entities, which are responsible for liquidity planning and maintaining adequate liquidity buffers. Liquidity risk is monitored based on the expected cash flows resulting from assets, liabilities and other business. In the subsidiaries, the adequacy of liquidity buffers is dependent on the underwriting cash flows. In the parent company, the adequacy of liquidity buffers is dependent also on potential strategic arrangements and strong liquidity and capacity to generate more liquidity if needed is generally preferred.

Since there is no unambiguous technique to quantify the capital need for liquidity risk, it is not directly taken into account in the internal capital need estimates. Thus only the interest rate, inflation and FX-risks of the ALM risks are accounted for in the capital need framework.

One form of liquidity risk is the access to markets when needed. Sampo Group companies maintain good business relationships with several creditworthy counterparties which mitigate the risk that Group is not able to enter into reinsurance or derivative transactions when needed.

At Group level Sampo plc monitors the ALM-profiles of the companies and may adjust its own risk profiles to mitigate the risks at group level. Because of this the major portion of Sampo's debt is tied to short term interest rates. Hence, risk profile of Sampo plc is opposite to daughter companies.

Principles of Investment Portfolio Management

Investments (excluding Mandatum Life's investments covering unit-linked policies) are managed according to the subsidiaries' Investment Policies which are based on insurance liabilities and solvency as described in previous section. In Sampo Group direct investments and managers of collective investment assets are carefully studied before entering into new investments or making new commitments. This prudent person principle is reflected in many different ways in companies´ investment policies and specifically in requirements set for new kind of investments or any non-routine investments by their nature.

Sampo Group's Chief Investment Officer is responsible for managing investments within the limitations of the Investment Policies prepared by Group companies and approved by Group companies' Boards of Directors. The insurance subsidiaries and the parent company have a common Group-wide infrastructure for investment management as well as for performance and risk reporting which facilitates simultaneous company and Group level reporting. These create cost efficiency in Investment activities and also facilitate Group-wide monitoring of portfolios.

Sampo Group has a thorough understanding of the Nordic markets and issuers and consequently Group's direct investments are mainly made in Nordic securities although lately direct investments outside non-Nordic countries have increased. Mandatum Life's direct investments are mainly denominated in euro and in companies geographically located in Finland and selectively in other countries. If P&C has the major part of its direct investments denominated in the Scandinavian currencies and their respective countries. Through effective differentiation in asset selection between companies, concentration risk is proactively managed at Group level.

Sampo Group prefers simple matured instruments and transparency. Hence, most of Sampo Group's investments are in fixed income securities and listed equities which are tradable and subject to daily mark-to-market valuation. Moreover, Sampo Group has also some illiquid investments in these asset classes – loan instruments and private equity – for which market prices are not that frequently available, but whose fair values can change adversely when the financial strength or future prospects of the issuer deteriorates or the value of collaterals decreases. Sampo Group has tools in place to measure the risks of these instruments as well.

In financial accounting the investment portfolios are reported on a fair value basis. These fair values are determined either on the basis of direct market quotes or by using various valuation models. More information on the valuation methods of the investment assets is presented in Note 16 of Sampo Group Financial Statements. In regards to Solvency II valuation methods, there are some minor differences compared to IFRS rules. See Appendix 4 for Solvency II Valuation Methods.

Sampo believes that the sustainability issues have an impact on the long term performance, risks and value of all companies. Hence, integration of environmental, social and governance issues (ESG) into the investment process is an important instrument to improve the risk-return profile of investments and it is a critical success factor of investment activities especially in the long run.

- At the moment Sampo Group companies do not have ESG investment guidelines that would exclude some business areas and companies outside the scope of investment opportunities. Sampo Group does not have earmarked funds for sustainable investments like green bonds either.
- Sampo's investment philosophy is to invest into separate companies' shares and debt instruments instead of allocating funds to chosen industries and geographical areas. These companies are carefully studied before any investments are made and hence environmental, social and governance issues are considered in parallel with other factors affecting risk/return ratio of separate investments. By this method Sampo will acquire only investments that are in line with Sampo's values at the time of investment. It is the responsibility of the portfolio managers and others involved in the investment decision-making process to determine ESG factors as well.
- During 2018 Sampo Group will develop reports classifying assets by their ESG scorings (or ratings) to further enhance internal monitoring of ESG issues and make external reporting more transparent from ESG angle.

Sampo's activity is reflected through our actions. In case Sampo's view about the company changes, Sampo does not make new investments on the company and investments already in the portfolio may be sold over time.

Management of Equity and Spread Risks of Direct Investments

In Sampo Group, the selection of direct fixed income and equity investments is based primarily on stock and bond picking and secondarily on top-down allocation. This investment style ensures that the portfolio includes thoroughly analyzed investments with risk return ratios internally considered to be adequate, although the portfolio might not be necessarily as diversified as finance or portfolio theory suggests.

The main steps in decision making, limit and monitoring process are as follows:

1. Potential investments are analyzed thoroughly. The creditworthiness and future prospects of the issuer are assessed together with collaterals and structural details of the instruments. Although external credit ratings by rating agencies and the opinions of analysts are used to support the internal assessment, Sampo Group's own internal assessment is always the most important factor in decision making.
2. Investment transactions shall be executable on short notice when an opportunity appears. This puts pressure on authorizations and credit limit structures and procedures which must be simultaneously (i) carried out flexibly enough to facilitate fast decision making regardless of instrument type, (ii) well-structured to ensure that investment opportunities are assessed prudently, taking into account the specific features and risks of all investment types and (iii) able to restrict the maximum exposure of a single name risk to a level that is within the company's risk appetite.
3. Accumulated credit exposures over single names and products are monitored regularly at the subsidiary level and at Group level to identify unwanted concentrations. Credit exposures are reported, for instance, by sectors and asset classes and within fixed income by ratings.

Management of Indirect Investments

In addition to direct investments the collective investment assets managed by third parties are used. The external asset managers and collective investment assets managed by them are selected centrally by the same members of Sampo Group's Investment Unit for both wholly owned subsidiaries. In this selection clearly defined procedures are followed to ensure the integrity of asset managers and to make sure that these investments do not overlap with direct investments. By this way Sampo Group prevents unidentified or unwanted concentrations.

These investments are mainly in other asset classes – real estate, private equity and alternative credit funds - and in different geographical areas than the direct investments that are mainly in Nordic countries. These investments are primarily used as a tool in tactical asset allocation when seeking return and secondarily in order to increase diversification. Sampo Group does not have Asset Backed securities in its portfolios except some CDOs in Topdanmark.

Management of Currency Risk

In Sampo Group companies the net foreign currency **transaction** exposure is considered as a separate asset class and is managed within investment portfolio activities as considered relevant by the company.

Open transaction risk positions are identified, measured and managed separately by each Sampo Group company. The net position in each currency consists of the assets, liabilities and foreign exchange transactions denominated in the particular currency. Mandatum Life and Topdanmark have their liabilities only in their local currency and hence their transaction exposures are net of foreign currency assets and currency derivatives. In If P&C there are also foreign currency denominated liabilities.

At Group level Sampo is also exposed to translation risk, because base currency of If P&C is Swedish Krona and for Topdanmark base currency is Danish Krona.

Use of Derivatives

In Sampo Group the main motive for use of derivatives is their efficiency – better liquidity and tighter bid-ask spreads – compared to cash instruments.

In Sampo Group derivatives are used mainly to adjust risks at investment-portfolio level (spread and equity risks) or at balance-sheet level (interest rate, inflation and currency risks). This adjusting can mean mitigating or increasing of risks. From time to time risk profile of single transactions may be adjusted by derivatives as well.

The approved derivatives are listed in the companies' investment policies. In case there is a need for a new kind of derivative instrument the proposal is made for the Board approval. This proposal includes analysis how the effect of new instrument type is properly taken into account in risk limits and other reporting.

In most of the cases, derivatives are booked as trading derivatives at fair value through the profit and loss statement in financial accounting and hedge accounting is applied only seldom.
The counterparty risk related to derivatives is managed as described in counterparty risk section.

Control of Investment Activities

Daily Controlling of activities in wholly owned subsidiaries

Market risk control is separated from portfolio management activities in two ways. Firstly, persons independent from the Investment Unit prepare Investment Policies for Board approval. Secondly, Middle Office units which are independent of the Investment Unit, measure risks, performance and control limits set in Investment Policies on a daily basis.

Market risks and limits are also controlled by the Investment Control Committee (ICC) in If P&C and the Asset and Liability Committees (ALCOs) in Mandatum Life on a monthly basis at a minimum. These committees are responsible for the control of investment activities within the respective legal entity.

The ICC is responsible for monitoring the implementation of and compliance with the Investment and Asset Coverage

Policies. The committee considers and proposes changes to the policies. The Chairman is responsible for the reporting of policy deviations and other issues dealt with by the committee.

Mandatum Life has two ALCOs, of which one controls the segregated assets and liabilities and the other controls the rest of Mandatum Life's with profit assets and liabilities. The ALCOs ensure that the investment activities are conducted within the limits defined in the Investment Policy as approved by the Board and monitors the adequacy of liquidity, profitability and solvency capital in relation to the risks in the balance sheet. The ALCOs prepare proposals of Investment Policy to the Board of Directors and report to the Board.

Group-wide Monitoring Activities

The aggregated market risks and concentrations at Group level are controlled by Group's Audit Committee quarterly at a minimum. Unlike underwriting activities, the subsidiaries' investment activities are coordinated closely many ways at group level as follows:

- Their investment portfolios' risk profiles are designed and decided separately from each other, but their risk profiles are coordinated to proactively prevent potential concentrations. This principle is relevant for Topdanmark as well.
- The persons responsible for managing the subsidiaries' investments report directly to Sampo Group's Chief Investment Officer which ensures day-to-day coordination. Topdanmark is taking care of its day-to-day investments independently
- IT systems in investment activities are common throughout the Group, facilitating consistent analysis and reporting of risks both at the company and group level. In regards to Topdanmark their investment assets are taken into account at concentration reporting, but otherwise they have separate reporting processes.
- The same basic principles are primarily followed in the investment activities of both wholly owned subsidiaries, although the risk level of If P&C's investment portfolio is significantly lower than the risk level of Mandatum Life's investment portfolio due to different features of their insurance liabilities. In Topdanmark as well the insurance liabilities are the starting point to investment risk profiles.

Principles of Operational Risks Management

The effects of operational risks have their general causes in external and internal drivers. For example the operational risks may realize as a result of inadequate or failed processes or systems, from personnel or from external events (for further details, see Appendix 2, Risk Definitions - Operational Risks). Group companies have their own specific risk sources which are causes of events that may have negative impacts on different processes, personnel or fixed assets.

In Sampo Group, the parent company sets the following goals of operational risk management for its subsidiaries:

- To simultaneously ensure the efficiency and the quality of operations
- To ensure that operations are compliant with laws and regulations
- To ensure the continuity of business operations in exceptional circumstances.

Each company is responsible for arranging its operational risk management in line with the above mentioned goals, while also taking into account the specific features of its business activities.

Appendix 4: Profitability, Risks and Capital

Sampo Group operates under a holding company structure and the parent company does not have any business activities of its own. Sampo Group's business activities are conducted in four separately managed independent business areas, with each business area managing their own risks and reserving sufficient capital to cover their risks.

This structure implies that the parent company is structurally subordinated. Hence, it is dependent on business areas' dividends that can be paid only after business areas have met their own obligations. Thus, the parent company prefers to maintain in its business areas a balance between profits, risks and capital which supports business areas' ability to pay stable dividends after servicing their own obligations.

The structure also implies that **Sampo plc's primary focus is on the capitalization at the sub-group level** and when the sub-groups are well-capitalized, the Group is by definition well-capitalized. The latter may not be true if the sub-groups are cross-capitalizing each other, or the parent company is financially weak (highly leveraged and has inadequate liquidity buffers) or profits of the sub-groups are strongly and positively correlated. In Sampo Group none of these three claims are true.

Hence, from Sampo Group's perspective, the main **objectives** are:

- Independent business areas generate a stable and growing stream of profits and have adequate solvency to ensure the continuity of normal business activities.
- The portfolio of separate business areas is stable. From the Group's perspective, a weak correlation of business areas' profits increasing the benefits of diversification on a portfolio level is preferred.
- The Group's parent company is able to provide liquidity for the strategic arrangements and capital injections, if needed. Hence, the parent company prefers to have a relatively low leverage and adequate liquidity buffers to ensure its ability to generate liquidity.

Over the years Sampo Group has disclosed its financial information by segments and relevant risk and solvency reporting by insurance sub-groups. Associated company has disclosed their respective reports independently. Sampo Group has disclosed its group solvency (FICO solvency) according to the Act on the Supervision of Financial and Insurance Conglomerates (699/2004), i.e. conglomerate rules.

Since Solvency II ("SII") entered into force on 1 January 2016, group solvency calculated by Solvency II rules must be disclosed as well. Differences between these methods will be described later in the chapter Capitalization at Group level. In Solvency II Sampo plc is defined as the ultimate parent of the Solvency II group and thus the operative insurance companies each report separate figures to their local supervisors while If P&C group Solvency II figures are not required to be disclosed separately, but as part of Sampo Group SII figures.

In addition to the disclosures described above, which are in line with management structure of the Group, Sampo Group's solvency based on Solvency II rules is disclosed as well.

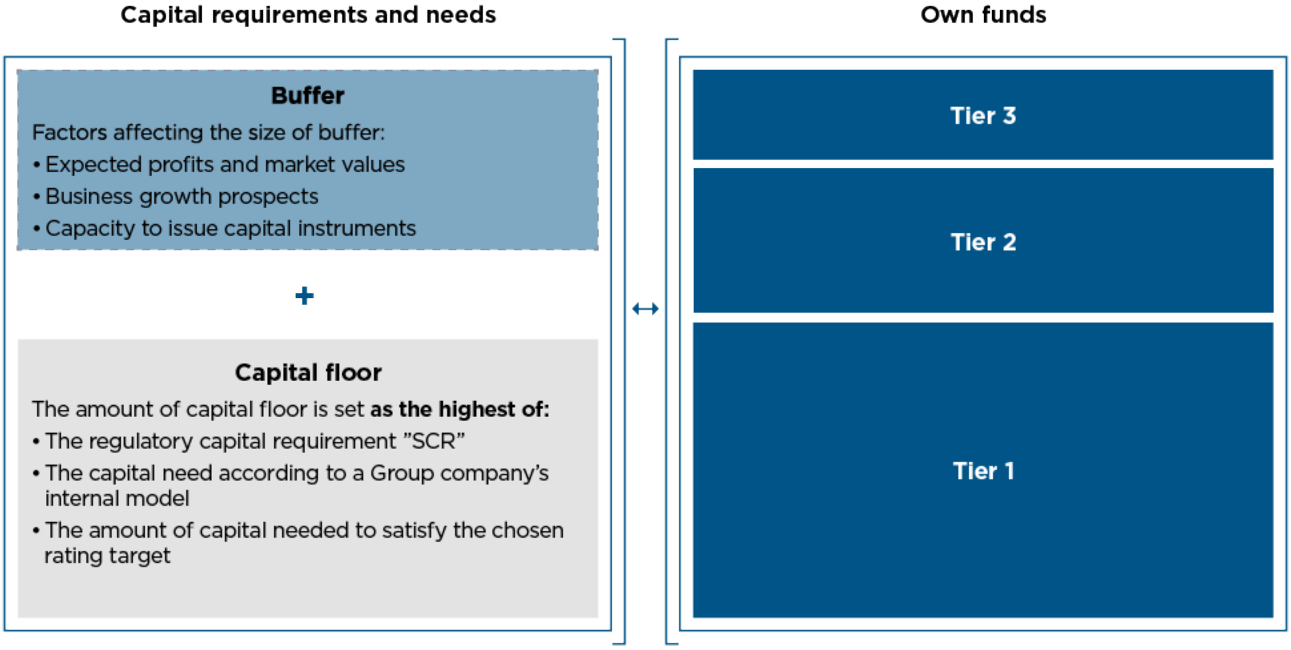
Capitalization at the Sub-Group Level

As noted earlier, in Sampo Group the first priority is to maintain **a balance between profits, risks and capital** in each of the separate business areas.

In a nutshell a balance between profits, risks and capital means that the actual amount of capital – or Own Funds ("OF") in Solvency II terminology - is maintained over risk based capital need with a certain buffer; the size of this buffer is dependent on many things but mainly on expected profitability.

The figure Sampo Group Companies' Capitalization Framework illustrates Sampo's approach to sub-group and company-level capitalization.

Sampo Group Companies' Capitalization Framework



The Solvency Capital Requirement ("SCR") sets the minimum level of capital at which a company is able to conduct its business without regulatory intervention. Regardless of whether the regulatory capital requirement is calculated using the internal model or the standard formula ("SF"), it reflects a 99.5 per cent confidence level, i.e. the same probability of default as a Triple-B rating from major rating agencies. If the company's clients and counterparties prefer a higher than Triple-B creditworthiness from their insurance company, the level of capital must always be higher than the SCR, to ensure the company's ability to serve its client base.

To serve its current clients, If P&C is maintaining a Single-A rating which effectively implies that If P&C's capital floor – the level to which it compares its actual capital – is higher than the SCR. Mandatum Life and Topdanmark consider the SCR to be an adequate capital floor. Topdanmark's group solvency is calculated according to Solvency II rules. Topdanmark uses a partial internal model to calculate the non-life insurance risk and the volatility-adjustment when calculating technical provisions, which are both approved by the Danish FSA.

There is a need to have a certain **buffer** between the actual amount of capital and the capital floor defined by the company, because risk exposures and profits evolve continuously over time and capital can sometimes erode rapidly due to stressed situations. An adequate buffer gives time for the company to adjust its risks and capital in times of stress and to maintain the balance between risks and capital. An adequate buffer also gives confidence to supervisors and counterparties (this being the other motivation for the buffer).

In Sampo Group the management steers the balance between SCRs and rating agency capital target and OF through their decisions on risk profiles, dividend payments, capital instrument issuances and technical provisions. In the long run a sound profitability and satisfied clients are the most important factors in maintaining an adequate capitalization.

The following factors are the most material when the size of buffer is considered in Sampo Group companies:

- The higher **the level of expected profits** and the lower **the volatility of profits and market value of balance sheet**, the less is the volatility of own funds and thus the smaller is the buffer.
- If **business is growing**, the buffer is larger than in the case of a run-off -business. For instance in Mandatum Life, capital consuming with profit business has already been in a virtual run-off mode for years.
- More ability and **capacity to issue SII compliant capital instruments** means that a lower buffer is needed.

When the balance between profits, risks and capital is met, the following three goals of Sampo Group are simultaneously obtainable:

i. The business activities can be conducted without supervisory intervention.
ii. The business activities can be conducted with all targeted client bases and the company has access to financial and debt issuance markets at terms and conditions implied by the company's creditworthiness.
iii. The targeted dividends can be paid to shareholders in the long run without endangering the balance between risk and capital.

On a sub-group and company level, a target can also be set for the **capital structure**. In general, Sampo Group is in favor of strong capital structures and as a result Sampo Group companies currently have, according to SII rules, room for new hybrid capital and subordinated debt instruments in their balance sheets.

In regards to **Nordea**, the Swedish requirements for banks' capital include components, which are country-specific and thus the total requirement is higher than in many other countries. The Swedish FSA has communicated the capital requirement for Nordea. Nordea's capital policy aims to maintain a management buffer of 50–150 basis points above the capital requirement. By the end of third quarter 2017, the communicated Common Equity Tier 1 ("CET1") ratio requirement for Nordea was 17.4 per cent.

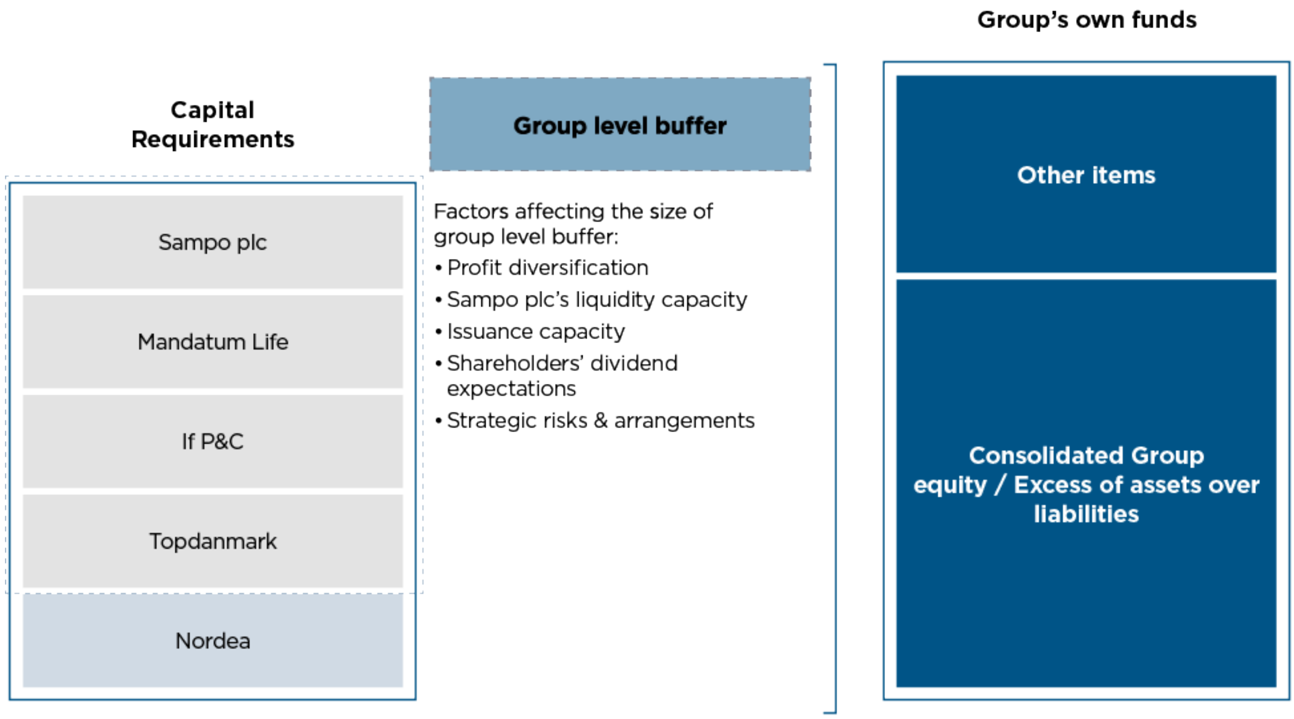
The CET1 ratio of Nordea increased to 19.5 per cent (18.4 per cent) in 2017. The CET1 capital amounted to EUR 24.5 billion and its own funds were EUR 31.7 billion. Nordea's capital requirement based on the transitional rules was EUR 16.2 billion; without the transitional rules it was EUR 10.1 billion. Sampo consolidates its share of all Nordea's own funds items and minimum capital requirement to Group solvency under both Solvency II and conglomerate rules. From Sampo Group's perspective, Nordea is strongly capitalized and its contribution to Group's own funds and capital requirement is significant. Nordea's contribution to Sampo Group's capital requirement changes with effect from Q1/18 as so called transitional rules (Basel I floor) expire in Sweden and Sampo starts to use Minimum requirement for Own funds as defined in Nordea's quarterly Factbook as a capital requirement in Group solvency.

Capitalization at Group Level

The sub-group level balance of profits, risks and capital is the primary focus of Sampo Group. When all sub-groups are well capitalized as a result the Group should be adequately capitalized as well.

However, at Sampo Group level there are more factors affecting capitalization than at the sub-group level. These factors are illustrated in the figure Sampo Group's Capitalization Framework.

Sampo Group's Capitalization Framework



Group's capital requirement is dependent mainly on the capital requirements of the business areas. The parent company's contribution to Group capital need is minor most of the time, because Sampo plc does not have any business activities of its own other than the management of its capital structure and liquidity portfolio.

Diversification benefit exists at two levels, within the companies and between the companies. The former is included in the companies' SCRs; for the latter there are different estimation methods as described later in the document.

Conceptually, **Group's own funds** is the difference between the market value of assets and liabilities plus the subordinated liabilities. This difference has accrued during the lifetime of the Group and it includes the following main components:

- Accrued profits that have not been paid as dividends over the years.
- Market value adjustment to the book values of assets and liabilities.
- Issued capital and subordinated liabilities meeting Solvency II requirements.

Due to the use of the same sectoral rules in both Solvency II and financial conglomerate calculations, there is no material difference between Sampo's Solvency II or FICO own funds.

At the Group level, the capital requirement and own funds are both exposed to foreign currency translation risk. Translation risk may realize when the actual capital and the capital needs of If P&C and Topdanmark are converted from their reporting currencies to euros. When the reporting currencies of If P&C and Topdanmark depreciate, the actual amount of Group's capital in euros decreases and the capital requirements of If P&C and Topdanmark will be lower in euro terms. Translation currency risk is monitored internally and its effect on Sampo Group's solvency on a going concern basis is analyzed regularly. However, internally no capital need is set for translation risk, because it realizes only when a sub-group is divested.

Group level buffer is the difference between the amount of Group's own funds and the Group capital requirement. In addition to the sub-group level factors – expected profits and their volatility, business growth prospects and ability to issue Solvency II compliant capital instruments – there are Group level factors that are also relevant when considering the size of the Group level buffer. The most material Group level factors affecting the size of buffer are (i) correlation of sub-groups' reported profits; (ii) parent company's capacity to generate liquidity; (iii) probability of strategic risks and arrangements within industry; and (iv) shareholders dividend expectations.

Regulatory Solvency Calculation Methods and Group Solvency Position

Sampo Group's capital requirement and amount of group's own funds are calculated either by the conglomerate rules or the Solvency II directive as follows:

Sampo Group's capital requirement **according to the conglomerate rules**, is called the **Group's total minimum requirement for own funds** and it is the sum of the separate sub-group's requirements (sectoral rules) and the parent company's requirement based on the Capital Requirements Directive/Capital Requirements Regulation ("CRD IV/CRR"). The conglomerate's capital requirement does not take into account any diversification between the business areas. Hence it is a quite conservative measure of capital requirement and easy to interpret.

The starting point for the calculation of Group's own funds is Group's consolidated equity. Sectoral items, which include among others the subordinated liabilities held by the external investors, are added to the Group's consolidated equity. In addition, intangible assets and foreseeable dividends as well as other deductible items are subtracted from the Group's own funds.

Sampo Group's capital requirement by **Solvency II rules** is called **Group SCR** and it is calculated in two phases:

i. The capital requirements of other risks than FX-risk and concentration risk are calculated for the consolidated group including respective standard formula SCRs of the parent company Sampo plc, If P&C, Mandatum Life and Topdanmark. The company SCRs may include the simplifications and other options as applied by them. The capital requirement of FX-risk and concentration risks are calculated based on group-wide exposures calculated separately for this purpose. In regards to FX-risk requirement also the translation risk exposures related to SEK denominated equity of If P&C and DKK denominated equity of Topdanmark are taken into account. Diversified capital requirement for the consolidated group SCR is then calculated from these risk specific SCRs.
ii. Sampo plc's share of Nordea's and Mandatum Life's other sectors' capital requirements are added to the consolidated group's capital requirement.

The Group SCR calculated by Solvency II rules takes into account diversification only within the consolidated group thus excluding the diversification benefit related to the holding of Nordea.

The **Group's own funds** under Solvency II rules is the excess of assets over liabilities (including any subordinated liabilities which may be called up in order to absorb losses and minus own shares held directly). Assets and liabilities are valued at market value and all intra-group transactions are eliminated. The excess of assets over liabilities is classified into tiers 1-3. The tiers reflect the degree of loss absorbency of own funds in the event of a winding up. Adjustments are made if all own funds are not available or eligible at the Group level. In addition, associated company's additional Tier 1 and Tier 2 capital instruments are included in own funds.

Group's own funds and SCR are calculated by combination of consolidation and deduction and aggregation methods.

Under normal circumstances Group's OF by Solvency II and conglomerate rules are close to each other due to the similar treatment of sectoral items. Minimum Consolidated Group SCR (MCR) is determined by adding up the Solo MCRs of the insurance entities consolidated for the Group SCR calculation.

Appendix 5: Valuation for Solvency Purposes

Sampo Group Solvency II balance sheet is derived from Sampo's consolidated IFRS financial statements, which are adjusted in accordance with Solvency II regulation. The IFRS accounting principles "Summary of significant accounting principles" are presented in Sampo Group's Annual Report/ Financial Statements/Notes to the accounts.

There are no major adjustments to the IFRS numbers necessary for Solvency II purposes. A large majority of Sampo Group's assets are valued at fair value on the IFRS balance sheet based on market values. No significant alternative valuation methods are used. The fair values of financial liabilities and properties are given in the notes to the IFRS accounts.

The determination of the fair values are presented in Sampo Group's Annual Report "Financial Statement/Notes to the accounts/Summary of significant accounting policies/Fair value and Investment property" and also in the notes "Fair values" and "Determination and hierarchy of fair values".

For comparison purposes the values derived from Sampo's consolidated IFRS financial statements are mapped in accordance with the Solvency II balance sheet presentation in the below table Solvency II adjustments, 31 December 2017. Only main rows are presented. The currency used is the group's reporting currency, the euro.

The scope of Sampo Group in the SII framework is the same as the scope used in Sampo Groups's financial statement.

Solvency II Adjustments Sampo Group,
31 December 2017

Assets, EURm	IFRS value*	Solvency II value	Adjustment
Goodwill, intangible assets and deferred acquisition cost	**2,347**	**-**	**-2,347**
Deferred tax assets	**18**	**-**	**-18**
Property, plant & equipment held for own use	**158**	**160**	**1**
Investments (other than unit-linked)	**31,122**	**31,161**	**39**
Property other than for own use	572	611	39
Holdings in related undertakings	7,773	7,773	-
Equities	2,572	2,572	-
Bonds	17,523	17,523	-
Collective investments undertakings	2,119	2,119	-
Derivatives	82	82	-
Deposits other than cash equivalents	480	480	-
Asset held for unit-linked contracts	10,526	10,526	-
Loans and mortgages	419	419	-
Reinsurance recoverables	**297**	**257**	**-39**
Non-life and health similar to non-life	280	241	-39
Life and health similar to life	16	16	0
Insurance and intermediaries receivables	**1,296**	**380**	**-916**
Reinsurance receivables	**12**	**12**	**0**
Receivables (trade, not insurance)	**156**	**39**	**-117**
Own shares (held directly)	**0**	**149**	**149**
Cash and cash equivalents	**2,711**	**2,711**	**-**
Any other assets	**236**	**174**	**-62**
Total assets	**49,300**	**45,988**	**-3,311**

Liabilities, EURm	IFRS value	Solvency II value	Adjustment
Technical provisions – non-life	8,339	6,860	-1,479
Technical provisions – life	10,717	10,394	-323
Technical provisions – unit-linked	11,101	10,564	-537
Provisions other than technical provisions, Pension benefit obligations	104	104	-
Deferred tax liabilities	638	491	-147
Derivatives	91	91	-
Financial liabilities other than owned to credit institutions	3,182	3,265	83
Insurance and intermediaries payables	276	276	-
Reinsurance payables	33	30	-4
Payables (trade, not insurance)	440	324	-116
Subordinated liabilities	377	368	-9
Any other liabilities, not elsewhere shown	492	450	-42
Total liabilities	**35,792**	**33,217**	**-2,575**
Excess of assets over liabilities	**13,508**	**12,771**	**-737**

*In IFRS Sampo's financial assets consist of equity and debt instruments available for sale and fair value through profit/loss, derivatives and loans and receivables. Financial liabilities in IFRS consist of derivatives and other liabilities eg. subordinated liabilities and other debt securities in issue.

According to the Solvency II balance sheet the excess of assets over liabilities for the Group per 31.12.2017 was EUR 737 million less than the respective IFRS figure. On the asset side the main differences are due to the different treatment of intangible assets and inclusion of future undue premium receivables in technical provisions instead of assets. On the liability side there are material differences related to technical provisions due to different classification of some items and valuation principles. These differences are discussed in the next sections.

Assets

In the group Solvency II balance sheet goodwill, intangible assets and deferred acquisition costs are valued at zero.

While recognition of deferred taxes is consistent with the IFRS accounts, SII adjustments affect the carrying values in the SII balance sheet and thus give rise to additional deferred tax effects. Solvency II valuation decreased deferred tax assets by EUR 18 million and deferred tax liabilities by EUR 147 million. The difference is mainly due to elimination of certain assets (intangible assets, etc) and differences in the calculation of technical provisions.

There are no anticipated effects on the carrying amounts of Sampo's investment assets except for properties. In solvency II balance sheet properties are valued at fair value according to SII valuation rules. This increases the value of properties by EUR 40 million.

Loans and mortgages are valued at amortized cost, which is not in line with the treatment for financial assets in Solvency II. Sampo, however, considers the IFRS value to be substantially commensurate with the fair value of the loans.

Participations are reported in Sampo's SII consolidated balance sheet using the adjusted equity method, or where applicable, the IFRS equity method. Participations refers to undertakings in which Sampo Group directly or indirectly has significant influence, which is normally the case when the shareholding amounts to a minimum of 20 per cent of the capital or voting rights for all shares in the company.

Reinsurance recoverables represent the reinsurers' share of the best estimate, less expected counterparty default. Consistently with technical provisions, these amounts are calculated in line with the SII requirements.

Under Solvency II the technical provisions should fully take into account all cash inflows and outflows. Therefore, in regard to the policies in force, the future premiums expected but not yet due are not recognized as receivables. Instead they are included in the premium provision based on a best estimate, which differs from the treatment under the IFRS, where premium receivables are recognized in the balance sheet. Thus receivables of EUR 916 million were reclassified from premium receivables to insurance liabilities. Receivables in Solvency II relate only to the amounts due for payments by policyholders, insurers, and others linked to insurance business.

The adjustment of receivables (trade receivables, not insurance receivables) relates to netting of receivable amounts in relation to the Finnish medical malpractice pool ("MMP"), public sector, which are treated as part of the SII best estimate technical provisions, whereas in Sampo Group's consolidated accounts the MMP provision public sector is recognized as other assets / liabilities. Receivables of EUR 112 million are reclassified from trade receivables to the insurance obligation.

In Solvency II Own Shares EUR 149 million are recognized on balance sheet whereas in IFRS Own Shares are deducted from Equity.

Technical Provisions According to Solvency II in Sampo Group

In Solvency II, the value of technical provisions is equal to the sum of a best estimate and a risk margin.

The **Best Estimate** is determined as follows:

- First, all expected future insurance liability cash flows and cash flows related to the management and claims handling costs of insurance liabilities are estimated by the company at best effort basis based on recognized actuarial and statistical techniques.
- Second, all of these cash flows are discounted by the risk free interest rate term structure as defined and published by EIOPA.

The best estimate is calculated separately on a gross basis, without deduction of the amounts recoverable from reinsurance contracts, and on a net basis by taking into account the ceded amount representing amounts recoverable from reinsurance contracts.

The above calculations of the best estimate are done separately for each currency the company has insurance liabilities in and the currency specific discount curve as defined by EIOPA is used. This risk free term structure is based on market rates that are adjusted by credit risk adjustment and by volatility adjustment. The use of volatility adjustment is optional. This routine is followed up to the last liquid point of market rates as defined by EIOPA and it is defined separately for different currencies. The last liquid point is for example 20 years for the euro and 10 years for the Swedish krona. From the last liquid point and ahead, being the last point on the curve based on market rates, the risk free term structure is affected by the Ultimate Forward Rate (UFR) as defined by EIOPA.

The future expected cash flows of insurance activities are always estimates and hence their magnitude and timing are uncertain by their nature. For this uncertainty, and to arrive at a market consistent valuation of the liabilities, a company must take into account the capital allocated for the run-off of the liabilities. **Risk Margin** is the cost of this capital and it is determined as follows.

i. It is assumed that a company is not taking on any excess market risk nor writing any new business. Then all expected future cash flows of insurance activities match exactly with risk free asset cash flows in same currencies as insurance related cash flows.
ii. With the market risk SCR at zero and no new business being written, the company's SCR is related to the insurance risk, reinsurance credit risk and operational risk.
iii. Since no new business is written, the cash flows behind the best estimate will run off. Based on these cash flows, the company calculates the future values of the best estimate and the resulting SCRs until full depletion of all the cash flows behind the best estimate. Hence, as a result, the future values of required capital at different future times have been derived.
iv. All of the resulting future SCR values are discounted to one present value with the risk free-rate as defined by EIOPA.
v. Finally, to get the risk margin, the cost for holding the SCR until full run-off of the best estimate is calculated by multiplying the sum of the future SCRs by 6 per cent – the cost of capital given by EIOPA.

Conceptual Differences between Solvency II and IFRS Technical Provisions

The main conceptual differences between SII and IFRS Technical Provisions affecting Sampo Group are:

1. **In Solvency II a "true best estimate" is defined as the mean of the full range of possible future outcomes of insurance cash flows** without any cash flow add-ons based on prudency. The IFRS provisions may include prudential assumptions when the cash flows are estimated.
2. **In Solvency II, all cash flows are discounted by EIOPAS´s risk free interest rates** whereas within the financial accounting regime not all cash flows are discounted, and when discounting, discount rates based on local regulations are typically used.
3. **The inclusion of future insurance events into Technical Provisions is fundamentally different in SII and in financial accounting.** The following points listed are illustrating these differences, but local financial accounting rules may be different than the ones used as examples here.
   - Following the financial accounting rules, when an insurance company writes a premium, **the full written premium is booked into the reserves at the moment of the writing.** This reserve is called the Unearned Premium Reserve (UPR) and its conceptual purpose is to cover future insurance events on the written contracts. After the initial booking, the reserve is released linearly into earnings during the lifetime of the insurance contract – at the end of the contract period there is no UPR left and if the claims and costs related to the contract turned out to be lower than the written premium, a profit has been recognized.
   - **The corresponding component** in the SII Technical Provisions is called the Premium Provision (PP). **This account estimates all of the future insurance events and the corresponding best estimate cash flows related to contracts in force.**
   - **The PP has a lower value than the UPR account if the written contract is estimated to be profitable.** The

higher the estimated profitability, the bigger the difference between the accounts.

- **Effectively, the PP implicitly recognizes the estimated profit of the contract via the difference between the UPR and the PP already at the inception of the contract.** This means that the younger the contract, the bigger the difference between the UPR and the PP. As time goes by, both accounts decrease in value and the absolute difference between them becomes narrower and eventually diminishes as the contract expires and both accounts reach zero. In reality, neither item never reaches zero in an active insurance company since new business is written continuously. Assuming that a company would write an equal amount of exactly equal business each day, the difference between the items would remain constant over time.
- When a policy is written but no premiums are due yet, the whole premium is already booked as UPR in financial accounting and a corresponding receivable is booked on the asset side. **In SII, any insurance receivables that are not yet due are netted against the PP account. This effectively means that the balance sheet shrinks in size when going from financial accounting to SII** and that the difference between the UPR and the PP is the biggest when premiums are not yet due.
- In non-life business the valuation difference between the UPR and the PP is the most material difference between the financial accounting and SII Technical Provisions.

4. A risk margin over the Best Estimate is included in the Solvency II Technical provisions.

The nature of technical provisions means that there is always uncertainty associated with the calculations since they inevitably involve assumptions about future events. Main risk factors affecting the reserve risk are described further under “Underwriting Risks”.

Sampo Group’s insurance companies present the differences between IFRS and Solvency II Technical provisions in the next sections. Calculation methods, made assumptions and other decisions affecting the cash flows are described in more detail.

Technical Provisions According to Solvency II in If P&C

The differences between IFRS and Solvency II technical provisions are summarised in the below table Technical Provisions in IFRS and Solvency II, 31 December 2017.

Technical Provisions in IFRS and Solvency II

If P&C, 31 December 2017

Type of technical provisions	SOLVENCY II					STATUTORY			
	Best estimate	Risk Margin	Provision Gross	Reinsurance share	Technical Provision	Provision Gross	Reinsurancers Share	Technical Provision	SII of Statutory
Total, EURm	**7,341**	**324**	**7,665**	**190**	**7,475**	**9,120**	**218**	**8,902**	**84%**
Health similar to life	**1,036**	**32**	**1,068**	**0**	**1,068**	**1,080**	**0**	**1,080**	**99%**
Income protection insurance (annuities)	18	1	19	0	19	19	0	19	100%
Medical expense insurance (annuities)	2	0	2	0	2	2	0	2	100%
Workers' compensation insurance (annuities)	1,016	31	1,047	0	1,047	1,059	0	1,059	99%
Health similar to non-life	**1,330**	**92**	**1,422**	**30**	**1,392**	**1,549**	**32**	**1,517**	**92%**
Income protection insurance	584	29	613	1	612	750	1	749	82%
Medical expense insurance	118	6	124	0	124	158	0	158	78%
Workers' compensation insurance	628	57	685	29	656	641	31	610	108%
Life excluding health	**1,048**	**24**	**1,072**	**0**	**1,072**	**1,137**	**0**	**1,137**	**94%**
Fire and other damage to property insurance (annuities)	5	0	5	0	5	5	0	5	100%
Life insurance	11	0	11	0	11	20	0	20	55%
Motor vehicle liability insurance (annuities)	0	0	0	0	0	0	0	0	100%
General liability insurance (annuities)	1,014	23	1,037	0	1,037	1,093	0	1,093	95%
Other motor insurance (annuities)	18	1	19	0	19	19	0	19	100%
Non-life excluding health	**3,927**	**176**	**4,103**	**160**	**3,943**	**5,354**	**186**	**5,168**	**76%**
Fire and other damage to property insurance	914	47	961	56	905	1,287	66	1,221	74%
Marine, aviation and transport insurance	102	9	111	16	95	122	18	104	91%
Other motor insurance	416	13	429	1	428	951	2	949	45%
Motor vehicle liability insurance	1,858	78	1,936	1	1,935	2,291	1	2,290	84%
General liability insurance	633	29	662	86	576	697	99	598	96%
Assistance	4	0	4	0	4	6	0	6	67%

Different principles are used for calculating the technical provisions in Solvency II and in the IFRS financial statements:

- The largest revaluation effect is due to netting of expected premiums not yet due and amounts to EUR 913 million, affecting both the asset and liability side of the balance sheet to the same degree.
- The introduction of the risk margin increases the technical provisions by EUR 324 million.
- Other revaluation effects amounting to EUR 838 million include cash flow revaluation effects mainly on premium provisions as well as discounting effects. If P&C, under IFRS, only discounts claims provision reserves for annuities and the annuity IBNR provision in Finland. The basic risk free rates used in the Solvency II balance sheet are derived for currencies DKK, EUR, GBP, NOK, SEK and USD, which cover more than 99 per cent of the technical provisions. For other currencies, either EUR or USD rates are used.
- If P&C uses the risk free rates without volatility adjustment.

In the IFRS consolidated accounts, recognition of a liability as an insurance contract would be dependent on the existence of significant insurance (underwriting) risk (refer IFRS 4). Based on If P&C's assessment that there is no material degree of insurance risk prevalent, the Medical Malpractice Pool (MMP) public sector is not recognized as an insurance contract in the consolidated accounts, but is treated as a service contract with its components recognized in other assets and other liabilities. Accordingly, a difference occurs with the Solvency II treatment where the liability should be recognized within the insurance obligations.

Therefore, under Solvency II treatment, all receivables and liabilities related to the MMP public sector are reclassified as forming a part of the Solvency II best estimate technical provisions. Under this treatment the receivables balances are netted against the liabilities in the technical provisions, as they are considered to be premium cash in-flows and thus included in the technical provisions.

Further discussion regarding the reinsurance recoverables can be found under "Counterparty Default Risks".

If P&C does not apply transitional measures on the risk-free interest term structure or to the technical provisions.

Technical Provisions According to Solvency II in Mandatum Life

To calculate Solvency II technical provision Mandatum Life produces the cash flows of insurance policies by using best estimate parameters and assumptions and stochastic investment market scenarios consistent with Solvency II discount rate. Stochastic market scenarios are particularly needed for the valuation of economic guarantees and policyholder options embedded in insurance contracts. Probability weighted present value of these cash flows is so called best estimate liability. Solvency II technical provision is best estimate liability plus risk margin.

The differences between IFRS and Solvency II technical provisions with transitional measures are summarised in the below table Overall position, technical provisions, 31 December 2017.

Overall Position, Technical Provisions
Mandatum Life, 31 December 2017

EURm	IFRS value	Solvency II value	Differences
Technical provisions – life (excluding unit-linked)	**4,573**	**4,327**	**246**
Best Estimate		4,129	
Risk margin		198	
Technical provisions – unit-linked	**7,066**	**6,549**	**516**
Best Estimate		6,454	
Risk margin		96	

Mandatum Life applies the transitional measures on technical provisions for its Solvency II technical provision in regards to its original pension policies with 3.5 per cent and 4.5 per cent guarantees. Also, a volatility adjustment is applied when technical provisions are calculated. The size of SII liabilities with transitional measures is EUR 10,876 million and EUR 11,403 million without transitional measures. Hence the transitional measures on technical provisions increase the amount of OF after tax by EUR 422 million. Mandatum Life applies standard formula without undertaking-specific parameters or simplified calculations.

Accounting principles of life insurance contracts are presented in Sampo's Annual Report/Financial Statements/Notes to the accounts/Summary of significant accounting policies/Life insurance business.

Technical Provisions According to Solvency II in Topdanmark

For Topdanmark the principles for calculating the insurance provisions are almost the same for IFRS and Solvency II.

For non-life insurance the calculation of best estimate, risk margin and profit margin (expected profit in future premiums) are the same for IFRS and Solvency II. The only difference is the presentation of the profit margin. In IFRS the profit margin is presented as an insurance provision, while in Solvency II it forms part of the Solvency II own funds deducted for tax liabilities.

For life insurance the calculation of best estimate and profit margin are the same for IFRS and Solvency II. In IFRS the profit margin is presented as an insurance provision, while in Solvency II it forms part of the Solvency II own funds deducted for tax liabilities. The calculation of risk margin applies two different principles. For IFRS the principle is a stress on the biometrical risks. The Solvency II calculation is a 6 per cent cost of capital on insurance risk, counterparty default risk and operational risk in accordance with Solvency II.

All the best estimate insurance liabilities are discounted using the volatility adjusted Solvency II interest rate curve for DKK.

Overall Position, Technical Provisions
Topdanmark, 31 December 2017

EURm		IFRS value	Solvency II value	Difference
Non-life gross	Best Estimate	2,018	2,018	0
	Risk margin	42	51	9
	Profit margin	101	0	-101
Total non-life		**2,161**	**2,069**	**-92**
Life insurance gross	Best Estimate	7,233	7,233	0
	Risk margin	15	17	3
	Profit margin	33	0	-33
Total non-life		**7,280**	**7,250**	**-30**
Total		**9,441**	**9,319**	

Other Liabilities

The effects of Solvency II valuation on Sampo's other liabilities than technical provisions are fairly limited, consisting mainly of the valuation impact on financial liabilities and Payables balances related to the technical provisions.

Other liabilities than technical provisions are valued by discounting future cash flows with the government yield plus calculated spread at inception. This increased the amount of financial liabilities in SII balance sheet by EUR 83 million.

Deferred tax liabilities are discussed above in connection with deferred tax assets.

The reclassification of medical malpractice pool public sector from a service contract to an insurance contract effect also payables balances. Payables of EUR 112 million are reclassified from trade payables to the insurance obligations.

Other provisions than technical provisions and contingent liabilities do not give any additional rise to either new liabilities being recognized for solvency purposes or existing liabilities being recognized differently to their financial statement recognition. Provisions and contingent liabilities as well as pension benefits and operating leases are presented in Sampo Annual Report/Financial Statement/Notes to the accounts. There are no major financial leasing arrangements in Sampo Group.

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