HDI Reinsurance (Ireland) SE

2019 Solvency and Financial Condition Report

(SFCR)

HDI Reinsurance (Ireland) SE as at 31 December 2019

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Executive summary

HDI Reinsurance (Ireland) SE (HDI Re or the Company), formerly known as Talanx Reinsurance (Ireland) SE, is a wholly owned subsidiary of HDI Global SE with a detailed organisational chart shown under the business objectives section of this report.

This report covers the business and performance of the Company, its system of governance, risk profile, valuation for solvency purposes and capital management. The ultimate responsibility for all of these matters is the Company's Board of Directors, with the help of various governance and control functions that it has put in place to monitor and manage the business.

Business and performance

The principal activity of the Company consists of the transaction of reinsurance business with Talanx Primary Group. The Company has a 31 December year end and for the year ended 31 December 2019 the Company reported a Net Profit after tax of €25.430 Mio (2018: €34.747Mio). The positive result was mainly driven by a strong underwriting result, complimented also by increase in return on investment from 1.65.00% in 2018 to 1.95%. The total Shareholder Equity, including capital contribution, is €268.433 Mio (2018: €223.578 Mio). The total eligible own funds to meet the Solvency Capital Requirement is €359.322 Mio (2018: €335.759 Mio). In 2019, the Company paid a dividend of €10.000 Mio in respect of financial year 2018. Based on the year end result of €25.430 Mio the Board declared in January 2020 a dividend of €10.000 Mio in respect of the financial year 2019 subject to approval of the Annual Shareholders Meeting.

System of governance

The Company has continuously complied with all aspects of the Solvency II regulations from the date of first implementation on 1 January 2016. Over the past few years, the Board of HDI Re put in place significant measures to strengthen the corporate governance framework, in line with the 2015 Corporate Governance Requirements for Re/Insurance Undertakings, including but not limited to the compliance, risk management, actuarial and internal audit functions. The latter three key functions are outsourced within the HDI / Talanx Group as per Solvency II requirements.

The Company's organisational structure operates on a "three-line defence" detailed in its organisation chart shown on page 15. The Company ensures that all persons, who effectively run the Company or have other key functions, are fit to provide sound and prudent management through their professional qualifications, knowledge and experience and are proper by being of good repute and integrity.

An Internal Control System policy is in place, in line with the Solvency II Directive, fully incorporating the three-line defence framework as outlined above whilst also ensuring compliance with legal, regulatory and reporting requirements.

Risk profile

The Company continues to fulfil its objective of maintaining the A rating from AM Best with the risk profile stable over the last number of years. Underwriting risk, NatCat and market risk determine the risk profile of HDI Re. All material risks are covered by the solvency capital requirement (SCR). The risks are quantified utilising full internal model (IM) which was approved by BaFin (major model change approval by the lead regulator for Talanx Group) and implemented during Q3 2019.

From 30 December 2016 until 31 August 2019, the SCR and the capital adequacy ratio (CAR) were calculated for regulatory purposes by a partial internal model, where the operational risk was calculated by the standard formula and aggregated with the internal model results excluding operational risk.

SCR calculated under full internal model, increases from Q4 2018 (€162.296 Mio) to Q4 2019 €174.857 Mio mainly due to increased assets (market risk) and increased reserves (underwriting risk).

HDI Reinsurance (Ireland) SE applied for the use of the volatility adjustment (VA), pursuant to Art. 77d Directive 2009/138/EC and Article 88, to CBI on 16 May 2019. HDI Re received CBI's approval to use the VA within its internal model on 27 September 2019. The earn ability of the VA has to be proven on an annual basis and HDI Re has set up the necessary processes to ensure full compliance of all supervisory and regulatory requirements are maintained at all times.

The retrocession is bought in line with the General Retrocession Guideline and adjusted to the premium risk portfolio annually.

Valuation for solvency purposes

The valuation for assets and liabilities are carried out according to the Section 3, Article 51 of Solvency II Directive 2009/138/EC, and covered in more detail under chapter D of this report.

Capital management

The Company's policy is to maintain a strong capital base and manages all its available resources as capital which includes the common stock, non-distributable capital contributions, a subordinated loan, retained earnings and fair value reserves. A capital management plan for the mid-term planning of the own funds is prepared over five years to ensure that the regulatory needs are fulfilled at all times. The capital management plan includes the development of the assumed business, the cash flow of technical provisions, planned dividends and an investment strategy. The mid-term plan is approved by the Board.

The Own funds, SCR and CAR under full internal model at end of 2019 were:

	2019	2018
Own Funds	€359.322 Mio	€335.759 Mio
SCR	174.857 Mio	€162.296 Mio
CAR	206%	207%

A. Business and performance

A.1 Business

A.1.1 Business objectives

HDI Re is part of the HDI Group. The Haftpflichtverband Der Deutschen Industrie V.a.G., Germany, (HDI V.a.G.) is the ultimate parent. HDI Re is wholly owned by HDI Global SE. The organisational chart below shows the position of the Company within the Group. As HDI Group is virtually identical to the Talanx Group in terms of business activities, organisation and structure, the following report refers mainly to Talanx Group.

The Group structure contains six segments. The segments are each responsible for their own business processes. These tasks, which are shared by several organisational units, help to create value in the Group. HDI Re forms part of the corporate operations of Talanx Group and is servicing as in-house reinsurance company.

The purpose of HDI Re as the Prime Reinsurer of the Industrial lines division of Talanx Primary Group (TPG) is to:

- Support the group insurance companies within the Industrial Lines division of TPG to decrease the risk based capital charge
- Act as a tool to manage the retention of group insurance companies within Industrial Lines division.

HDI Re cedants are solely engaged from Talanx Primary Insurance Group. HDI Re is a composite reinsurance company and entitled to write life and non-life business. However, since its' founding constitution in 2009, the Company has exclusively written only non-life business. The business is diversified worldwide.

HDI Re has established an organisational structure based on the principles of three lines of defence, the segregation of functions and the delegation of authorities.

Being a member of one of the leading European insurance groups, HDI Re utilizes the expertise and knowledge of specialized group entities via service level agreements. As at 31.12.2019, HDI Re has eight employees. (For an overview of the organisational chart and details of the governance structure, key functions and outsourcing please refer to chapter B. System of governance.)

HDI Re is a registered company under Irish law. The Company is supervised by the CBI (Central Bank of Ireland, New Wapping Street, North Wall Quay, Dublin 1) and is assessed as "medium-low" according to the local PRISM[1] ranking. CBI's PRISM ranking structure is outlined in their February 2016 document 'PRISM Explained, How the Central Bank of Ireland is Implementing Risk Based Regulation'.

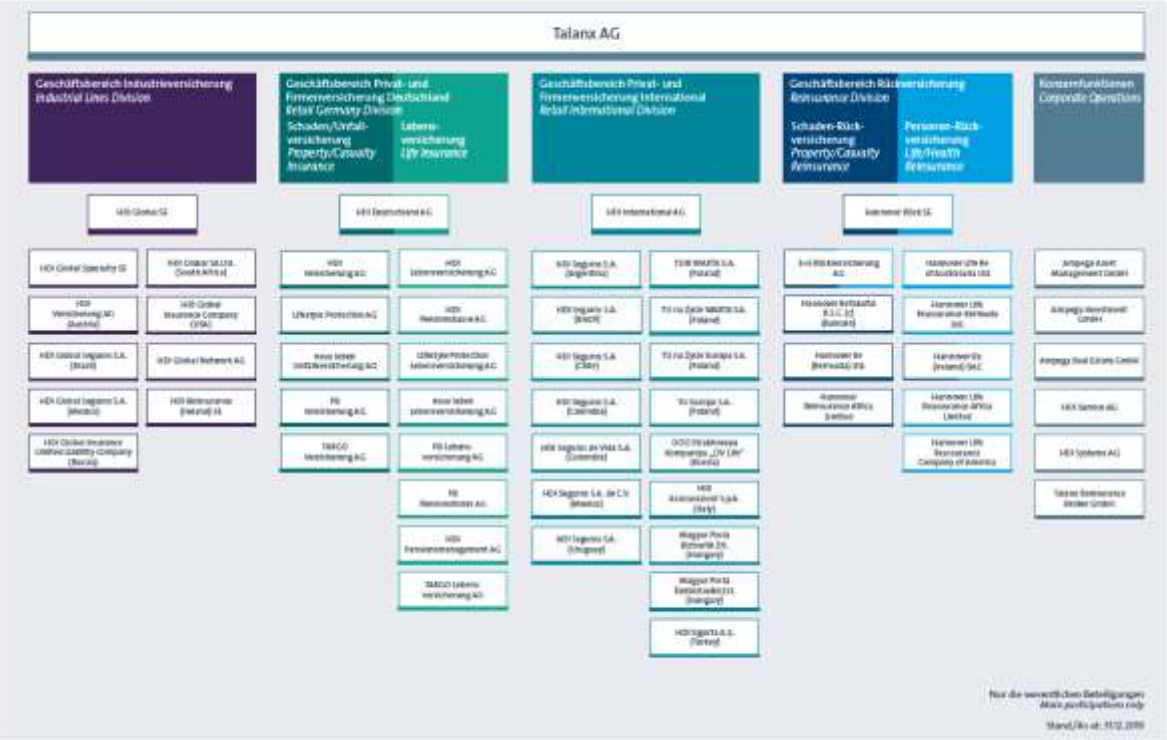
HDI Global SE is supervised by the German supervisory authority for insurance companies BaFin (Bundesanstalt fuer Finanzdienstleistungsaufsicht, Graurheindorfer Str. 108, 53117 Bonn).

PWC Ireland, 1 Spencer Dock, North Wall Quay, Dublin 1 is the Company's appointed statutory auditor for year-end 2019 including the Solvency II audit as per the regulations.

[1] Probability Risk and Impact SysteM

Konzernstruktur
Group structure

talanx.



A.1.2 Significant events

2019 was characterised as a transition year for the implementation of the new business strategy of HDI Re.

Following the new focus of the company on providing individual and tailor made reinsurance solutions and managing retentions of the industrial segment of Talanx Group, HDI Re increased its risk position with HDI Global SE and the new formed segment member company HDI Global Specialty SE, basically by taking up direct proportional cessions. Going forward, HDI Re will concentrate on supporting these companies in the further optimisation of their risk bases capital with individual reinsurance solutions.

In addition, HDI Re entered into an interim reinsurance fronting arrangement with Talanx AG for all placements assumed via Talanx Reinsurance Broker in 2019 and prior years. Under this arrangement, all participations of HDI Re in broker placements were retroceded to Talanx AG under a 90% quota share. From 2020 onwards, Talanx AG will take up this business at 100%.

The Bundesanstalt fuer Finanzdienstleistungsaufsicht, after consultation with CBI, has approved a HDI Re's application for an extension of the partial model of HDI Reinsurance (Ireland) SE by the risk category Operational risk with effect from 30st September 2019

The Company's application to apply a Volatility Adjustment to the relevant risk-free interest rate term structure was approved by CBI in September 2019.

The current COVID-19 pandemic may lead to economic upheavals, which can also adversely affect our customers, the Company and the Talanx group in general. More details on the Covid-19 pandemic available on pages 46 and 47 of this report.

In our property and casualty business, we do not expect any significant impact as pandemic-related incidents are generally not covered by insurance. However, we are exposed to, for instance, event cancellations or business closings.

In response to the current situation, we have implemented appropriate business continuity measures that enable us to maintain business operations. All of HDI Re's staff can fully work from remote locations.

Depreciations in the financial markets also affect our investments. Simultaneously, rising uncertainty regarding future developments increases the risk.

This report comprises information on the solvency capital requirement (SCR) and own funds (OF) as of 31.12.2019. Between the reference data in the report and its publications, the macroeconomic indicators developed significantly adversely. The international equity markets have dropped across the board. At the same time, interest rates, for example on German government bonds, have repeatedly decreased. Moreover, a clear widening of the spread curve can be observed. Induced by these adverse effects, we expect a reduction of eligible funds and an increase of the SCR. Ceteris paribus, the combination of these effects could lead to a material decrease in the ratios in this report.

Nevertheless, we assume that we will comply with the self-imposed thresholds.

A.2 Underwriting performance

HDI Re prepares its financial statements in accordance with International Financial Reporting Standards (IFRS). The Company writes both proportional and non-proportional business exclusively within Talanx Group. The business written is a diversified mix, distributed across multiple business lines and geographical areas.

Figures in € thousands	**2019 Actual**	2018 Actual	**2019 Plan**
Gross Written Premium	696,711	443,698	618,054
Ceded Written Premium	59,454	16,774	57,146
Net Written Premium	637,257	426,924	560,907
Net Earned Premium	519,574	430,903	467.053
Incurred Claims	367,761	301,630	351,373
Commission Expense	135,163	100,013	111,427
Administration Expenses	3,321	3,491	3,660
Net Underwriting	13,328	25,769	**589**

The net underwriting result for the period ending 31 December 2019 was €13.328 Mio (2018: €25.769 Mio).

The portfolio expanded and the gross written premium increased by 57.0% from €443.698 Mio in 2018 to €696.711 Mio (57.0%) in 2019. The top line growth was mainly generated by business emanating from newly written specialty business.

HDI Re's claims ratio increased from of 67.9% (2018) to 70.8% (2019). The major factors contributing to the adverse movement , HDI Global's casualty quota share loss ratio deteriorated substantially on 2017 underwriting year, caused by increased volume of reported large claims, incurred movement slightly greater the €20.000 Mio. An aggregate claim ratio of 71.4% was reported on Speciality business contributing to a combined operating ratio of 106.1%.

Commission expense increased due to participation on new proportional business and the increase is in- line with the increases in written premium.

The increase of retro premium emanates from non- industrial line 90%whole account quota share retro-ceded to Talanx AG.

The company's Property and Casualty retrocessional programs remained relatively unchanged from 2018. It's panel of retrocessionaires remained unchanged from the previous year. As part of the reinsurance arrangement with Talanx AG, premium stemming from these contracts form part of the whole account quota share.

Administration expenses are slightly down on the previous year, the decrease in part relates to costs associated with being IFRS 17 compliment in 2021 taken up in the previously year.

A.2.1 Material lines of business

2019

Figures in € thousand	All Classes	non-life insurance and reinsurance obligations (direct business and accepted proportional reinsurance)					accepted non-proportional reinsurance		
		Motor vehicle liability	Other motor insurance	Marine, aviation and transport	Fire and other damage to property insurance	General liability insurance	Casualty	Property	Other Classes
Gross Written Premium	696,711	29,981	25,457	107,794	102,273	274,631	58,188	25,126	73,260
Ceded Written Premium	59,454	11,375	7,551	3,592	6,539	1,805	6,613	17,611	4,367
Net Written Premium	637,257	18,606	17,906	104,202	95,734	272,826	51,575	7,515	68,893
Net Earned Premium	519,574	7,742	12,274	74,926	73,844	240,208	51,575	7,515	51,489
Incurred Claims	367,761	2,033	7,451	48,517	49,052	187,698	44,623	3,895	24,491
Commission Expense	135,163	3,626	4,251	18,628	20,483	65,488	0	0	22,686
Administration Expenses	3,321	82	79	462	424	1,208	228	33	804
Net Underwriting	13,328	2,000	492	7,320	3,884	-14,187	6,723	3,587	3,508

2018

Figures in € thousand	All Classes	non-life insurance and reinsurance obligations (direct business and accepted proportional reinsurance)					accepted non-proportional reinsurance		
		Motor vehicle liability	Other motor insurance	Marine, aviation and transport	Fire and other damage to property insurance	General liability insurance	Casualty	Property	Other Classes
Gross Written Premium	443,698	37,213	31,215	25,255	60,150	204,156	27,266	33,822	24,622
Ceded Written Premium	16,774	-	-	1,037	3,403	593	2,012	9,195	533
Net Written Premium	426,924	37,213	31,215	24,218	56,746	203,563	25,254	24,627	24,089

Net Earned Premium	430,903	37,213	31,215	24,228	53,840	203,570	25,248	24,600	30,990
Incurred Claims	301,630	13,985	21,515	14,093	33,624	165,478	24,829	7,819	20,287
Commission Expense	100,013	10,503	8,294	5,770	13,697	52,961	74	-	8,713
Administration Expenses	3,491	312	262	203	477	1,616	212	13	396
Net Underwriting	25,769	12,413	1,143	4,161	6,042	(16,485)	133	16,768	1,594

Administration expenses are allocated in proportion to the gross written premium

Motor vehicle liability (proportional)

The decrease year on year can be attributed to the non- renewal of the German retail motor program this year. In 2018 German retail program contributed €35.046 Mio to top line premium, the reduction somewhat offset by participation on HGI Specialty program which provided €22.013Mio to MTPL line of business.

Other motor insurance (proportional)

Likewise gross written premium relating to other motor insurance (proportional) decreased as a result of non- participation on the German retail motor quota share.

Marine, aviation and transport (proportional)

Gross written premium substantial greater in 2019, HDI Specialty contracts (€ 56.400 Mio), HDI Global (€46.000 Mio) Marine and Aviation quota share's represents the bulk of segment's written premium.
Favourable development on the HDI Global Marine and Indirect Marine run-off portfolio's across all underwriting years is the main factor contributing to the improved underwriting result.

Fire and other damage to property (proportional)

Year on year increase generated by participation on HDI Speciality programs (€40.000 Mio).The result impacted by higher than normal frequency large individual claims on HDI Global 2018 property program.

General liability insurance (proportional)

This line of business predominately relates to the general third party liability programme of industrial lines cedants of Talanx group. Gross written premium with regards to the 2019 underwriting year was €192.750 Mio. Premium of €60.000 Mio was derived from the new HDI Speciality treaties. The negative result can be attributed to the 2018 GTPL QS which is performing well below average due to volume of large claims..

Casualty (non-proportional)

Top line premium increased year on year by over 100%. Premium can be attributed to General Liability and Motor third party liability classes of business stemming from the Industrial cell. HDI Global GTPL contract, with worldwide industrial liability insurance as its underlying original business provides €33.000 Mio. Segment seen some substantial deterioration on reported claims stemming from HDI Global GTPL treaty across various underwriting years.

Property (non-proportional)

Portfolio remains relatively unchanged from 2018 underwriting year Premium decrease year on year is derived from reinstatement premium relating to 2017 Autumn hurricanes Harvey and Maria booked in this previously period. No losses of note were reported on 2019 Property natural catastrophe treaties.

Other Classes (proportional and non-proportional)

Other line of business category, predominately includes income protection, bond & suretyship, miscellaneous financial loss and legal expense insurance. Written premium in 2019 is substantially higher than the previous year. The increase can be directly attributed to HDI Re's participation on various quota share treaties ceded from Germany industrial cell.

A.2.2 Regions

All the company's cedants are situated in Europe accept for the Australian branch. A breakdown of underwriting performance by the five largest geographical areas by gross written premium is as follows:

2019

Figures in € thousand	All Regions	Germany	Sweden	United Kingdom	Australia	Austria	Other Regions
Gross Written Premium	696,711	476,661	78,704	62,554	24,034	24,064	30,693
Ceded Written Premium	59,454	13,563	-	-	-	21,692	24,200
Net Written Premium	637,257	463,098	78,704	62,554	24,034	2,373	6,493
Net Earned Premium	519,574	427,178	38,378	31,277	11,790	2,373	8,577
Incurred Claims	367,761	315,439	26,159	23,208	8,411	1,699	(7,155)
Commission Expense	135,163	107,818	11,489	12,334	3,354	678	(508)
Administration Expenses	3,321	2,272	375	298	115	115	146
Net Underwriting	13,328	1,649	356	(4,563)	(89)	(118)	16,094

2018

Figures in € thousand	All Regions	Germany	Austria	Poland	Italy	Netherlands	Other Regions
Gross Written Premium	443,698	400,672	16,746	10,099	5,786	6,862	3,534
Ceded Written Premium	16,774	4,101	38	5,621	685	5,541	788
Net Written Premium	426,924	396,571	16,707	4,479	5,100	1,321	2,745
Net Earned Premium	430,903	401,041	16,707	4,325	4,762	1,321	2,746
Incurred Claims	301,630	282,145	12,047	3,057	2,550	1,101	731
Commission Expense	100,013	93,374	4,568	116	1,136	365	453
Administration Expenses	3,491	3,143	135	82	47	55	29
Net Underwriting	25,769	22,379	(43)	1,070	1,030	(200)	1,533

Germany

The major portion of the underwriting business, as outlined above, can be attributed to the German region, mainly due to participation on the large industrial lines contracts proportional contracts (GTPL QS, marine QS, motor QS and property QS). In addition, Premium generated from HGS Speciality business contributed €49Mio to the top. Result deteriorated from the previous year due to large claims reported on the 2018 industrial line casualty account.

Sweden

Business stemming from Sweden, relates solely to new quota shares treaty with HDI Stockholm branch under HGI Speciality arrangement. The treaty comprises of multi –classes of business, mainly Motor, Aviation, General Liability and Marine.

United Kingdom

Likewise, business included in United Kingdom region is also as a result of the new arrangement with HGI Speciality. The major classes of business taken up in this region's quota share include General Liability, Property and Aviation.

Australia

HGI Specialty proportional business also includes business written in the Australian branch. Majority of the business relates to Motor and Financial lines.

Austria

The nature of the business written in Austria is both proportional and non-proportional and across various lines of business and encompasses both Industrial and retail business. The gross written premium position increase of 50% year on year can be attributed to HDI Re's increased participation in both Industrial and retail Property, Personnel Accident and General Liability Motor quota shares.
90% of the business written in 2019 was ceded to Talanx AG.

A.3 Investment performance

A.3.1 Asset classes performance

In 2019 the total investment income of the Company according to IFRS amounts to €18.294 Mio (2018: €13.915 Mio). This corresponds to a net return of 1.95% (1.65%) and includes a management fee amounting to €0.907 Mio (€0.729 Mio).

Income, broken down in different asset classes, is shown in the table below. The management fee cannot be assigned to a specific asset class and will therefore not be further specified in the following annotation:

HDI RE IFRS Bookvalues classified according to CIC code	31.12.2019									
in TEUR	IFRS value	ordinary Income	Appreciation	Impairm./ deprec.	Realized Gains	Realized Losses	Unreal. Gains	Unreal. losses	Expenses	Total Inv. Income
Government bonds	91.058	3.154	0	0	110	-89	0	0	0	3.175
Corporate bonds	826.636	11.801	0	0	635	-264	0	0	0	12.172
Equities - listed	0	0	0	0	0	0	0	0	0	0
Equities - unlisted	0	0	0	0	0	0	0	0	0	0
Holdings/Participations	0	0	0	0	0	0	0	0	0	0
Collective Inv. Undertakings	145.093	3.206	0	-1.098	17	0	0	0	0	2.125
Structured notes	0	0	0	0	0	0	0	0	0	0
Collateralised securities	82.416	1.643	0	0	0	0	0	0	0	1.643
Cash and cash equivalents*	0	0	0	0	0	0	0	0	0	0
Deposits other than cash eq.	8.787	86	0	0	0	0	0	0	0	86
Loans/mortgages (w/o policy loans)	0	0	0	0	0	0	0	0	0	0
Loans on policies	0	0	0	0	0	0	0	0	0	0
Property (other than own use)	0	0	0	0	0	0	0	0	0	0
Derivatives	0	0	0	0	0	0	0	0	0	0
Mgmt. Expenses (not assigned)	0	0	0	0	0	0	0	0	-907	-907
Total:	1.153.989	19.889	0	-1.098	762	-352	0	0	-907	18.294

*w/o current accounts with banks

The ordinary income, resulting predominantly from coupon payments of corporate bonds, collateralised securities and government bonds, amounts to €19.889 Mio (€15.471 Mio) as opposed to ordinary expenses of €0.907 Mio (€0.729 Mio).

Other comprehensive income (OCI) amounts to €42.205 Mio (€8.671 Mio), mainly driven by fixed income securities €30.527 Mio (€6.731 Mio) such as corporate bonds and government bonds. The OCI of the equity positions (collective investments undertakings) amounts to €4.609 Mio (€-2.082 Mio) Compared to year end 2018 the total OCI increased by €33.534 Mio (compared to a decrease of €16.271 Mio in the previous year).

Impairments amount to € 1.098 (€ 0.890 Mio) in 2019. The net result from gains and losses on disposals amounting to €0.41 Mio (€0.063 Mio) is based on effects from normal business activity.

The mentioned management fee of €0.907 Mio (€0.729 Mio) is the result of a basis point related remuneration model in the amount of 12 basis points, applied to the respective assets under management. The management fee shall be seen as mixed pricing which allocates the same fee to all asset classes from the least complex to very complex.

Under compliance of the given risk budget and duration from the liabilities side, an average reinvestment yield of 1.47% (2.07%) was generated in the fixed income segment in 2019.

A.4 Performance of other activities

A.4.1 Other activities

The Company entered into a subordinated loan agreement with Targo Lebensversicherung during 2014, a related group company for the amount of €30.000 Mio. The loan forms part of the eligible own funds of the Company and is classified as Tier 2 capital. The subordinated loan is dated thirty years (up to 14th January 2045) and is non-cancellable prior to ten years (up to 14th January 2025). It is placed on an arm's length basis with a fixed interest rate of 4.08% for the period of ten years and thereafter with a market dependable rate. The interest amount applicable to 2019 was €1.224 Mio which was settled to Targo Lebensversicherung during January 2020.

A.4.2 Leasing arrangements

The Company has licence commitments for its office space under an operating licence cancellable within one year of €0.094 Mio exclusive of VAT. There are no other significant leasing arrangements in place for HDI Re.

A.4.3 Off balance sheet commitments

Off balance sheet capital commitments of the company as at 31 December 2019 are €70.740 Mio (2018: €56.000 Mio). These commitments are in respect of investment projects with no set cash call dates.

A.5 Any other information

The net profit before taxes was €29.063 Mio (2018: €39.711 Mio) and the corporation tax charge for the year 2019 amounts to €3.633 Mio (2018: €4.964 Mio). The company paid a €10.000 Mio dividend in respect of the financial year 2018 during 2019. In January 2019, the Company declared a dividend in respect of financial year 2019 of €10.000 Mio to its parent HDI Global SE.

B. System of governance

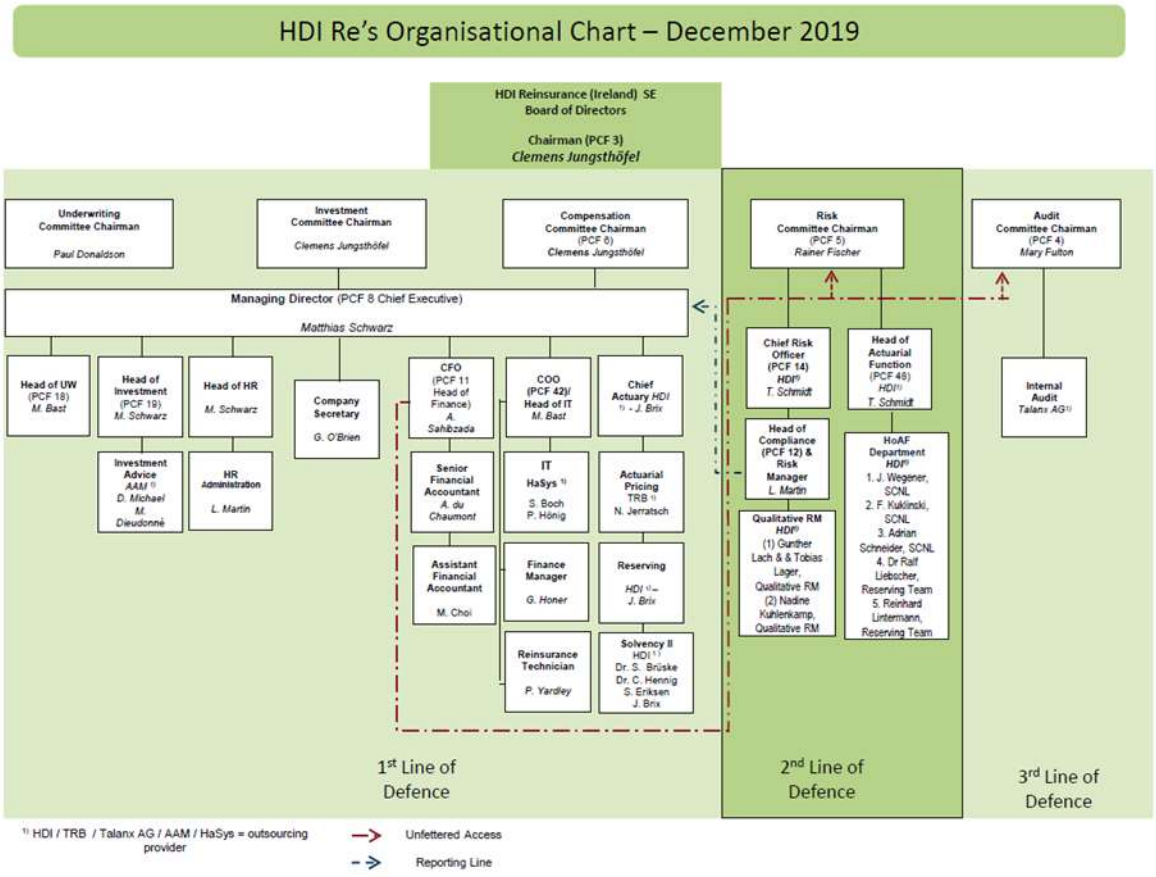
B.1 General information on the system of governance

HDI Re's shareholder changed from Talanx Group to HDI Global SE at year-end 2019. As HDI Global SE is owned by Talanx Group and virtually identical in terms of business activities, organisation and structure, the report refers mainly to Talanx Group (for the Group structure please refer to chapter A1).

The Group structure contains six segments and each segment is responsible for its own business processes. These tasks, which are shared by several organisational units, help to create value in the Group. HDI Re forms part of the corporate operations of Talanx Group and is a servicing in-house reinsurance company.

At the core of our corporate governance principles is integrity in HDI Re's dealings with our business partners, employees, shareholders and other stakeholders. HDI Re complies with all statutory and regulatory requirements and applies them in a proportionate way appropriate to its business model. HDI Re has established an organisational structure based on the principle of three lines of defence.

Below is HDI Re's organisational chart as at year-end 2019:



The first line of defence comprises of the operational processes of the company. Clear roles and responsibilities are allocated to the front-line employees to process the day-to-day transactions

appropriately. HDI Re has documented processes and written policies in place to ensure a secure handling of the operation.

Within the second line of defence, HDI Re has established the risk management function, the compliance function and the actuarial function according to the Solvency II Directive (Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) and the Irish regulatory requirements. The second line of defence ensures an independent oversight over HDI Re's operations especially with regard to risk management and actuarial tasks. The Chief Risk Officer and the Head of Actuarial Function have direct reporting lines to the Management Board or respective senior committees (for further information on Solvency II key functions please refer to CBI's Policy Notice-October 2015-Fitness and Probity for Reinsurance Undertakings under Solvency II - see chapter B.2).

The third line of defence refers to the independent audit by external and internal auditors. The internal audit function forms part of the Solvency II key functions. The internal and external auditors report directly to the HDI Re's audit committee.

Being a member of one of the leading European insurance groups, HDI Re utilizes the expertise and knowhow of specialized Group entities. Main outsourcing agreements are established with Talanx AG (risk management), HDI Global (actuarial services), AAM (asset management) and TRB (operational and actuarial support). HDI Re has outsourced the risk management, internal audit and actuarial function according to the Solvency II Directive to Talanx Group entities. For each outsourcing arrangement, the Company has established service level agreements (SLAs). The Head of Compliance is also responsible for HDI Re's outsourcing agreements and the outsourced services are assessed annually based on existing performance indicators.

B.1.1 Roles and responsibilities

Board of Directors (BoD)

HDI Re is HDI Global's primary reinsurer and is registered in Ireland with the Irish financial regulator CBI as a Composite Reinsurer.

HDI Re's governance structure has been approved by the Board of Directors and is in line with the 2015 Corporate Governance Requirements for Re/Insurance Undertakings. The Company complied with all reporting requirements as required by the Code in 2019.

HDI Re's Board of Directors charter sets out its approved principles of composition and role, delegation of authorities, possible conflicts of interest to consider, matters reserved for board decisions and its diversity policy. In addition, HDI Re's governance process is characterized by the segregation of function, which is achieved by assigning specific business review information/documentation to Board of Directors committees. The detailed responsibilities are outlined in the individual committee's charter and summarised below.

The Board of Directors meetings are held quarterly and the Board is responsible for:

- determining the overall business strategic objectives of the Company
- monitoring the performance of the Company and its management against the strategic objectives
- overseeing an adequate and effective internal control framework that includes well-functioning risk management, compliance and internal audit functions as well as an appropriate financial reporting and accounting framework
- ensuring that the risk management and internal controls reflect HDI Re's risk appetite and that there are adequate arrangements in place to ensure that there is regular reporting to the Board on compliance with the risk appetite
- overseeing the strategy for on-going management of material risks, including liquidity risk, and has established procedures to maintain an appropriate relationship with external auditors.

The Board of Directors as a whole is collectively responsible for promoting HDI Re's success by directing and supervising its business affairs. In addition to the responsibilities common to all Board of Directors, non-executive directors exercise their independence of judgement by:

- Challenging constructively and contributing to the development of HDI Re's strategy
- Scrutinising the performance of HDI Re's management in meeting agreed goals and objectives and monitoring the reporting of performance
- Satisfying themselves that financial information is accurate and that financial controls and systems of risk management are robust and defensible
- Reviewing the reports and recommendations of the delegated committees.

At year-end 2019, HDI Re had seven directors and the Chairman is proposed for election in the first quarter of each year. From **January to December 2019** the board members were:

- Mr Clemens Jungsthöfel (Chairman) German – appointed 31 May 2019
- Mr Michael Bast (Chief Operating Officer) German
- Mr Paul Donaldson (Independent Non-Executive Director)
- Mr Rainer Fischer (Non-Executive Director) German
- Ms Mary Fulton (Independent Non-Executive Director) – appointed 1 January 2019
- Mr Andreas Grabi (Non-Executive Director) German – retired 17 January 2019
- Dr Christian Hinsch (Chairman) German – retired 31 May 2019
- Dr Immo Querner (Non-Executive Director) German
- Mr Matthias Schwarz (Chief Executive) German.

Board of Directors reporting responsibilities

During 2019, HDI Re's Board of Directors and delegated committees have upheld their charters' roles and responsibilities and all local and group reporting deadlines have been observed.

HDI Re's committees

HDI Re has five committees and the Board of Directors are responsible for the oversight of each committee:

- Risk (meetings held at least three times a year)
- Audit (meetings held quarterly)
- Underwriting (meetings held quarterly)
- Investment (meetings held at least three times a year)
- Compensation (one meeting annually in Q4).

a) Risk Committee (RC)

HDI Re's RC currently has five members and is composed of non-executive and independent non-executive directors. Their charter is reviewed annually and the committee's 2019 responsibilities and duties include:

- **CRO function** - by regular liaison to ensure the effectiveness of the current RC organisation and ensure the development and on-going maintenance of an effective risk management system within HDI Re that is effective and proportionate to the nature, scale and complexity of the risks inherent in the business;
- **Quantitative and qualitative risk management requirements** - by the monitoring of the risk management requirements including HDI Re's risk strategy, risk appetite, the current financial position;
- **Risk management function** oversight (the risk management function is managed on a day to day basis by the CRO);

- **Risk framework** - by ensuring the framework is aligned with the Group's risk framework;
- **Guidelines and policies** - by reviewing and approving all HDI Re's guidelines and policies updates as prepared by the Managing Director and/or CRO;
- **Effectiveness of strategies and policies** - by advising the BoDs with respect to maintaining, on an on-going basis, amounts, types and distribution of both internal capital and own funds adequate to cover its risks;
- **Compliance function** - by ensuring that the department is adequately resourced and has the tools, rights and authorities required to carry out its work and also by reviewing the compliance function's annual report.

b) Audit Committee (AC)

HDI Re's AC currently has three members and is composed of non-executive and independent non-executive directors. Their charter is reviewed annually and the committee's 2019 responsibilities and the duties include:

- **Financial reporting -** by monitoring the integrity of HDI Re's data for the financial statements, including any significant returns to be made to CBI and any financial results or any formal announcements relating to its results (either interim or final);
- **Whistle blowing -** by reviewing HDI Re's arrangements for its employees to raise concerns in confidence about possible wrongdoing in financial reporting or other matters. The AC ensures that these arrangements allow investigation of such matters and appropriate follow up action;
- **Internal audit** - by monitoring and reviewing the effectiveness of HDI Re's internal audit function in the context of its overall risk management system, assessing the proposed internal audit plan, reviewing all internal auditor reports on HDI Re to ensure management's responsiveness to the findings and recommendations are adequate. The AC Chairman meets the head of internal audit at regular intervals, without management being present, to discuss their remit and any issues arising from the internal audits carried out;
- **External audit** - by considering and making recommendations to the Board of Directors, in relation to the appointment, re-appointment and removal of HDI Re's external auditor. The AC oversees the selection process for new auditors and oversees the relationship with the external auditor including (but not limited to) approval of their remuneration, whether fees for audit or non-audit services and that the level of fees is appropriate. The AC Chairman meets the external auditor regularly (including one at the planning stage and once after the audit) to discuss any issues arising from the audit.

c) Underwriting Committee (UC)

HDI Re's UC currently has five members and is composed of executive, non-executive and independent non-executive directors. Their charter is reviewed annually and the committee's 2019 responsibilities and the duties include:

- **Underwriting** - by overseeing and advising the board on all underwriting related matters. The UC monitors the integrity of the underwriting business data and ensures that appropriate underwriting standards, estimates and judgements are undertaken by the underwriting unit (UU), including external advisors opinions. Regular UU reports are presented to ensure full transparency of the underwriting and reinsurance processes and the agreed underwriting limits and thresholds are being maintained;
- **General Underwriting Guidelines and Retrocession Guidelines -** by reviewing, steering, controlling and approving HDI Re's UU in accordance with the documents authorized limits and approving any guidelines updates;
- **Renewal/new business proposals -** by reviewing each new or renewal business proposal to ensure compliance with the aforementioned guidelines and including the treaty level authority requirements.

d) Investment Committee (IC)

HDI Re's IC currently has three members and is composed of executive, non-executive and independent non-executive directors. Their charter is reviewed annually and the committee's 2019 responsibilities and the duties include:

- **Investment strategy and risk exposure** - by advising the Board of Directors on the investment strategy, especially the strategic asset allocation and its implementation and informing the Board of Directors on the applied limits and thresholds for market risk. The IC monitor and review current risk exposure of market risk and ensure that the investment follows the HDI Re Investment Guidelines;
- **Governance and investment management -** by making recommendations on the appointment of the asset management provider, investment manager and investment advisors. The IC makes recommendations on the investment policy which includes giving appropriate consideration to the market risks, asset diversification risks, credit and liquidity risks faced by HDI Re. The committee reviews the investment managers' regular reports and their performance against the market benchmarks as well as the Company's Investment Guidelines and also reviews the asset management provider's compliance with legal requirements as well as the Company's Investment Guidelines;
- **Internal model -** by reviewing the annual validation report especially with regard to market risk and sub-categories, the regular risk reporting on market risk and to advise the board on conclusions from the risk reporting (i.e. ORSA report, internal risk report, reports on the adherence to limits and thresholds). The IC advise on model changes with regard to investments and market risk (in accordance with the current Model Change Policy);
- **Risk management culture -** by reviewing and monitoring the executive management's responsiveness to the findings and recommendations of the IC.

e) Compensation Committee (CC)

HDI Re's CC had three members and is composed of executive, non-executive and independent non-executive directors.

The CC meets annually to assess their current charter, proposals for employee performance related bonus and annual salary increases and also to ensure that all provisions regarding disclosure of remuneration, including pensions, are fulfilled.

HDI Re's Committee's reporting responsibilities

Each Committee's Chairman reports to the Board of Directors on its committees meetings proceedings on all matters within its duties and responsibilities. The committee's chairman is responsible for determining the form and nature of the information delivered to the Board of Directors and also confirms that its committee members have carried out their duties as outlined above.

All committee's recommendation proposals, as outlined in the committee chairman's report, are discussed at the Board of Directors meeting to obtain their final approval.

HDI Re's standard of business conduct and ethical behaviour guidelines

HDI Re is fully committed to uphold its Standard of Business Conduct and Ethical Behaviour Guidelines. All personnel, upon arrival to the company, must review the document and agree to abide to its contents as part of their HR welcome pack.

Integrity guides HDI Re personnel's conduct towards our business partners, colleagues, shareholders and stakeholders and this concept is at the very heart of its corporate governance principles and forms the basis of HDI Re's corporate strategy. Both HDI Re's strategic considerations and its day-to-day business activities are based on high ethical and legal standards. The Business Conduct Guidelines are binding rules applicable to every employee within the Company and are intended to assist each individual confidentially handle all ethical and legal challenges that may arise in their daily business activities.

B.1.2 Remuneration and system of governance

Compensation principles

The compensation strategy of HDI Re is based on the objective of sustainable ongoing development of the company and group. HDI Re's compensation structure and the compensation rules are intended to be compliant with the Irish market and to be competitive. The business development of the company is built taking account of sustainability and the competitive environment.

The compensation structure is directed towards attracting high-calibre employees to the management and senior personnel and to retaining their loyalty. The system is also intended to guarantee sustainable and value-based corporate governance.

The compensation system is based on the business and risk management strategy, the internal organisational structure and the risk profile of the company.

The compensation structures are generally arranged so as to avoid an inappropriate readiness to take risks. The selection of target criteria for the variable compensation system and for restricting the upper limit of variable compensation elements is ensured such that no inappropriate performance incentives are offered which could persuade employees to enter into risks with incalculable consequences.

Compensation components for the Board of Directors

The non-executive directors are reimbursed for their expenses only, while the independent non-executive directors also receive a fixed annual compensation. The executive directors are reimbursed in accordance with their individually agreed contracts of employment.

Compensation components for employees

The compensation for HDI Re's employees comprises of a range of different components. It guarantees an appropriate and balanced compensation package which takes account the level of responsibility and function inherent in the position, and the conditions prevailing within the Irish marketplace.

The compensation generally comprises the following components:

- Annual fixed compensation - the fixed compensation is specifically based on the spectrum of functions, the level of responsibility and the career experience.
- Variable compensation - the level of the compensation is linked to attaining annually agreed individual targets.
- Retirement provision – the fundamental commitments are guaranteed within the framework of retirement provision which is based on a defined contribution model and are generous in Irish market conditions.

- Other fringe benefits independent of performance (e.g. health insurance, death in service benefit, accommodation allowance etc). Fringe benefits vary according to individual circumstances and depend on individual contracts of employment.

Compensation reporting

HDI Re has a Compensation Committee and the committee meets annually to assess the proposed employee performance related bonus, proposed annual salary increases and ensure that all provisions regarding disclosure of remuneration including pensions, are fulfilled (for details on the compensation committee please refer to chapter B.1.1).

B.1.3 Material changes

During the reporting period, no major change in HDI Re's governance system was observed.

B.2 Fit and proper requirements

According to the requirements of the Solvency II framework directive, all senior management or individuals holding other key functions have to satisfy the requirements regarding:

- their technical and professional qualification (fitness) and
- their personal reliability (propriety).

B.2.1 Policies and processes

The Solvency II fit and proper requirements are currently outlined in the following CBI guidelines: 'Guidance on Fitness and Probity Standards 2016, Guidance for Reinsurance Undertakings on the Fitness and Probity Amendments 2015, Domestic Actuarial Regime and Related Governance Requirements under Solvency II 2015, Guidance for Reinsurance Undertakings on the Head of Actuarial Function Role 2015'. HDI Re adheres to the aforementioned guidelines and required reporting was upheld in 2019.

B.2.2 Persons in key functions

Persons with key functions can be distinguished as follows:

- Persons actually leading the company (Board of Directors members)
- Persons holding other key functions (key functions according to the Solvency II Directive, functions requiring pre-approval according to the local fitness and probity regime).

The following roles are classified by CBI (Guidance for Reinsurance Undertakings on the Fitness and Probity Amendments guidelines 2015) as the four key functions of the system of governance under Solvency II:

- PCF 12 - Head of Compliance
- PCF 13 – Head of Internal Audit
- PCF 14 – Chief Risk Officer
- PCF 48 – Head of Actuarial Function.

Under Solvency II where key functions are outsourced, the entity must designate an individual within the company with overall responsibility for the key function. The designed local individual must be a current CBI PCF holder within the company and possess sufficient knowledge and experience regarding the outsourced key function to enable change of the performance and results of the outsourced service provider.

B.3 Risk management system including the own risk and solvency assessment

B 3.1 Risk strategy

The main objective is to achieve an A rating according to the standards of AM Best. This in turn implies an adequate capital adequacy ratio according to the internal model TERM. Furthermore, full compliance with the regulatory requirements under Solvency II is a prerequisite. HDI Re has a fully-fledged limit and threshold system in place that allows control of the risks taken, in order to achieve the profit targets. HDI Re outsourced many aspects of the risk management process, in particular the calculations under Pillar 1, parts of the reporting (e.g. ORSA) and the CRO function. These outsourcing activities allow at one hand to be cost-efficient and effective on the other hand, this approach allows HDI Re to interact with the holding (HDI Group) respectively the industrial lines division in a very smooth manner. Of course, the local management ensures that the interests of HDI Re are adequately represented in committees and considered appropriately. The Pillar 1 calculations are based on the internal model TERM which yields the row data for the various reporting formats.

B.3.2 Risk profile

The risk profile of HDI Re is stable over time since several years because the business model is unchanged and splits up to the following risk categories:

- Premium and reserve risk
- NatCat
- Market risk
- Operational Risk

The contribution from other risk categories is of minor importance. Note that TERM is from Q3/ 2019 on a full internal model. With the use of the full internal model, there has been a significant reduction within the operational risk category.

B.3.3 Material risks not included in the SCR

There are no material risks that are not fully included in the calculated SCR.

B.3.4 Investment risk and Prudent Person Principle

The investment decisions are worked out by the investment committee and decided by the board. The execution of the related deals are realized by Ampega Asset Management, an asset manager which has approximately € 150bn assets under its management and keeps high standards in their processing both for internal and external clients as well. Within this environment a number of policies and related governance structures ensure that the requirements of the prudent person principles are fulfilled.

For HDI Re the feasible investment universe applies as for the whole Talanx group. Therefore, HDI Re has access to systems and knowledge that enable the identification, measurement, monitoring, controlling and reporting of all the risks related to their investments or investment strategies.

In that respect a number of additional risk management systems beyond TERM are in place and related reports are delivered. The most prominent ones are the Credit Value-at-Risk Report and the so-called Asset Liability Management Report. These reports are produced on a high frequency basis.

B.3.5 Appropriateness of credit assessments from external credit assessments institutions

This chapter is not applicable for the Company.

B.3.6 Extrapolation of the risk-free rate

According to the standards for internal models, the EIOPA curve is applied within very tight boundaries of few basis points. This curve is applied for the evaluation of HDI Re's assets and liabilities.

B.3.7 Own risk and solvency assessment

The ORSA is provided by the CRO. It is based on the quantitative output of our internal model TERM. Furthermore the available qualitative information is also included as well as the main focus of a risk analysis and a risk assessment. In addition, according to the five-year-planning process the forward-looking perspective is considered.

The results of the ORSA process are discussed in-depth and challenged by means of workshops with the Managing Director and INEDs of the Company. Furthermore, the results of the ORSA are discussed in the risk committee and related board meetings.

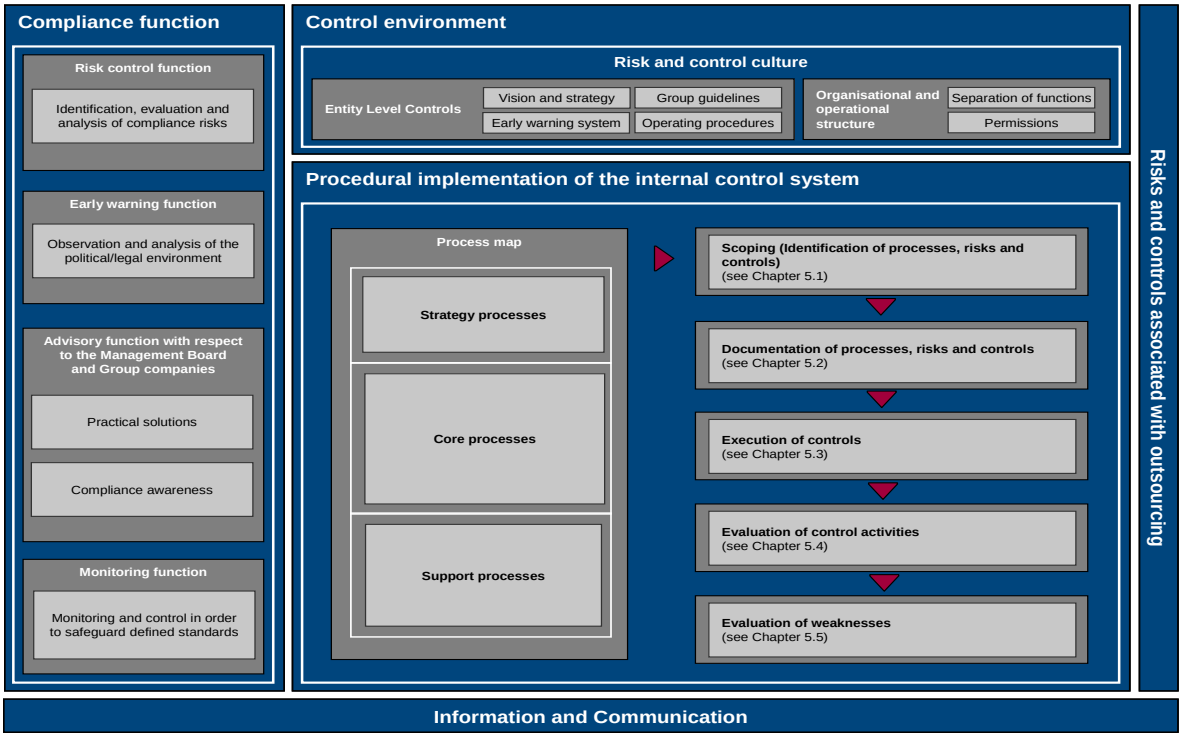
The main application from the ORSA is the revision and updating of the limit and threshold system which include of course the general strategy of the company.

B.4 Internal control system

B.4.1 Key procedures

In line with Solvency II requirements (articles 46 and 47 of 2009/138/EC Directive), HDI Re has an Internal Control System (ICS) Policy. The policy sets minimum requirements for the design of the ICS within the company. The ICS is an aggregation of all integrated and process independent monitoring measures (internal controls and organisational measures) which ensure that HDI Re's organisation and processes function satisfactorily. It applies to all levels and focuses on process risk and the controls implemented for their monitoring.

The elements of HDI Re's Internal Control System are shown below:



The Internal Control System is an integral part of business administration. It serves to reach business goals efficiently, with regard to compliance with regulations and the avoidance of risks.
The processes and measures of the ICS have the following objectives:

- Compliance with legal requirements and with further regulation, contracts and internal rules,
- Adequate execution of business activity,
- Protection of assets,
- Protection of an adequate and reliable accounting,
- Prevention and exposure of asset misappropriation,
- Focus and special regard on material risks,
- Effectiveness and efficiency of risk monitoring and avoidance in business processes,
- Correctness of the display of the assets, financial and earnings position and the risk situation.

Integration of the ICS into the "three lines of defence" concept

The three lines of defence concept describes a framework for a functional control and monitoring system. It outlines three fundamental areas of responsibility, the so called "lines of defence":

- The first "line of defence" is the responsibility of the operative departments for ensuring risk identification, evaluation and monitoring of risks at operational levels. Thereby they bear the responsibility for an adequate design of ICS in the respective department.
- The second "line of defence" consists of functions, which ensure an adequate design of ICS at a superior level and assist the operative departments. This includes the Risk Committee, the risk management, compliance and actuarial functions and the officers for data security, money laundering, outsourcing etc. The risk management function is also responsible especially for identification, evaluation, analysis, monitoring and reporting of risks at company level
- As independent and objective function and as third "line of defence" internal auditing observes the effectiveness and efficiency of the entire ICS, the risk management system and the risk management process, using the respective audit activities.

Roles and responsibilities within the Internal Control System

The most important roles and responsibilities in the ICS framework with relevant tasks are:

Role	Tasks & responsibilities
Board of Directors of HDI Re	▪ Implementation and adequate design of an effective ICS ▪ Adoption of an ICS guideline ▪ Monitoring and ensuring of the effectiveness of the ICS
Risk and process responsible persons in HDI Re	Operative implementation of the ICS (for further information see chapter 4 of the guideline): ▪ Scoping phase: Identification of material processes and IT-systems within the ICS framework ▪ Documentation of the processes and IT-systems identified as material, their inherent risks and belonging controls ▪ Execution of controls and creation of a control record ▪ Ongoing evaluation of control activities regarding their adequacy and functionality ▪ Assessment of control weaknesses
Group Business Organization	▪ Support with the documentation and design of processes and IT-systems regarded as material, their inherent process risks and belonging controls
Risk Committee, the risk management function, compliance function and actuarial function, officers for data security, money laundering, outsourcing etc.	▪ Risk identification, evaluation, analysis, HDI Re, monitoring and reporting on overall corporate level.
Group Auditing	▪ Evaluation of control activities regarding their adequacy and functionality during the regular audits ▪ Assessment of control weaknesses during the regular audits ▪ Reporting taking into account the results of the audits of adequacy and functionality of the ICS

Execution of key controls

The execution of the control and the record of key controls outline the key factors of the ICS operative implementation. Key controls have to be executed in their documented form and a record of execution has to be created. This record should ensure that the risk and process responsible person and/or a qualified third party can adequately review the effectiveness of the key control.

Evaluation of key controls

Any implemented and documented key controls have to be effective, i.e. that the key control is appropriate and functional.

A control is appropriate if the type and design of the control is suitable to reduce the risk, i.e. to reduce the occurrence probability and/or the impact in the case of occurrence.

The functionality of a control describes whether the control is executed in accordance with its design.

In addition to the ongoing evaluation of control activities by the process responsible persons in the specialist areas, internal audit assesses the control activities, identifies potential weaknesses and documents these weaknesses during their regular audits. The functions of the second line of defence are available to assist.

Evaluation of weaknesses of key controls

The identified and documented control weaknesses within the evaluation of control activities have to be assessed regarding possible damages and risks by the respective responsible persons within the scope of their operational activities and by internal audit during their regular audits. Appropriate action plans for the elimination of these control weaknesses have to be defined. The documentation is created by the respective responsible person and/or internal audit within their reports.

ICS reporting

The ICS reporting contains the following reports of the second and third line of defence, which include the appropriateness and functionality of the ICS:

- Reports of the risk management function,
- Reports of the actuarial function,
- Reports of the compliance function,
- Audit and activity reports of Internal Audit.

The HDI Re Head of Compliance produces an annual ICS report for board review/approval as part of the annual Compliance Report.

B.4.2 Compliance function

As outlined in CBI's Corporate Governance Code for Insurance Undertakings 2015 (the Code), HDI Re's Board has the ultimate responsibility for ensuring that the risk and compliance functions are properly managed within the company.

HDI Re's compliance function has the responsibility for advising the Board on compliance with regard to the relevant laws, regulations and administrative provisions and includes an assessment of the possible compliance risk impact of any changes in the legal environment of HDI Re's operations.

Compliance function tasks, authorities & responsibilities

Role	Tasks and Responsibilities
Board	▪ Set HDI Re's business strategy and approve its corporate governance arrangements, including clear lines of responsibility, adequate internal control mechanisms and key control functions ▪ Set the 'tone at the top' in terms of compliance and other responsibilities ▪ Ensure that the compliance function has adequate resources required to effectively undertake the work involved ▪ Delegate oversight of the compliance function and its work to the Risk Committee (including the review and recommendation to approve the annual compliance plan)
Risk Committee	▪ Review of annual compliance plan prepared by the compliance function and submit to the Board for final approval ▪ Provide oversight of the compliance function, including ensuring that an adequate compliance framework is in place ▪ Receive and approve compliance policies ▪ Ensure the compliance function is adequately resourced and has the tools, rights and authorities required to do its work
Compliance Function	▪ Ensure a fit for purpose compliance framework is in place for the management of compliance risks ▪ Act as the primary contact for financial regulators ▪ Own board approved compliance policies and review regularly. Recommend to the Risk Committee and/or Board approval for any proposed recommended changes as may be necessary from time to time ▪ Provides an Compliance Report to the Board annually in Q1
Management and Employees	▪ Provide any assistance and explanations as may be necessary to the compliance function ▪ Ensure the business is run in compliance with relevant statutory and regulatory requirements, formalised policies and procedures ▪ Report all compliance breaches promptly to the compliance function, proposing and implementing remedial action where agreed and required. Furthermore, compliance breaches can be reported anonymously via an electronic whistleblowing system accessible on HDI' internet website.

Compliance risk

Compliance risk is defined as the risk HDI Re may suffer as a result of its failure to comply with applicable law, regulation, codes of conduct and standards of good practice and includes:

- statutory and regulatory risk
- reputation risk
- litigation risk
- risk of regulatory sanction
- risk of financial loss.

HDI Re manages its compliance risks using three lines of defence (see chapter B4 Internal Control System).

The compliance function is part of the second line of defence and:

- translates laws into compliance obligations and assists management to identify its compliance risks
- assists management in identifying activities to mitigate risks, monitors control of compliance risks and advises Management on compliance risk management matters.

The compliance function works with other second lines of defence functions (risk management, actuarial function) to provide objective challenge and support. The function also serves in an advisory role as it implements and embeds procedures (via Risk Committee) and executes other compliance framework activities (internal audit reports). The work and performance of the compliance function is subject to periodic review by internal audit.

Independence of the compliance function

The Head of Compliance (HoC) is independent from any commercial, administrative or control function within HDI Re in order to allow the individual to carry out compliance tasks/reviews with absolute impartiality. The HoC has a formal regular reporting line to the Managing Director and the CRO and together with the CRO reports to the Risk Committee on a quarterly basis and to the Board as a whole as necessary.

Compliance framework

The compliance function maintains a fit for purpose compliance framework in order to meet its objectives. The HoC produces an annual compliance report which is reported to the Risk Committee.

The annual compliance report contains the following topics:
- Summary of report
- Compliance Management Framework
- Head of Compliance Tasks, Authorities & Responsibilities
- Independence of the Compliance Function
- Compliance risk
- CBI Compliance Reporting (annual and quarterly returns)
- Compliance breaches and Group's BKMS whistleblower platform
- ICS Reports
- Group and Local Guidelines updates
- Outsourcing annual assesssment
- Appropriateness of Business Organisation Report
- Annual Compliance Plan 2020.

B.5 Internal audit function

B.5.1 Policy

HDI Re's internal audit function is outsourced to the holding company Talanx AG and carried out by Group Auditing. The HDI Re internal audit function reports their findings and communicates updates directly with the management of HDI Re as well as the Chairman of the audit committee at least on a quarterly basis.

The basic standards upheld by Group Auditing are outlined in a document called Guidelines Group Auditing' and it has been approved by the Board of Directors of Talanx AG. The charter facilitates the evaluation of the structure and tasks of Group Auditing and describes the tasks, rights and responsibilities in respect of the supervisory authorities, the employees and any third parties transparently. HDI Re's senior management regulates the requirements of the internal audit function as part of the overall governance system via this policy. The charter is based on international best practice regulations that derive from the legal requirements, the Solvency II regulations as well as the professional auditing standards. It defines the general basics including tasks, standards, rights and obligations of Group Auditing and its integration into the organization. In addition the charter regulates the basic internal auditing processes, the reporting, the quality assurance and the document management. The charter is reviewed and adjusted as necessary (at least on an annual basis) by the

Head of Group Auditing. Changes might be necessary due to changes of the internal and external requirements or because of relevant structural changes (e.g. changes of the Group or corporate structure). All changes of the charter are approved by the Board of Talanx AG.

B.5.2 Planning

The auditing activities are based on the internal audit plan prepared by Group Auditing and approved by the Board. Group Auditing's role is carried out autonomously and includes unscheduled audits being undertaken if a major weakness is discovered. In order to exercise its monitoring function systematically, target oriented and efficiently for all relevant corporate areas, a comprehensive risk-oriented internal audit plan is prepared.

The audit universe is a basic tool which is reviewed at least annually with regard to its completeness or its representative status. All business processes as well as major participations are reviewed at least once within a 3 year period. Particular external requirements in respect of the auditing frequency (e.g. compulsory audits based on the anti-money laundering law) are also taken into account.

The following risk influencing factors are reflected in the risk-based audit plan:

- Inherent risk of the audit field
- Results from the last audit
- Legal and organizational changes regarding the audit field and
- Insights from the participation in committees and regular internal meetings with other governance functions.

B.6 Actuarial Function

The Actuarial Function of HDI Re is outsourced, via service level agreement, to the Risk Management of HDI Global SE. The Board of Directors have appointed and approved Mr Thomas Adrian Schmidt to fulfil the Head of Actuarial Function (HoAF) at HDI Re.

The HoAF organized a supporting team consisting of the following members of HDI Global SE's Risk Management department:

Adrian Schneider	Service Centre Non-Life
Josephine Fröhlich	Service Centre Non-Life
Fabian Kuklinski	Service Centre Non-Life
Dr. Ralf Liebscher	Reserving team
Reinhard Lintermann	Reserving team

Within HDI Re, the HoAF and his team are referred to as the Actuarial Function (AF).

In accordance with the Solvency II-Directive (Article 48, clause 2) and the implementation to national law via European Union (Insurance and Reinsurance) Regulations 2015 – hereafter called "the 2015 Regulations" – (Regulation 50, clause 2) the Actuarial Function shall be carried out by persons who:

- have knowledge of actuarial and financial mathematics, commensurate with the nature, scale and complexity of the risks inherent in the business of the insurance or reinsurance undertaking, and
- are able to demonstrate their relevant experience with applicable professional and other standards.

Mr Thomas Adrian Schmidt fulfils all fit and proper requirements as he has comprehensive actuarial qualifications and extensive actuarial experience within the industry. Furthermore, he has been a member of the German association of actuaries for many years ("Deutsche Aktuarvereinigung").

Segregation of existing actuarial functions

HDI Re's Chief Actuary (CA) is responsible for calculating the booked reserves and Technical Provisions with regard to Solvency II. The CA and the Actuarial Team review the pricing of incoming business and are involved in the Solvency II Internal Model (IM) process.

The Actuarial Function reviews the appropriateness of the methods and models used for calculating the Technical Provisions according to Solvency II. The AF supports the CA by highlighting quality issues (data, processes, assumptions, methods).

The following topics are not tasks of the HoAF:
- Calculation of Technical Provisions regarding Solvency II or IFRS
- Validation of data quality, assumptions, methods and results regarding IFRS
- Implementation or operation of the Internal Model.

Additional actuarial roles with HDI Re are:
- **Reviewing Actuary**, who performs a peer review of the "Actuarial Opinion of Technical Provisions" and "Actuarial Report of Technical Provisions" every 5 years,
- the **Service Centre Non-Life,** who administer the IM,
- the **Pricing Team**, who price incoming business and
- the **Validation Team**, who validate HDI Re's IM.

The responsibility for the risk management is with the Risk Committee and the Board of Directors. In particular, the Board of Directors decides about the composition of this function, ascertains the suitability

of the respective qualifications of the person appointed, taking the Actuarial Function's reporting requirements into account.

Independence of the Actuarial Function

In accordance with regulatory requirements, the HoAF is independent of HDI Re's additional actuarial roles. The HoAF, the CA with the Actuarial Team and the Service Centre Non-Life are outsourced via service level agreements to HDI Global SE. As the HoAF and the CA are members of separate departments, there are no inter dependencies between these roles or reporting lines.

In order to highlight the HoAF's independence, the following measures are established:

- HDI Re's HoAF reports directly to its BoDs
- the HoAF has no participation with regard to underwriting or reinsurance arrangements within HDI Re.

Tasks of the Actuarial Function

The tasks of the AF are regulated and outlined in several supervisory requirements (e.g. Article 48 of Solvency II-Directive, Article 272 of Delegated Acts, Guidelines on the System of Governance, Guidelines on Valuation of Technical Provisions). CBI published two papers ("Guidance for (Re)Insurance Undertakings on the Head of Actuarial Function Role" and "Domestic Actuarial Regime and Related Governance Requirements under Solvency II"), which assist undertakings to comprehend certain tasks outlined in Regulations 50 of the 2015 regulations. The regulations outlined above are the basis for the HoAF to produce the Report of the Actuarial Function.

The core tasks according to Regulation 50 of the 2015 Regulations are listed below:

Insurance and reinsurance undertakings shall provide for an effective Actuarial Function to:

a. coordinate the calculation of Technical Provisions;
b. ensure the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of Technical Provisions;
c. assess the sufficiency and quality of the data used in the calculation of Technical Provisions;
d. compare best estimates against experience;
e. inform the administrative, management or supervisory body of the reliability and adequacy of the calculation of Technical Provisions;
f. oversee the calculation of Technical Provisions in the case set out in Article 82 of Solvency II-Directive and Regulation 95 of the 2015 Regulations;
g. express an opinion on the overall underwriting policy;
h. express an opinion on the adequacy of reinsurance arrangements; and
i. contribute to the effective implementation of the risk-management system referred to in Regulation 46 of the 2015 Regulations in particular with respect to the risk modelling underlying the calculation of the capital requirements set out in Regulations 113 to 140 of the 2015 Regulations, and with respect to the assessment referred to in Regulation 47 of the 2015 Regulations.

In Article 272 of Delegated Act task a) is explained in more detail. The term "coordinate" is an assessment of the calculation of Technical Provisions (including assumptions, methods and quality of data).

The Actuarial Function produces an annual Actuarial Function report for the HDI Re Board of Directors. The Actuarial Function report outlines the tasks, results and recommendations of the Actuarial Function. If significant weaknesses are ascertained in the Actuarial Function, the Board of HDI Re is to be informed directly.

Regarding his opinion on the calculation of Technical Provisions according to Solvency II the HoAF informs the Board of Directors via the Actuarial Report on Technical Provisions (ARTP) within two months after the submission date of the QRTs to which the report relates. The HoAF presents the ARTP to the Board of Directors. Within the scope of the aforementioned tasks, the HoAF is supported by the employees of HDI Re, and the Actuarial Function team.

Opinion on retrocession

The AF listed the treaties that are subject to retrocession, examined the consistency of the rating of the chosen retrocessionaires with the Talanx Market List and considered the impact of retrocession according to HDI Re's Internal Model. Furthermore, existing guidelines were taken into account.
The HoAF confirms, that there are no indications, that the existing guidelines do not represent an appropriate framework for retrocession underwriting policy. The comparison of the gross and net results of HDI Re's IM indicate a favourable effect of the retrocession in place. The limits and thresholds of the existing retrocession are well within the parameters of the underlying protected treaties. HDI Re appropriately adapted its retrocession to the changes of its portfolio.

Opinion on underwriting

The AF described and assessed HDI Re's current pricing and underwriting processes. The compliance with existing guidelines is outlined. The methodologies and the data used for the actuarial pricing are assessed.

There are no indications that the existing guidelines are not an appropriate framework for the current underwriting policy. The HoAF confirms that HDI Re complies with the General Underwriting Guideline in all material respects.

The general methodologies used for the large claim parameterisation and the attritional loss parametrisation follows actuarial standards and represents market standard. HDI Re corrected the ranking algorithm for choosing an appropriate large loss severity distribution in accordance with recommendation (R8 2018). The recommendation (R9 2018) remains open:

(R9 2018) It is recommended to examine if the Generalized Pareto distribution could be of interest for the large loss severity parametrisation. Currently the Generalized Pareto distribution is not implemented functionally in HDI Re's actuarial pricing. **Opinion on Technical Provisions**

In the opinion of the HoAF, there are no material limitations on the sufficiency, appropriateness, completeness and accuracy of data or the appropriateness of the methodologies, models and assumptions used in the calculation of the Technical Provisions as at 31.12.2019.

To form this opinion the Actuarial Function performed an independent calculation of the Best Estimate for Claims Provisions for proportional treaties. The results were compared with the reserves of HDI Re. Furthermore the transparency of HDI Re's calculation steps was examined. The Actuarial Function analysed the calculations performed by the Chief Actuary regarding inconsistencies in itself or to the Special Reserving Guideline of HDI Re. Furthermore the underlying data basis was assessed.

Opinion on Risk Management

The approach of calculating premium risk, counterparty default risk and reserving risk in the IM adequately reflects HDI Re's actual risk position. The SCR calculations in the IM are in all material respects consistent with the underwriting policy, the calculations of Technical Provisions and the retrocession programme.

From the HoAF's point of view the existing ORSA process is in accordance with the main requirements of CBI's "Guidance for (Re)Insurance Undertakings on the Head of Actuarial Function Role".

B.7 Outsourcing

B.7.1 Outsourcing policy

HDI Re's Outsourcing Policy ensures that the decision to outsource activities is taken in a rigorous, transparent and consultative manner serving the best interests of HDI Re. Robust and effective systems and controls over outsourced activities are an integral element of HDI Re's control over the outsourced provider and the management of outsourcing risk, whilst also ensuring compliance with regulatory obligations.

Effective controls are also a key element in ensuring outsourced activities deliver the required level of service, at the agreed costs, and minimise any potential reputational damage whilst complying with all regulatory and legislative obligations.

The key to outsourcing is ensuring the Company's senior management team retains ultimate responsibility for the discharge of its obligations.

Any HDI Re company activity may be outsourced under Solvency II, including all activities in relation to the key functions. Any material development to an outsourcing arrangement (including commencement or change of any outsourcing arrangements of critical or important functions of outsourcing functions) must be reported to CBI giving at least 6 weeks' notice to the proposed change.

B.7.2 Outsourcing activities

The Outsourcing guidelines outline HDI Re's outsourcing processes and strategies throughout the lifecycle of the outsourced activity. These processes include:

- Selecting an outsourced provider
- Requirement content of a Service Level Agreements (SLA)
- Responsibilities of SLA owners
- Management and monitoring of SLAs
- Breaches reporting.

HDI Re conducts an annual audit of its major outsourcing agreements. Below is a list of HDI Re's most significant SLA's (all service providers are domiciled in Germany):

#	HDI Re Outsourced Service	HDI Group SLA Provider
1	Risk Management	HDI Global SE
2	TRB Non-Life Actuarial Services	Talanx Reinsurance Broker GmbH
3	HDI Non-Life Actuarial Services	HDI Global SE
4	Investment	Ampega Asset Management GmbH
5	IT Services	HDI Systeme AG
6	Retrocession	Talanx Reinsurance Broker GmbH
7	Internal Audit	Talanx AG

Outsourcing reporting responsibilities

During 2019, HDI Re's outsourcing activities have upheld all solvency II requirements in line with 2009/138/EU Solvency II Directive and CBI's '2016 Notification Process for Re/insurance Undertakings when Outsourcing Critical or Important Functions or Activities under Solvency II'.

B.8 Any other information

All material and relevant information about the system of governance are included in the sections of chapter B.

C. Risk profile

HDI Re quantifies its risks with a full internal model. The internal model was initially approved by the supervising authorities on 28 March 2017. A model extension regarding the inclusion of the operational risk was approved on xx.xx.2019. The internal model quantifies the required risk capital according to the 99.5% Value at Risk (VaR) within a one year time horizon.

The following table shows the major risk categories and the differences between the last annual model run and the annual model run before that for each risk categories:

Internal Model		
Figure in € thousand	Annual 2019	Annual 2018
Market risk	129,154	87,881
Counterparty default risk	5,756	3,830
Underwriting risk	150,673	145,064
Operational risk	12,295	20,719
Diversification	-98,618	-71,993
Loss absorbing capacity of deferred taxes	-24,921	-23,205
Solvency Capital Requirement	174,337	162,296

Table: Comparison SCR

The SCR increases mainly due to increased assets (market risk) and increased reserves (underwriting risk). The percentage wise large movement in operational risk is due to the fact that for annual 2018 this risk was calculated by the standard formula, for annual 2019 within the internal model. At the same time this change increases the diversification effect.

C.1 Underwriting risk

Underwriting risk for property / casualty lines consist of premium risk and of reserve risk. It describes a change in value caused by ultimate loss costs for full contractual obligations varying from those assumed when these obligations were estimated.

The underwriting risk of HDI Re is subject to the ‘General Underwriting Guideline’ and the ‘General Retrocession Guideline’. The framework for the HDI Re’s underwriting risk is given by the risk strategy and the risk appetite statement.

HDI Re’s underwriting risk originates almost exclusively from cedants being entities of Talanx group. Few exceptions exist, which were Talanx group entities at the time the respective reinsurance contracts were signed. The nominal technical provisions according to Solvency II of these entities are comparably small:

	Technical Provisions
HDI Entities	99.938%
non-HDI Entities	0.062%

Table: HDI vs non HDI TP

No collateral in terms of Article 214 of the Commission Delegated Regulation (EU) 2015/35 has been given by or to HDI Re.

Underwriting risks property / casualty

a) Premium risk

Premium risk describes the risk that future losses are larger than expected, either through higher than expected individual loss events or higher loss frequencies.

The premium risk within the internal model of HDI Re is estimated by a simulation approach at treaty level. The simulations per treaty are taken from the actuarial pricing process, carried out per treaty before writing any share in accordance with HDI Re's 'General Underwriting Guideline' and the 'Actuarial Pricing Guideline'. The simulations of the single treaties are combined using a copula with dedicated dependencies between the treaties.

The simulations are, subject to the underlying risk, split into attritional losses, large losses and natural perils losses. For a consistent view on natural perils, HDI Re applies external models (Applied Insurance Research, Risk Management Solutions, Impact Forecasting). The simulations, input data, output data and methodologies, are subject to a validation process which is independent of any risk taking activity.

The most material premium risk exposures currently held by HDI Re are:
- German industrial GTPL
- Worldwide Specialty business

The only direct retrocession of HDI Re is a natural perils event cover. The retrocession reduces the premium risk:

Figures in € thousand	Premium Risk
Gross	147,621
Net	108,520
Risk Mitigation	(39,102)

Table: Premium Risk, Retrocession

In addition various inuring reinsurance is in place before the business is ceded to HDI Re. this inuring reinsurance is not shown at HDI Re level.

Compared to previous year the premium risk increased. This is mainly due to newly signed treaties and increasing shares.

The potential default of retrocession reinsurers for premium risk is captured within the counterparty default risk of the internal model (for details please refer to chapter C.3 of this document). The retrocession is bought in line with the 'General Retrocession Guideline' and adjusted to the premium risk portfolio annually.

From a cedant point of view the highest concentration of assumed reinsurance treaties is with HDI Global Specialty SE. In terms of written premium, the following table shows the most material cedants by premium volume:

	Share in volume, 2019
HDI Global Specialty SE	52.09%
HDI Global SE	44.38%
LPV	3.53%
All Remaining	0.00%
Total	100.00%

Table: Concentration by Cedant

To define the risk sensitivity of the premium risk stress tests are carried out. Stress tests are carried out by changing the input data of the internal model and performing a full model run.

Stress 1: The dependency structure between the individual treaties is stressed by changing the underlying dependencies of the applied copula:

	Premium Risk	Underwriting Risk	SCR after tax
+10%	9.6%	4.3%	0.1%
-10%, >0%	-9.4%	-1.7%	-1.7%

Table: Stress dependencies between premium risk segments

Stress 2: The copula chosen to reflect the dependency structure is stressed:

	Premium Risk	Underwriting Risk	SCR after tax
t-Copula 5 d.o.f.	13.2%	16.9%	8.1%
t-Copula 10 d.o.f.	6.0%	8.9%	1.0%

Table: Stress Copula

Stress 3: for the largest premium risk segment the probability distribution parameters are stressed:

LL= LL= Large Loss distribution, AL=Atrittional Loss Distribution, std= standard deviation

Figures in € thousand		Premium Risk	SCR before tax
AL	mean and std + 10%	1.30%	0.56%
AL	mean and std -10%	-1.66%	-0.37%
LL, severity	mean and std + 10%	0.27%	0.09%
LL, frequency	mean +10%	0.30%	0.10%

Table: Stress largest segment

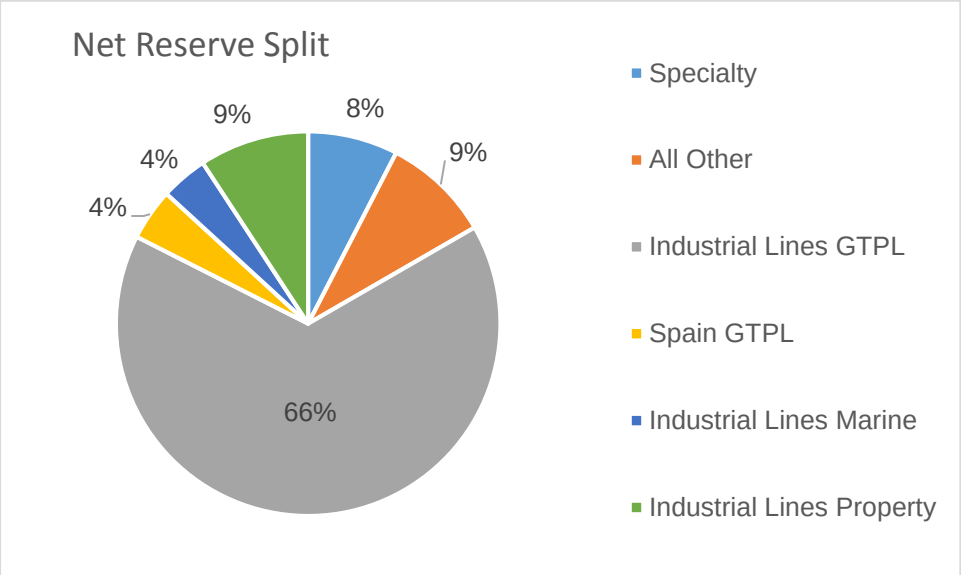
b) Reserve risk

Reserve risk relates to already incurred claims, i.e. existing claims including IBNR and IBNER and originates from claim sizes being greater than expected, differences in timing of claims payments from those expected and differences in claims frequency from those expected.

The reserve risk within the internal model of HDI Re is based on actuarial methods and on data, generally identical to the data applied in the actuarial reserving process of HDI Re.

The technical provisions are subject to an annual independent review by the actuarial function of HDI Re. The outcome of this review is presented to and discussed in the Board of Directors meeting. One outcome controlled by this review is the relation of booked IFRS reserves to best estimate technical provisions. Within the context of the limit and threshold system the best estimate technical provisions have to be at 102% (threshold) respectively 100% (limit) of the booked IFRS reserves. Currently this reserve ratio is well above the threshold.

The following graph gives a split of the volumes, by nominal best estimate reserves, by segment:



Graph: Split of nominal reserves

The single reserve segments are combined within the internal model using a copula with dedicated dependencies among the segments.

A large part of the reserves are protected by inuring reinsurance of the cedants which limits the maximum single loss. The largest single reserve risk segment originates from industrial lines third party liability business. The counterparty default risk of the inuring reinsurance is part of HDI Re's risk for a large part of the portfolio. The technical provisions take account of these risks. For a discussion of the default of these inuring reinsurers please compare chapter C.3 of this document.

The nominal best estimate reinsurance recoverables of the retrocessions in place for past accident years are €79,509,535. Of these €64,833,770 are ceded to one reinsurer, Talanx AG, the holding company for all Talanx entities.

Risk mitigation in form of non-proportional and proportional retrocession is in place for individual treaties as well as for the MTPL and parts of the GTPL portfolio of underwriting years 2013 to 2019. In addition a quota share retrocession cedes 90% of almost all business, for all underwriting years, originating with Talanx Retail International or Talanx Retail Germany companies to Talanx AG.

Reserve volume and reserve risk concentrations are reviewed on a quarterly level and discussed in the Board of Directors meetings.

To define the risk sensitivity of the reserve risk stress tests are carried out. Stress tests are carried out by changing the input data of the internal model and performing a full model run.

Stress 1: The dependency structure between the individual segments is stressed by changing the underlying dependencies of the applied copula:

	Reserve Risk	Underwriting Risk	SCR after tax
Original structure +10%	9.3%	9.0%	4.9%
Original structure -10% but >0%	-12.1%	-7.4%	-5.5%

Table: Stress reserve dependencies

Stress 2: The copula chosen to reflect the dependency structure is stressed:

	Reserve Risk
t-Copula 5 d.o.f.	2.9%
t-Copula 10 d.o.f.	-0.3%

Table: Stress reserve Copula

Stress 3: The largest reserving segment is stressed in volume:

	Reserve Risk	Underwriting Risk	SCR before tax
Increase by 20%.	12.7%	8.7%	4.7%
Increase by 30%.	18.6%	13.1%	7.6%

Table: Stress largest reserve segment

C.2 Market risk

Investment portfolio by asset class

The following table contains the total HDI Re assets under management to the key date 31 December 2019. Furthermore, the main asset classes and the related market values are depicted:

HDI RE IRELAND - Assets under Management *based on IFRS*	31.12.2019 *figure in € thousand*
Governements	95.199
Semi Governments	28.969
Covered Bonds	375.678
ABS/ MBS	82.416
Corporates	411.984
Convertibles	11.017
Total fixed income	**1.005.263**
Equities	54.580
Alternative Investments	28.744
Short term Investments	8.787
Affiliated Companies	11.163
Real Estate	28.216
Other Assets	19.990
Total AuM	**1.156.743**

Investment Report HDI RE 31.12.2019 – based on IFRS

From the composition of the investment portfolio it can be concluded that HDI Re follows a conservative investment strategy.

Credit VaR

The following graphic shows the CVaR-share of fixed income by rating and maturity. The distribution makes the conservative investment strategy evident. For the purposes of operational steering the asset portfolio in addition to TERM further credit risk models are applied.

CVaR-Share Fixed Income by Rating and Time to Maturity

	[0-2)	[2-5)	[5-7)	[7-10)	[10-15)	[15-20)	>=20	Total
AAA	0.01%	0.01%	0.00%	0.01%	0.01%	0.00%	0.00%	0.05%
AA	0.02%	0.09%	0.09%	0.05%	0.11%	0.01%	0.00%	0.37%
A	0.04%	0.28%	0.42%	0.14%	0.18%	0.06%	0.00%	1.12%
BBB	0.04%	0.57%	0.42%	0.16%	0.27%	0.00%	0.00%	1.46%
BB	0.00%	0.02%	0.02%	0.09%	0.01%	0.00%	0.00%	0.15%
B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<B	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total	0.11%	0.97%	0.96%	0.45%	0.59%	0.07%	0.00%	3.15%

The next table summarizes the main parameters of the profile of HDI Re's credit risk.

Business Unit	Market value	Credit VaR	CVaR Ratio	PD (bp)	LGD	Maturity (years)
HDI Reinsurance	1.152.100	48.500	4,21%	9	44,00%	5,1

Source: CVaR-Report 30.12.2019 *(in € thousand)*[2]

Sensitivities

The table with stress tests related to interest rate risk highlight HDI Re's sensitivity with respect to this risk factor:

Stress Test analyses of different assets:[3]

	AuM (in Tsd. EUR)	Change in interest rate				Equity (without alternative investments)			
Stress factor		-100bps	-50bps	+50bps	+100bps	-20%	-10%	+10%	+20%
Fixed Income	998.248	4,1%	2,0%	-2,1%	-4,2%				
Equity	54.580					-20,0%	-10,0%	10,0%	20,0%
Altern. Investments	65.106	0,4%	0,2%	-0,2%	-0,4%				
Other	44.401	1,9%	0,9%	-0,9%	-1,7%				
Total	**1.162.335**	3,6%	1,8%	-1,9%	-3,7%	-0,9%	-0,5%	0,5%	0,9%

Source: HDI RE Investment-Report, 31.12.2019

**AuM = Assets under management*

The stress tests provide information on the sensitivity of the investments to different risk factors. If the interest rate changes by 100 basis points, the value of the total assets is recording a 3,6% to -3,7% move in either direction. And similarly if the value of equity prices changes by 20% the value of the total assets moves by 0.9% in either direction.

Conclusion: the symmetry of the table above indicates that the portfolio is dominated by so-called quasi linear instruments, i.e. the proportion of options and complex derivatives in HDI Re's portfolio is of minor importance.

C.3 Credit risk

Credit risk is the risk of a change in value due to actual credit losses deviating from expected credit losses due to the failure to meet contractual debt obligations.

Credit risk in terms of the internal model of HDI Re is limited to reinsurance counterparty default risk. The default risk of assets as bonds and other investments is part of the market risk, and here especially the credit and spread risk of investments and liabilities.

No collateral in terms of Article 214 of the Commission Delegated Regulation (EU) 2015/35 has been given by or to HDI Re in respect of credit risk.

[2] Different AuM-values between Investment- and CVaR-Report due to different definition of "Assets under Management" Asset-types such as direct real estate, investments in affiliated companies, other securities and intragroup transactions are excluded within C-VaR. In addition, different times of data extraction between both reports.
[3] "Dirty" Value AuM (including mortgage loan). The total Assets under Management within the shown stresstest differ from the shown AuM in chapter "Investment portfolio by asset class" e.g. due to the consideration of cash and the exclusion of intercompany transactions/ participations.

The reinsurance default risk of HDI Re is comparably small with less than 5% of SCR before tax of the full internal model.

The reinsurance recoverables of HDI Re are 3.249 million EUR. In addition the reinsurance default risk stems from two additional sources. The first source is the default of reinsurers participating in cessions of the current underwriting year, out of premium risk. The other source stems from the default of inuring reinsurers. HDI Re carries the default risk from such constructions as part of the underwriting risk for parts of the portfolio.

To model the default risk appropriately the default risk of the inuring reinsurance is modelled within the reinsurance default risk.

The total reinsurance default risk can be split into the three parts listed above:

Figures in € thousand	
Direct Retrocession	3,957
Inuring Reinsurance	1,948
Total (diversified)	5,739

Table: Counterparty risk

Credit risk in terms of failure of receivables from cedants is not reflected in the internal model. With almost all premiums being 12 month treaties this risk is assumed to be remote.

To define the risk sensitivity of the credit risk stress tests are carried out. Stress tests are carried out by changing the input data of the internal model and performing a full model run.

Stress: the volume of the largest single retrocessionaire, is increased by 50%

	Reinsurance Default Risk	SCR before tax
Stress	24.1%	0.5%

Table: Stress credit volume

C.4 Liquidity risk

For HDI Re, liquidity risk is the risk that assets cannot be sold timely at reasonable price levels to fulfil HDI Re's financial obligations in time.

HDI Re's liquidity position is typically very good due to the fact that premiums are paid before claims payments or other obligations are due. At the same time HDI Re showed a positive technical cash flow for the past years.

The liquidity risk is hedged at HDI Re through a high diversification and fungibility of the invested assets. By matching assets and liabilities with respect to currencies and expected terms and through cash flow planning, HDI Re ensures sufficient liquidity at all times.

To control the liquidity risk each asset class has a liquidity code which gives a rating towards the possibility to sell the asset at a reasonable (market) price at short notice. The liquidity codes are regularly verified by the risk control department of Ampega (AAM), the asset managers of HDI Re. Additionally HDI Re's Investment Guidelines define a minimum quota to be invested in highly liquid assets.

L0 (cash and equivalent)	Category I	Category II	Other markets
Saleable without significant discount	L1	L2	L3
Saleable with discount	L4	L5	L6
difficult/not saleable:	L7	L8	L9

The liquidity, that is needed to balance the current accounts, is given for the following 12 months according to the liquidity planning. The aforementioned checks and controls do not show any liquidity issue.

The largest asset classes, representing more than 85% of the invested assets are:

Asset Class	Market Value Figures in € thousand
Corporate Bonds	478,907
Covered Bonds	375,678
ABS/MBS	82,416
Government Bonds	68,262
Cash	54,836
Equity	54,580

Table: Asset volume

The invested assets are split into many 100 individual investments (including equity funds, which again split into hundreds of individual assets) creating a well-diversified portfolio.

Other risk concentrations are not anticipated over the business planning time period.

For liquidity risk, no risk mitigation technique other than asset liability matching is in place. The expected profit included in future premiums (EPIFP) is regularly not included in the liquidity planning. The EPIFP are calculated by applying the results from the actuarial pricing (basically mean loss ratio and mean commission) to the expected premium, then the expected retrocession losses are deducted, the expected retrocession premium are added and the expected administrative expenses are added. In the economic balance sheet the total net amount is shown at three different positions, including reinsurance recoverables.

The result is the EPIFP:

Figure in € thousand	
Gross Value	15,702
Expected Retrocession	-299
Net Value	15,404

HDI Re applies a volatility adjustment (VA). To show that the conditions for applying the volatility adjustment are fulfilled, HDI Re provides a proof of earnability for the spread and a liquidity plan. It has to be ensured that there is sufficient liquidity in stressed market conditions such that the spread can still be earned. The following table summarizes the impact of the volatility adjustment for year-end 2019 (figures in € thousand).

Risk Sensitivity	with VA	without VA	Difference
Eligible Own Funds	359,322	353,607	5,715
SCR	174,857	175,154	-298
CAR	205.5%	201.9%	3.6%

Table: Risk Sensitivity to Volatility Adjustment

C.5 Operational risk

Operational Risk (along with other risk management topics) is outlined in HDI Re's risk report which is produced in Q2 and Q4 annually. The risk report monitors the overall risk situation comprising of information from the quantitative and qualitative risk management systems. The coverage of own funds according to the current regulatory regime and the internal model is presented as well as breaches originating from the system of limits and thresholds and the risk appetite statement. In addition, results from further risk relevant analyses are provided in order to outline a holistic view of the risk situation.

The risk identification process is undertaken by a customised IT system / database. A new operational risk database for risk identification (Alyne) is to be established in 2020 and training will be provided to all risk managers.

Operational risk, by definition, is a risk of a change in value caused by the fact that actual losses, incurred for inadequate or failed internal processes, people and systems or from external events (including legal risk), differ from the expected losses.

Within the internal model TERM HDI Re's operational risks are quantified. The following table outlines the results of the SCR calculations**: Risk appetite - operational risk**

Risk appetite - operational risk						
Risk measure	TERM 2018	TERM 2018Q3	TERM 2018Q2	TERM 2018Q1	TERM 2017	TERM 2016
Share of operational risk in % of aggregated undiversified SCR	12,254	11,320	11,320	17,938	17,938	17,938

Source: Internal model as at Q4 2018 (after retrocession, after tax)

The Self-Assessment of Operational Risk (SAOR) for year-end 2018 shows stable SCR compared to 2018Q2. The results have been aggregated with the current model change run to analyse aggregation effects. HDI Re's results are within expectation.

For regulatory purposes the Company calculated the operational risk on the Solvency II standard formula for Q1 and Q2 2019. From Q3 2019 onwards, due to full internal model approval by BaFin and Central Bank of Ireland at end September 2019, the Company calculated the operational risk in the internal model.

C.6 Other material risk

C.6.1 Further information regarding other material risk

Group transactions

HDI Re, being a reinsurer of the HDI group, underwrites only group internal reinsurance contracts and almost all of the technical provisions are stemming from group cedants. Only those cedants which are sold after the respective reinsurance contracts were signed do not belong to the HDI group (compare chapter C1 Underwriting Risk). In turn also almost all of the insurance receivables of HDI Re are from within the Talanx group.

All reinsurance contracts are signed with arm's length conditions. For most contracts, the arm's length conditions are proved via third party comparison (third parties participate on the original contract with relevant shares) and for a few treaties via a hypothetical third party comparison. The arm's length documentation is discussed within the Board of Directors meetings at least annually.

On retrocession, group participations are limited to Hannover Re group and to Talanx AG.

Within HDI Re's asset portfolio one bond, market value of €11.232 Mio, is issued by Talanx group.

C.7 Any other information – COVID-19

In compliance with regulatory requirements, this report primarily addresses developments in the fiscal year 2019. Since the end of 2019, the new infectious disease COVID-19 has occurred, and has been classified as a pandemic by the World Health Organization.

This pandemic may lead to economic upheavals, which can also adversely affect our customers, the Company and the Talanx Group and its subsidiaries in general.

The HDI Group and its subsidiaries support the measures taken by the federal authorities aiming to reduce the number of COVID-19 infections and to slow down the spread of the virus. We are very aware of our responsibility towards both our customers and partners alike and know that a reliable partnership is decisive, particularly in difficult times like this.

In response to the current situation, we have implemented appropriate business continuity measures that enable us to maintain business operations. All of HDI Re's staff can fully work from remote locations.

In our property and casualty business, we expect manageable impact as pandemic-related incidents are mostly not covered by insurance. However, we are exposed to, for instance, event cancellations or company closings.

Depreciations in the financial markets also affect assets we hold. Simultaneously, rising uncertainty regarding future developments increases the risk. We counter this with our conservative investment approach and strict asset-liability management.

Current estimates are and will remain uncertain for some time as they depend on the further emergence of the crisis and the effectiveness and efficiency of countermeasures.

This report contains information on the solvency capital requirement (SCR) and own funds (OF) as of 31.12.2019. In this regard, we have a strong capitalization of 206% in the economic view.

Between the reference date in the report and its publications, some of the reported macroeconomic indicators developed significantly adversely. The international equity markets have dropped across the board. At the same time, interest rates, for example on German government bonds, have repeatedly decreased. Moreover, a clear widening of the spread curve can be observed. Induced by these adverse effects, we expect a reduction of eligible funds and an increase of the SCR. Ceteris paribus, the combination of these effects lead to a material decrease in the ratio shown above.

Nevertheless, we assume that we will comply with the self-imposed thresholds.

D. Valuation for solvency purposes

D.1 Assets

General Remarks

Generally assets and liabilities are measured at which they could be exchanged, transferred or settled between knowledgeable, willing parties in an arm's length transaction. The valuation of assets and liabilities requires an economic, market-based and risk-based approach. The risks arising from certain balance sheet items are considered and market assumptions are taken into account. For this reason, risk, uncertainty and discounting are adequately considered in all positions.

Due to the fact that the Solvency II regulations refer to the International Financial Accounting Standards, the IFRS balance sheet is used as a starting point for the revaluation. The entities that do not engage in business with significant financial options and guarantees, use an existing balance sheet in accordance with IFRS or national accounting principles and re-assess each position in accordance with the Solvency II requirements.

Fair Value

Generally the fair value in IFRS is identical to the fair value in Solvency II. The fair value is defined as the price which is achievable when selling an asset or transferring a liability in an orderly transaction between market participants.

Active Market

Fair value measurement is based on observable market prices in an active market. A financial market is regarded as active market if quoted prices for traded items are readily and regularly made available by a stock exchange, trader, broker, industry group, pricing service or supervisor, and those prices represent actual and regularly occurring market transactions on an arm's length basis. An active market is a market where all the following requirements are met:

- The items traded within the market are homogeneous,
- Willing buyers and sellers can normally be found at any time and
- Prices are available to the public.

Inactive Market

The following circumstances can lead to an inactive market:

- There are few transactions
- Quotations are not based on current information or vary significantly across time or among market participants.
- There is a wide bid-ask-spread or a significant increase of the bid-ask-spread
- Indices, which were strongly correlated with the fair value of the underlying assets or liabilities are proven to be uncorrelated with the latest fair value data of these assets or liabilities
- There is a significant increase in the implicit liquidity risk premiums, yields or the performance indicators (e.g. default rates or Loss Given Defaults) for observable transactions or prices compared to the estimated cash flows of the reporting entity, taking into account all available market data on the credit and other non-performance risks to the asset or liability.
- There is a significant decrease or absence of a market for new issues of the asset or liability or comparable assets or liabilities.
- Only limited information is publicly available (e.g. Principal-to-principal market).

Primary Market

A primary market is the market with the largest volume and level of activity for the asset or liability. It is not necessarily the market with the lowest prices. The company must have access to the market. In the absence of evidence to the contrary, the market on which the company normally enters into a transaction to sell the asset or transfer a debt is the primary market.

Usually the primary market is the market the company normally uses, unless there are objective indications (e.g. a decline in market activity, higher access restrictions, etc.) that another market is the primary market. A revaluation of the primary market will be carried out at least once a year.

We take into account all information that is reasonably available. The determination of the primary market for non-standard OTC contracts could be based on the type of orders (e.g. interest rate swap) or on the basis of the individual contract (e.g. swap contract X). In the Talanx Group, the determination of the primary market for OTC derivatives generally depends on the nature of the contract.

Within Talanx Group markets are determined as follows, the primary market for stocks, futures and standard options consists of the local stock exchanges. For bearer bonds, registered bonds, ABS, MBS and OTC derivatives (e.g. interest rate swaps, credit default swaps, currency futures), the primary market consists of institutional brokers, which use banks as trading partners. These markets are the primary markets with the characteristics that the company has access to the market, typically uses the market for trading, and that these markets are the markets with the largest volume for each asset class. The measurement is usually based on information that exists in relation to these markets.

The most advantageous market

Unless there is a clear major market for assets and liabilities, the fair value measurement is based on the most advantageous market. In the most advantageous market, the company maximizes the value of selling an asset or minimizes the value of transferring a liability. The company must have access to the market.

Within several possible markets, the most advantageous market is the one where the company can achieve the highest net profit after deduction of transaction costs or transportation costs (for property, plant and equipment). This does not affect the fair value measurement, which is based on the purchase price without deduction of transaction costs. This leads to the fact that the market offering the highest net return on sales is not necessarily the market that provides the highest fair value.

Methods of Valuation

Generally assets and liabilities are valued under the going concern assumption.

The valuation methods used are in line with Article 75 of Directive 2009/138/EC. Assets and liabilities (other than technical provisions) are always valued in accordance with IAS/IFRS standards. Where the IAS/IFRS valuation methods, whether temporary or permanent, are inconsistent with the valuation approach set out in Article 75 of Directive 2009/138/EC, other valuation methods consistent with this article shall be applied.

When valuing assets and liabilities according to market valuation methods, the following valuation hierarchy is used:

Generally quoted prices in active markets for identical assets or liabilities are used as a standard valuation method. If the use of quoted market prices is not possible quoted prices in active markets for

comparable assets or liabilities will be used and adjusted accordingly if necessary taking into account all observable and relevant market information.

For the valuation of liabilities no adjustment for taking into account the own credit-worthiness is made.

Assets are priced mark-to-model if there are no publicly available price quotations or the markets from which they are derived are not considered active.

The classification of market prices according to the explanatory text of guideline 7, EIOPA Guidelines SFCR BoS. 15/109, item 2.22 is defined as followed:

a) „Quoted prices in active markets for identical assets“: Assets measured at (unadjusted) prices quoted directly in active markets.
b) “Quoted prices in active markets for similar assets“: None
c) “Inputs other than quoted prices in active markets for identical or similar assets, that are observable for the asset directly (i.e. as prices) or indirectly (i.e. derived from prices)”: Assets which are measured using observable market data and are not allocable to Level a). Their Measurement is based, in particular, on prices for comparable assets that are traded on active markets, prices on markets that are not considered active as well as inputs derived from such prices or market data.
d) „Inputs not based on observable market data“: Assets that cannot be measured or can only partially be measured using observable market inputs. The measurement of such instruments is principally based on valuation models and methods.

A significant input is defined as an input parameter or an adjustment to an input parameter that affects the fair value measurement of an instrument in its entirety by more than 10 percent (i.e., up or down by more than 10 percent).

Changes in 2019 Calendar year
There haven’t been made any changes in valuation methods or valuation proceedings in calendar year 2019 in comparison to calendar year 2018.

Goodwill

Goodwill from acquisitions is valued at zero in Solvency II balance sheet as this is not applicable.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Goodwill	0	0	0	0

Deferred acquisition costs

The deferred acquisition costs (DAC) do not represent a recognisable asset, as acquisition costs are dealt with via the best estimate calculation of technical provisions.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Deferred acquisition cost	0	0	40,969	4,751

Intangible assets

Intangible assets are valuated in the Solvency II balance sheet with zero unless they can be sold separately and there is a quoted market price in an active market for the same or similar intangible assets. According to the Solvency II requirements the definitions in IAS 38 Intangible Assets, including the definition of active markets, are applicable in Solvency II

The intangible assets shown under the statutory accounts represent bespoke software developmental and associated costs including licence fee etc. As no active quoted prices in an active market can be observed this amount is valued at zero in the solvency II balance sheet.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Intangible assets	0	0	186	313

Deferred tax asset

IAS 12 Income Taxes applies for Solvency II. Deferred taxes are recognised for the revaluation differences between the local (tax) IFRS balance sheet and the Solvency II balance sheet. IAS 12 requires deferred tax assets be established if assets have to be recognised in a lower amount or liabilities in a higher amount in the balance sheet than in the tax balance sheet and if these temporary differences will lead to reduced tax burdens in the future.

Deferred tax assets are also recognised on tax loss carry-forwards and tax credits. Value adjustments are taken on deferred tax assets as soon as realisation of the net value of deferred tax assets and deferred tax liabilities no longer appears likely. Deferred taxes are measured at 12.5% according to the tax regulations in the Republic of Ireland adopted as at the closing date.

Deferred tax assets may only be netted with deferred tax liabilities if an enforceable right exists to net actual tax refund claims with actual taxes owing. A precondition here is that the deferred tax assets and deferred tax liabilities refer to income taxes that are levied by the tax authority.

Under IFRS deferred tax assets and liabilities are measured at the tax rates that are expected to apply for the period in which an asset is realised or a liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date. The measurement of deferred tax assets and liabilities reflect the tax consequences that would follow, as of the balance sheet date, from the expected manner of the reversal of temporary differences.

The balance of deferred tax assets (€6.262 Mio) and deferred tax liabilities (€ 21.323 Mio) results in a net deferred tax liability for Solvency II to IFRS in the amount of €15.061 Mio which is caused by valuations of assets and liabilities according to Solvency II framework compared to IFRS valuation.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Deferred tax assets	6,262	8,841	0	0

Pension benefit surplus

There was no pension benefit surplus to report as this is not applicable.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Pension benefit surplus	0	0	0	0

Property, plant & equipment held for own use

Assets under property, plant and equipment held for own use are measured at cost less accumulated depreciation in the statutory accounts under IFRS and comprising mainly of equipment.

In arriving at the Solvency II fair value the Company believes in the absence of an existing active market the fair value is close to book value;

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Property, plant & equipment held for own use	20	22	20	22

Property (other than own use)

There are no valuation differences as this is not applicable;

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Property (other than own use	0	0	0	0

Holdings in related undertakings, including participations

This position includes affiliated companies and participations. Mainly strategic positions are shown;

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Holdings in related undertakings, including participations	0	0	0	21,575

Basis: This position includes affiliated companies and participations. This category can include strategic as well as non-strategic holdings.

Methods: Within Solvency II the valuation of affiliated companies and participations is performed using appropriate procedures and methods. For units / participations inside the HDI V.a.G. or HDI scope of

consolidation, the adjusted equity method is used. The book value is replaced by the common shareholder net assets (SNA) on the valuation date.

Main assumptions: none

Difference: In 2018 the difference between the Solvency II value and the Statutory Accounts value to the amount of €(21.575) Mio is mainly due to private equity investments - which were recognised as collective investment undertakings according to Solvency II whereas in the statutory accounts they are all classified as Holdings in rel. Und., incl. participations.

Equities – listed/unlisted
The company has no investments in any quoted or non-quoted stocks.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Equities- listed	0	0	0	0
Equities- unlisted	0	0	0	0

Government Bonds and Corporate Bonds
This position includes investments such as bearer bonds and other fixed income securities, registered bonds, promissory notes and loans to affiliated companies.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Bonds	1,002,864	837,957	1,000,110	833,674
Government-Bonds	91,058	87,919	91,058	113,709
Corporate Bonds	829,390	666,712	826,636	636,929
Structure Notes	0	0	0	0
Collateralised Securities	82,416	83,326	82,416	83,326

Basis: Government and corporate bonds prices are mainly based on quoted prices from active markets. If there are no publicly available quoted prices or the respective markets are not classified as active as active markets, the positions are marked-to-model.

Methods: Market quotations come from selected pricing services, trade information systems or intermediaries (brokers) considered as reliable. The available potential pricing sources are placed in a ranking based on a hierarchy. In general prices of pricing services have the highest priority the ones from intermediaries is the lowest. Exceptions may be made e. g. for selected market segments-/ currency-combinations.

If there are no publicly available quoted prices or the respective markets are not classified as active as active markets, the Bonds are marked-to-model taking into account the creditworthiness of the issuer,

using parameters derived from observable market data (yield and spread curves) and applying appropriate valuation models. For non-structured bonds the mark-to-model approach is the net present value method which discounts the future payments of the instruments to the valuation date. The rate applied for discounting consists of a term-linked base component (derived from the risk-free rate) and an issuer-/ emission-specific risk premium covering spread, migration and default risks.

All methods and parameter-definitions applied are validated at least annually (for timeliness and/ or adequacy) and adjusted if necessary.

Changes in Calendar year 2019: There haven't been made any changes in valuation methods or valuation proceedings in calendar year 2019 in comparison to calendar year 2018. .

Main Assumptions: Applying a mark-to-model approach using parameters derived from observable market data for bonds without publicly available quotation the main assumption is that a difference in pricing for comparable listed bonds (transparent market) with the same risk, term and creditworthiness is mainly due to emissions specific features and less liquidity.

Difference: The difference of TEUR 2,574 is arising based on instruments that are valued at amortized costs for IFRS accounting purposes but at fair value for Solvency II

Structured Notes

The Company has no investments in any structured products.

Collateralised bonds

This position contains various types of collateralised securities. These include Asset Backed Securities (ABS), Mortgage Backed Securities (MBS), Commercial Mortgage Backed Securities (CMBS), Collateralised Debt Obligations (CDOs), Collateralised Loan Obligations (CLOs) and Collateralised Mortgage Obligations (CMOs). It does not include "Pfandbriefe" and other legally secured bonds that are subject to special legal regulations. These are included in the category Corporate Bonds.

Basis: Generally no quoted prices are available for collateralised securities. Valuation of these positions is therefore performed theoretically using internal valuation models or prices provided by specialized service providers.

Methods: Collateralised bonds such as CDOs / CLOs are priced internally or by specialized service providers using a mark-to-model approach. This is done using special databases that allow an evaluation of the underlying securities or receivables.

The collateral of the covered position is treated as a risk mitigating factor. However spread, migration and default risk are still accounted for when performing the mark-to-model calculation.
All methods and parameter-definitions applied are validated at least annually (for timeliness and/ or adequacy) and adjusted if necessary.

Main assumptions: For special forms of collateralised bonds like CDOs/CLOs, assumptions are made concerning prepayment and loss rates.

Difference: No differences to report.

Collective Investment Undertakings

This position includes several types of funds, e.g. Indirect Real Estate Funds, Fixed Income Funds, Equity Funds, Funds of Funds.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Collective Investment Undertakings	145,093	90,030	145,093	71,456

Basis: Mutual funds are priced with their official redemption price.

Methods: The redemption price is regularly calculated and published by the investment company (KVG) according to contractual and supervisory compliant aspects. Typically, these prices are automatically available via price service providers. Alternatively, the net asset value method is used. The net asset value is calculated from the sum of all assets (in-case, mainly the investments and bank balances and deposits) less potential obligations.

All methods and parameter-definitions applied are validated at least annually (for timeliness and/ or adequacy) and adjusted if necessary.

Main Assumptions: None.

Difference: No differences to report.

Derivatives

There are currently no investments in derivatives:

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Derivatives	0	0	0	0

Deposits (excluding cash equivalent item):

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Deposits other than cash equivalents	8,787	2,796	8,787	2,796

Basis: Deposits are priced at their redemption value.

Methods: none

Main assumptions: none

Difference: No differences to report.

Other investments

There are no valuation differences as this is not applicable.

Assets held for index-linked and unit-linked contracts

There are no valuation differences as this is not applicable.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Assets held for index- linked and unit linked contracts	**0**	**0**	**0**	**0**

Loans and mortgages

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Loans & Mortgages	**0**	**0**	**0**	**3,483**
Loan & mortgages to individuals	*0*	*0*	*0*	*0*
Other loans & mortgages	*0*	*0*	*0*	*3,483*

There are currently no investments in loans and mortgages.

Reinsurance recoverables from:

Under IFRS the total recoverables reported stems from the whole account quota share ceded to Talanx AG incepted on January 1st 2019 , as well as single retrocessions of selected Polish non-proportional and Turkish proportional business which were inforce from January 2018.These contracts are ceded on a back-to-back basis. However, under Solvency II valuation the reinsurance recoverables are present value of future recoveries based on treaties in place as at end of December

Figures in € thousands	Solvency II value		Statutory Accounts Value	
	2019	2018	2019	2018
Reinsurance recoverables	**74,185**	**2,429**	**80,650**	**6,153**
Non-Life excluding health	**71,081**	**1,047**	**77,762**	**6,148**
Health similar to non- life	**3,104**	**1,368**	**2,888**	**5**

Deposits to cedants

These assets primarily consist of funds held on certain contracts representing the collateral contractually withheld by our cedants to cover the technical liabilities HDI Re has reinsured. The cedants invest these deposits within the criteria of the Talanx Group “Limit and Threshold” system of

governance. These assets are initially recognised at cost under IFRS accounting and valued at face value. There are no differences between statutory accounts versus solvency II.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Deposits to cedants	48,349	31,731	48,349	31,731

Insurance and intermediaries receivables

The carrying amount of insurance and intermediary receivables is deemed to be a reasonable approximation of fair value. Balances receivable include actual account balances due plus an estimate of the amount due for the period for which accounts have not yet been received.

The receivable balance is diversified among a range of cedants. The risk of non-payment by cedants is mitigated by the use of offset clauses in the underlying contract. Following our review of the receivable balances, no impairment was necessary.
The amounts shown under Solvency II are the netted amounts with corresponding payables. Please refer to further details under section Insurance and intermediaries payables.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2018	2018	2019	2018
Insurance &Intermediaries receivables	15,564	77,136	15,564	77,136

Reinsurance receivables

There are no valuation differences as this is not applicable.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Reinsurance receivables	0	0	0	0

Receivables (trade, not insurance)

Receivables here represent mainly tax rebate on corporation tax over payment in respect of 2017 tax liability and are valued at the expected present value of future cash flows, i.e. discounted with the Solvency II valuation interest rate. In addition, receivables are adjusted for the expected counterparty default. The Solvency II value is held to be identical with the IFRS fair value. No revaluation is applied by HDI Re due to materiality reasons.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Receivables(trade, not insurance)	199	201	199	201

Own shares (held directly)

There are no valuation differences as this is not applicable.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Own Share (held directly)	0	0	0	0

Amounts due in respect of own fund items or initial fund called up but not yet paid in

There are no valuation differences as this is not applicable.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Amounts due in respect of own fund items or initial fund called up but not yet paid in	0	0	0	0

Cash and cash equivalents

Cash and cash equivalents are carried at their face value.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Cash & cash equivalents	26,038	53,216	26,038	53,216

Any other assets, not elsewhere shown

The assets here represent a small balance of accrued interest adjustment accounted for at fair value under Solvency II. They are accounted for at amortised costs according to IFRS.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Any other assets, not elsewhere shown	0	0	0	0

The Solvency II values are held to be identical with the IFRS fair value and no revaluation is applied by HDI Re due to materiality reasons.

D.2 Technical Provisions

D.2.1 Non-life techniques

The Technical Provisions (TP) of HDI Re are determined by revaluation of the IFRS underwriting provisions as disclosed in the financial statements of HDI Re. This is done in three main steps.

In the first step, the IFRS loss reserves are revalued. This includes the elimination of prudence and Unearned Premium Reserves (UPR) and other valuation adjustments. Furthermore the discounting is adjusted. It results in the Best Estimate for Claims Provisions (BECP).

In the second step, the Best Estimate for Premium Provisions (BEPP) are established as provisions for future coverage.

Lastly, a risk margin (RM) is calculated for the present loss portfolio in net terms due to the inherent uncertainty in this portfolio, and is added to the BECP and BEPP. This results in the TP according to Solvency II.

Below the individual steps are discussed in more detail (details to determine the IFRS provisions are listed in chapter D.2.1.5). HDI Re's numbers for the TP under Solvency and the provisions under IFRS are shown in D.2.1.4.

D.2.1.1 Best Estimate for Claims Provisions

BECP relate to claims events occurring before the valuation date. All future cash flows resulting from those losses which occurred up to the valuation date are taken into account. The BECP shall not include any implicit or explicit redundancy or deficiency of calculated reserves.

In order to take the time value of these future cash flows into consideration, they are discounted. The currency-dependent yield curves included in the calculation take into account a static volatility adjustment and are conform to the corresponding yield curves specified by EIOPA. The pay-out pattern is derived from actuarial analyses.

The calculation methods for the BECP are analogous to these for the IFRS reserves (see chapter D.2.1.5).

D.2.1.2 Best estimate for premium provisions

The BEPP relates to claims events occurring after the valuation date and during the remaining in-force coverage period of policies.

Hence, the best estimate for premium provisions shall include the valuation of all recognised obligations within the boundary of (re)insurance contracts, for all exposure to future claims events, where:

- Cover has incepted prior to the valuation date;
- Cover has not incepted prior to the valuation date, but the insurance or reinsurance undertaking has become party to the insurance contract providing cover.

The calculation of the (gross) BEPP at HDI Re is based on an approximation as set out in the EIOPA "Guidelines on valuation of TP".

HDI Re uses the following formula to determine the Best Estimate for Premium Provisions per SII segment:

$$BEPP_{seg} := \sum_{treaty \in seg} UPR_{treaty} \cdot LR_{treaty,UPR} + InvExpenses_{seg} - (Premium - Loss - Commission - Expenses)_{seg},$$

- UPR_{treaty}= Unearned Premium Reserves according to IFRS per treaty. To be precise this UPR are not the ones from local financial statements but the ones delivered by cedants Discounting effects are taken into consideration.
- $LR_{treaty,UPR}$= expected Loss Ratio (claims/earned premium gross of acquisition expenses) per treaty derived from HDI Re's pricings
- $InvExpenses_{seg}$= discounted Future investment expenses per SII segment resulting from the unearned premiums
- $(Premium - Loss - Commission - Expenses)_{seg}$= expected Present value of future profits per SII segment, the expected Premium, the expected gross Loss and the commission is derived from HDI Re's input for the internal model, the Expenses are estimated to be 1% of the earned premium plus investment expenses, discounting effects are taken into consideration.

The left hand part in the above formula describes the present value of future claims payments resulting from the unearned premiums (UPR). The right hand part describes the present value of the future profit (<0) or loss (>0) (PVFP), which results from underwriting business already signed but not incepted.

The latter summand is derived by mapping the respective values of the single treaties to the related Solvency II segments. This mapping is based on the renewal information provided by the cedant. For the expected values the averages from the pricing process are taken.

Expenses are included as future investment expenses, commissions to be paid to cedants and administration expenses for the renewal business. Based on the going concern principle the administration expenses as well as unallocated claims handling costs are covered by the renewal business in every financial year.

Usually the coverage period of HDI Re's treaties is 1st January to 31th December. There are a few multi-year contracts which are covered by the left hand part of above formula. As of 31.12.2019 the UPR amount to 55.2 Mio.

D.2.1.3 Risk margin

The risk margin is calculated in a way that the value of the TP, including the risk margin, corresponds to the value which an insurance or reinsurance company would require being able to take over to meet the obligations of the entity. This is achieved by determining the costs of providing an amount of eligible own funds that meets the Solvency Capital Requirement, which in turn is necessary to cover the insurance and reinsurance liabilities during their term.

The risk margin is calculated by HDI Re's internal model

Following the requirements of Delegated Acts, the risk margin (RM) for the entire portfolio of insurance and reinsurance liabilities is calculated as follows:

$$\mathrm{RM} := \mathrm{CoC} * \sum_{t \geq 0} \frac{\mathrm{SCR}_t}{(1 + r_{t+1})^{t+1}} \quad , \quad t \in \mathbb{N}_0$$

with

CoC = Cost of Capital
SCR_t = Solvency Capital Requirement for non-hedgeable risks after t years and
r_{t+1} = risk-free EURO interest rate for the term of t+1.

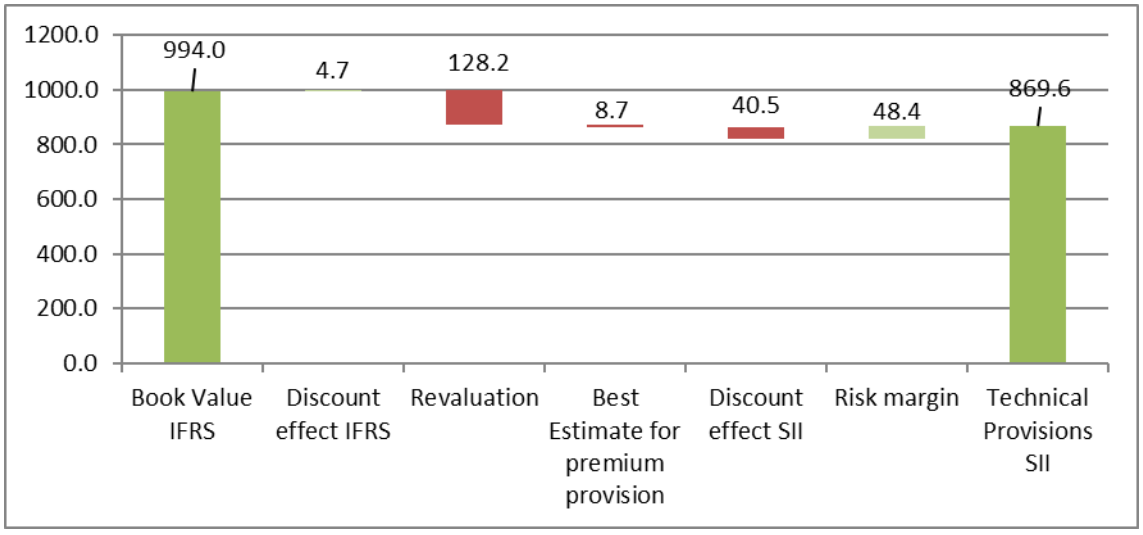
The risk margin calculation in HDI Re's IM follows the simplification method level (2) as presented in the EIOPA Guidelines on the valuation of TP. For the calculation of SCR_o the Internal Model SCR (comprising of underwriting risk, reinsurance default risk and operational risk is utilised. For the calculation of $\mathrm{SCR}_t, t > 0$ the Internal Model SCR comprising reserve risk, reinsurance default risk and operational risk is utilised. Market risk is not considered in the above calculation. The future cash flows per IM segment are derived from current claim data. The Cost of Capital for the calculation of the risk margin amounts 6%. The Euro interest rate curve is used for discounting.

D.2 Comparison of TP with local reporting provisions

When comparing local balance sheet values and those from the solvency balance sheet regarding TP, three components - the BECP, the BEPP, and the RM - have to be taken into consideration.

Below a comparison between Technical Provisions according to IFRS and to Solvency II is shown:

Figure 1: Comparison between booked reserves and Solvency II TP (gross, in € Mio)



As shown in the above figure, the transition from TP according to IFRS, in comparison to Solvency II, can be described in 5 steps. The first step includes the elimination of the effect of discounting under IFRS (€ 4.7 Mio). Under IFRS, the two business segments German Motor from the LPT 2009 and the casualty part of LPT Spain are discounted.

As a second step, the TP are revaluated. In particular, this includes an elimination of UPR (€ 55.2 Mio) and prudence (€ 78.5 Mio) included in the IFRS amounts, but not in the calculation of best estimates, as well as other valuation adjustments. These contain the Investment Management Expenses for Claims Provisions (€ 5.5 Mio) taken into account under Solvency II, but not under IFRS.

When referring to BECP within this document, the undiscounted reserves under Solvency II (without Investment Management Expenses) are implied.

In a third step, the Best Estimate for premium provisions (BEPP) (€ -8.7 Mio) is added. This value is discounted and includes Investment Expenses. The Best Estimate for premium provisions (BEPP) includes all recognised obligations for all exposure to future claims events, where:

(i) cover has incepted prior to the valuation date,
(ii) cover has not incepted prior to the valuation date, but HDI Re has become party to the insurance contract providing cover.

The negative BEPP results from the expected (positive) result of the contracts, which began on 1 January 2019 (part (ii)).

The next step considers the effect of discounting for the Claims Provisions under Solvency II (€ 40.5 Mio). This discounting impact includes the discounting effect for the Investment Expenses regarding Claims Provisions. Furthermore the discounting takes account of a static volatility adjustment. The effect of this adjustment amounts to € -6.8 mio In the fourth step, the risk margin is added (€ 48.4 Mio).

The following table shows the Solvency II values split in the Solvency II-Lines of Business. After the derivation of the Gross Technical Provisions, the Net Technical Provisions are calculated by subtracting the Reinsurance Recoverables. The future retrocession premium is reflected in the Reinsurance Recoverables. The Reinsurance Recoverables relate to the Premium Provisions (€2,220,539) and the Claims Provisions (€75,069,889).

Figure 2: Technical Provisions of HDI Re as at 31.12.2019 (in € 1,000)

Line of Business	Gross Best Estimate Liability	Risk Margin	Gross Technical Provisions (calculated as a whole)	Total Technical Provisions	Recoverables from Reinsurance contracts and SPVs	Total Technical Provisions net of Recoverables
Proportional medical expense reinsurance	0	0	0	0	0	0
Proportional income protection reinsurance	8,082	236	0	8,318	2,759	5,559
Proportional workers' compensation reinsurance	0	0	0	0	0	0
Proportional motor vehicle liability reinsurance	24,304	937	0	25,241	13,824	11,417
Proportional other motor reinsurance	7,528	320	0	7,848	1,601	6,247
Proportional marine, aviation and transport reinsurance	31,622	3,296	0	34,918	2,339	32,579
Proportional fire and other damage to property reinsurance	74,110	4,665	0	78,775	6,103	72,673
Proportional general liability reinsurance	489,298	28,916	0	518,214	1,969	516,245
Proportional credit and suretyship reinsurance	5,101	216	0	5,317	1,837	3,479
Proportional legal expenses reinsurance	28,754	1,563	0	30,317	0	30,317
Proportional assistance reinsurance	0	0	0	0	0	0
Proportional miscellaneous financial loss reinsurance	897	148	0	1,045	0	1,045
Non-proportional health reinsurance	1,064	51	0	1,115	346	769
Non-proportional casualty reinsurance	122,563	6,662	0	129,225	31,211	98,014
Non-proportional marine, aviation and transport reinsurance	2,858	80	0	2,938	1,508	1,430
Non-proportional property reinsurance	25,041	1,293	0	26,335	10,689	15,646
TOTAL	**821,223**	**48,384**	**0**	**869,606**	**74,186**	**795,421**

D.2.1.5 Claims provision IFRS

General information on the business

HDI Re writes only business of Talanx Group companies and up to now has only written non-life business. The most material sectors in terms of reserving volume are general liability, property (non-catastrophe), Marine and motor insurance.

Lines of business

As the number of HDI Re's programmes is small (73 programmes consisting of 129 treaties in underwriting year 2019), the Technical Provisions are calculated separately for each programme or per segment in case of specialty business. This is an appropriate way to ensure that the Technical Provisions are calculated with a homogenous risk group segmentation. For reporting purposes these programmes are allocated to the different Solvency II lines of business.

Estimation of claims reserves

Decisions result from the application of appropriate methods and assumptions, therefore the conclusions seem realistic based on the available information. However, it should be kept in mind that the future settlement of claims - also materially - may differ from these estimates. Estimates are always connected to uncertainties. In addition new relevant facts, which were not or insufficiently known at the time of analysis, can arise and lead to changes.

The loss reserves are estimated by applying a wide range of methods. As a general principle, the result for each treaty and each underwriting/accident year is a loss ratio which, by multiplying with HDI Re's accounted earned premium and deducting the accounted paid to date losses gives the reserve estimate by treaty and underwriting/accident year.

If reliable loss triangles, fulfilling necessary data quality standards are available, the reserving actuary applies generally accepted actuarial reserving techniques. Any such analysis is carried out in Willis Towers Watson's software tool ResQ. The underlying triangles usually represent 100% of the cedants gross business.

The result per treaty and underwriting/accident year is always reviewed in the light of the respective pricing loss ratio, reported losses to date and the development over time. The finally applied loss ratio, taking into account all aspects, is documented and the methodology used is briefly described. The resulting loss reserves include loadings for events not in data.

Assessment approaches for gross claims reserves

The paid and incurred triangles in ResQ are analysed applying using generally accepted standard actuarial methods (e.g. Chain Ladder, incremental loss ratio). This includes estimations for the tail-factors for long-term business. This includes estimations for the tail-factors for long-term business.
The final decision regarding the expected loss ratio is made per treaty and accident/underwriting year taking into account all available information. These include not only the general character of the treaty, but also the individual claim information, the usable length of the triangle and the level of development of the respective accident/underwriting years.

Available data

Considering the available own data of HDI Re the exclusive use of own data of HDI Re is not sufficient for reliable actuarial analyses. The usage of third party data is necessary; besides, it is common for reinsurance companies.

HDI Re uses third party data from cedants supplemented by own accounted data. The third party data consists of paid and incurred loss triangles as well as respective premium information which are provided by the cedant during renewal of the programme and on request. Besides further information from the renewal package, which is required for the pricing process, can be the basis for the reserving.

Quality of data

There are several plausibility checks which are performed with the data of the cedant (e.g. comparison to the own accounted data, consistency checks over years). Any inconsistencies are directly approached and openly discussed between accounting and actuarial staff. If necessary the cedant is approached to clarify any anomaly detection which cannot be explained.

Inflation

Currently, inflation impacting claims settlement has been considered implicitly. By utilising a Chain Ladder, the historically observed inflation is taken into account. The inflation is taken into account in the pricing process and thus in the priced loss ratios which are used in case no reliable loss triangles are available.

An explicit treatment of inflation indices would only be reasonable for very small subsections of the analysis segments, and even so a pure index analysis is not sufficient, since opposing effects because of possible cappings should be analysed individually due to existing coverage levels.

Currency

Currency exchange rates were provided by Ampega Asset Management and correspond to the ones used for the Talanx financial statement.

Valuation approach reinsurance

HDI Re protects selected named programmes of its assumed 2019 reinsurance business year with two retrocession programmes. One covers property per event losses whereby the main risk contributors are natural perils and the other covers MTPL and GTPL losses. Additionally there are five proportional single retrocession programmes that cause the occurrence of Ceded Claims Provisions. These retrocession programmes relate to the underwriting year 2019 and protect treaties from the cedants HDI Turkey and Warta. The Net Claims Provisions are derived by applying the relevant “Gross to Net” factor to the Gross Claims Provisions. The “Gross to Net” factor is applied per treaty and considers the share of the retrocession in question. With respect to HDI Re’s non-proportional retrocession programmes there is no relief through retrocession as all best estimates are below the retention levels.

Details notes per line of business

a) Income protection insurance

The uncertainty of this segment is mainly attributable to changes in the jurisdiction that could have an impact on loss adjustments. Uncertainties from biometric risks in the area of pensions are adequately represented. For the non-material sub-segments, the provisions according to local accounting are adopted for reasons of simplification. In our opinion this approach is appropriate due to the lack of materiality.

b) Motor vehicle liability insurance

The uncertainty of the dominant segment is mainly attributable to the development of personal injuries, which are heavily influenced by medical advances and the associated increase in costs. For the non-material sub-segments, provisions according to local accounting are adopted for reasons of simplification. In our opinion, this approach is appropriate due to the lack of materiality.

c) Other motor insurance

The uncertainty of this segment is mainly attributable to the assessment of the processing status of the current accident year. For the non-material sub-segments, provisions according to local accounting standards are adopted for reasons of simplification. In our opinion, this approach is appropriate due to the lack of materiality.

d) Marine, aviation and transport insurance

The uncertainty of this segment is mainly attributable to changes in loss adjustments and the volatility of long-term losses. For the non-material sub-segments, provisions according to local accounting standards are adopted for reasons of simplification. In our opinion, this approach is appropriate due to the lack of materiality. Aviation is also included in this Solvency II - Line of business. The uncertainty of this segment is mainly attributable to the very heterogeneous portfolio structure over various accident years. For the non-material sub-segments, provisions according to local accounting standards are adopted for reasons of simplification. In our opinion, this approach is appropriate due to the lack of materiality.

e) Fire and other damage to property insurance

The uncertainty of this segment is mainly attributable to the assessment of future settlement gains on already known losses, i.e. to the assessment of the current processing status. For the non-material sub-segments, provisions according to local accounting standards are adopted for reasons of simplification. In our opinion, this approach is appropriate due to the lack of materiality.

f) General liability insurance

The uncertainty of this segment is mainly attributable to changes in jurisdiction, partly specific litigation risks in the United States and the large share of major long-term losses. For the non-material sub-segments, provisions according to local accounting standards are adopted for reasons of simplification. In our opinion, this approach is appropriate due to the lack of materiality.

g) Legal expenses insurance

The uncertainty of this segment is mainly attributable to losses, where the accident date has to be adjusted retrospectively. Due to the rather small portfolio, this turns out to be the crucial driver of volatility. For the non-material sub-segments, provisions according to local accounting are adopted for reasons of simplification. In our opinion, this approach is appropriate due to the lack of materiality.

D.2.2 Life techniques (with MCEV)

The chapter is not applicable as HDI Re writes only non-life business.

D.3 Other liabilities

D.3.1 Valuation of other liabilities

Contingent liabilities

There are no valuation differences as this is not applicable

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Contingent liabilities	0	0	0	0

Provisions other than Technical Provisions

The following liabilities are included in “Provisions other than technical provisions” in the Solvency II balance sheet:

- partial retirement
- holiday and overtime pay
- bonuses and anniversary benefits
- interest for tax payment delay
- outstanding invoices
- remuneration of administrative, management and supervisory body
- anticipated losses
- integration costs or restructuring.

Generally, the miscellaneous other provisions include all provisions which:

- are not underwriting provisions (insurance technical provisions)
- are not provisions for pensions and similar obligations
- are not tax provisions
- fulfil the general requirements for the creation of provisions under IAS 37.
- Provisions have to satisfy the definition of liabilities and can therefore only be recognised for potential uncertain obligations towards third parties.

The IFRS recognition and measurement principles in IAS 37 are considered to be consistent with Article 75 of Directive 2009/138/EC (Solvency II). The Solvency II value of the other provisions is held to be identical with the IFRS value.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Provisions other than technical provisions	510	147	510	147

Pension benefit obligations

There are no valuation differences as this is not applicable.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Pension benefit obligations	0	0	0	0

Deposits from reinsurers

There are no valuation differences as this is not applicable.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Deposits to reinsurers	0	0	0	0

Derivatives

There are no valuation differences as this is not applicable.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Derivatives	0	0	0	0

Financial liabilities other than debts owed to credit institutions

There are no valuation differences as this is not applicable.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Financial liabilities other than debts owed to credit institutions	0	0	0	0

Insurance and intermediaries payable

These are amounts due to cedants but not yet settled as at year end. The amounts so outstanding are netted off against any corresponding receivables and the net amount shown under Insurance and intermediaries receivables. There are no valuation differences between IFRS and Solvency II amounts.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Insurance and intermediaries payable	(403)	0	(403)	0

Reinsurance payables

These are present value of future cash outflows in respect of reinsurance contracts in place as at end of December. No such recognition is made under IFRS.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Reinsurance payable	0	0	0	

Payables (trade, not insurance)

There are no valuation differences as such except under SII any dividend payments which are certain but not declared as at year end can be recognised in the balance sheet, whereas under IAS 10 such recognition is not allowed. The Company declared and paid a dividend to HDI AG of €10.000 Mio in January 2019.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Payables (trade, not insurance)	(1,172)	10,347	(1,172)	347

Deferred tax liabilities

Please refer to chapter D.1 “Deferred Tax Assets” for valuation principles.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Deferred tax liabilities	21,323	21,381	5,287	1,084

The difference between the Solvency II value and the statutory accounts value to the amount of €20.297 Mio resulting from hidden reserves which were discovered when measuring the assets and liabilities at fair value.

Debts owed to credit institutions

The position “debts owed to credit institutions” contains mortgages and loans. Excluded are bonds being held by credit institutions and subordinated liabilities as they are shown in separate positions in the Solvency II balance sheet.

Under IFRS mortgage and loans are measured at amortised costs using the effective interest rate method for amortisation. Accrued interests are presented within the investment value using the dirty price method.

The economic valuation of financial liabilities in the Solvency II balance sheet should follow the fair value measurement approach in IAS 39. However, in some cases no revaluation is applied by HDI Re during the Preparatory Phase due to materiality reasons. Adjustments, if any, to identify the own credit standing under IFRS had been reversed for Solvency II purposes.

The amount as stated in the Statutory accounts represent accrued interest in respect of subordinate loan agreement with Targo Lebensversicherung, a HDI group entity. Under the Solvency II balance sheet accrued interest is shown within position Subordinated liabilities in BOF. Details of the loan in chapter E 1.

Subordinated liabilities in / not in basic own funds

Subordinated liabilities are loans which are reimbursed in the event of insolvency or liquidation only after serving the claims of other creditors; they have various characteristics of equity (IFRS) in economic terms. Subordinated liabilities, where these are included as own funds, are reported under the solvency position "Subordinated liabilities included in the basic liabilities". "Subordinated liabilities not included in the basic assets" cannot be considered as own funds. Under Solvency II, subordinated liabilities may be classified as equity if the conditions set out in Article 69 (b), 72 (b) or 76 (b) of the Delegated Regulation (EU) 2015/35 are met.

The subordinate liability in basic own funds (BOF) so shown is a subordinate loan with another group entity, Targo Lebensversicherung, issued in December 2014 for a term of 30 years.

For the economic valuation, the economic value of the instrument determined at the time of the issue is adjusted by means of the solvency balance of the instrument by changes in value which are exclusively attributable to a changed market situation. In contrast to the fair value approach pursuant to IAS 39, value changes resulting from changes in own credit spread (OCS) are not adjusted after issuance. The OCS is therefore kept constant for subsequent evaluations. The subordinate loan is valuated with the assumption that the maturity equals the 1st call date. The valuation under Solvency II is uniformly applied to the first due date ("1st call") in HDI Group.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Subordinated liabilities in BOF	32,476	31,987	30,000	30,000

A difference between the Solvency II value and the IFRS value of the amount of € 1,710 Mio is a result of the valuation of the subordinate bonds and loans at market value.

Any other liabilities not elsewhere shown
There are no valuation differences as this is not applicable.

Figures in € thousands	Solvency II value		Statutory Accounts value	
	2019	2018	2019	2018
Any other liabilities not elsewhere shown	0	0	0	0

D.4 Alternative methods for valuation

The positions of the balance sheet, for which an alternative valuation method according to article 236 and article 10 (5) of the Delegated Regulation is applied, have been described in chapter D.1 to D.3.

D.5 Any other information

There is no other material information to disclose.

E. Capital management

E.1 Own funds

HDI Re is integrated in the strategic and operational steering and planning processes of the Talanx Group. As part of the regular process HDI Re prepares a capital management plan for a mid-term period of five years. The Company projects the own funds and the SCR to ensure that the regulatory needs are fulfilled at all times.

HDI Re has a Capital Management Guideline in place, which governs the roles and responsibilities in the planning process, the tiering of capital and the Company's SCR requirements within the limit and threshold system. The capital management plan takes account of the development of the assumed business, the cash flow of technical provisions, planned dividends and an investment strategy.

If the mid-term planning process shows capital need, there are basically four management options:

- Revise the dividend policy and retain more profits
- A capital increase by the owner
- Implement alternative capital measures (e.g. issuance of a subordinated loan), which fulfil the requirements to become own funds
- Ultimately, revise the mid-term business plan to reduce the capital need.

Besides the fulfilment of regulatory requirements, HDI Re aims to show an adequate capitalisation according to the following requirements:

- Strategic risk appetite given through the limits and threshold for the overall SCR
- Required rating capital to achieve the Company's rating objective
- Sufficient buffer for movements of capital markets and / or insurance market
- Strategic goals
- Capital costs.

The results of the capital management plan include feedback from risk management and feeds in to the ORSA process and report.

E.1.1 Terms and conditions of the main items in the own funds

HDI Re's basic own funds as at 31 December 2019 consist of:

Figures in € thousand	Tier 1	Tier 2	Total
Paid in	131,000		131,000
Dated subordinated liabilities		32,476	32,476
Reconciliation reserve	195,846		195,846
Total	326,846	32,476	359,322

Table: basic own funds as at 31 December 2019

The basic own funds shown above can be used to support the SCR and the MCR. The “paid in" is equal to the paid in capital according to HDI Re’s IFRS financial statement as of 31 December 2019. For more information regarding “dated subordinated liabilities” reference is made to the detailed description in chapter D.3. The reconciliation reserve consists of the “retained earnings” comprised of the cumulative profit for the year and brought forward, which have not been distributed to the shareholders and the “difference in valuation”, representing the cumulative difference between the local Irish balance sheet (IFRS) value and the economic fair value according to Solvency II for all balance sheet positions of HDI Re.

The total own funds already include an anticipated dividend. Please compare E.1.3. In comparison, basic own funds as at 31 December 2018 were as follows:

Figures in € thousand	Tier 1	Tier 2	Total
Paid in	131,000		131,000
Dated subordinated liabilities		31,987	31,987
Reconciliation reserve	172,772		172,772
Total	303,772	31,987	335,759

Table: basic own funds as at 31 December 2018

While “Paid in” capital did not change and the subordinated liabilities changed only by 0.489 million due to valuation differences, reconciliation reserve and consequently total basic own funds increased by €23.074 million and €23.563 million, respectively. This increase can be attributed to expected profits from newly signed business (please refer to the EPIFP figures in section C.4 of this report), retained earnings from treaties that were in place already as at 31 December 2019 and investment returns.

The difference to the equity in the local Irish balance sheet (268,433 million) mainly arise from:

- balance sheet items not recognised in the Solvency II balance sheet, but in the local Irish balance sheet (deferred acquisition costs)
- valuation differences on investments (market vs. book value)
- valuation and recognition differences in the technical provisions and reinsurance recoverables (contracts underwritten, but not yet incepted; risk margin)
- subordinated liabilities included in the Solvency II basic own funds, but not in the equity of the local Irish balance sheet
- deferred taxes on these differences.

A reconciliation of the equity in the local Irish balance sheet and the Solvency II basic own funds according to these differences is provided in the table below:

Figures in € thousand	
Local Irish equity	**268,433**
Deferred Acquisition Costs	-40,970
Investments (incl. Loans and Mortgages)	2,755
Reinsurance Recoverables	-6,465
Technical Provisions	124,354
Dividends to be paid	-10,000
Subordinated Liabilities	32,476
Deferred Taxes	-9,773
Others	-1,488
Solvency II basic own funds	**359,322**

Table: Reconciliation of local Irish equity and Solvency II basic own funds

For details on the valuation according to Solvency II and valuation differences compared to IFRS please refer to chapter D of this report.

E.1.2 Basic own funds due to transitional arrangements

HDI Re does not have transitional arrangements in place according to Article 308b(9) and (10) of Directive 2009/138/EC.

E.1.3 Distribution to shareholders

In 2019, the Company paid dividend of €10.000 Mio in respect of financial year 2018. As at the balance sheet date 2019 the Company had planned to pay a dividend of €10.000 Mio in respect of 2019 financial year, however, the declaration and subsequent payment of the said dividend only took place in January 2020 and is likewise disclosed also in 2019 financial statements. This amounts to a dividend per share of €2.00 (2012: €2.00).

E.2. Minimum capital requirement

The MCR is calculated as the minimum of a linear function of earned premiums and technical provisions and a percentage of the SCR. For HDI Re the calculation gives an MCR of 45% of the regulatory view SCR as MCR. Please refer to the table under section E.2.1 for details.

E.3 Use of the duration-based equity risk sub-module in the calculation of the solvency capital requirement

This sub-module is not used by HDI Re.

E.4 Differences between the standard formula and any internal model used

E.4.1 Specification of the internal model

HDI Re uses a full internal model for the calculation of the regulatory SCR. The internal model covers underwriting risk, market risk and reinsurance default risk and the operational. The internal model quantifies the required risk capital according to the 99.5% Value at Risk (VaR) within a one year time horizon in an economic view. This is in line with the respective regulation.

HDI Re is part of the internal model of HDI V.A.G., embedded in the processes and standards at group level. It is ensured that HDI Re is included in the decision making process with respect to the internal model at group level via committees. Roles and responsibilities of HDI Re's internal model are set in accordance with group wide guidelines.

The internal model of HDI Re measures the value of the Solvency II own funds on the basis of economic market values per cut-off date as well as the development of these own funds over a one year time horizon. The prognosis of the own funds is carried out using Monte Carlo simulation techniques with a sufficient number of simulations.

From the distribution of the prognosis of the own funds the solvency capital required is calculated as the difference between the value at risk at the regulatory given probability (0.5%) and the mean of all simulations. In other words, the SCR estimates the loss of own funds, relative to the mean, that will not be exceeded with a likelihood of 0.5%.

To arrive at the internal model results, all risk categories are combined within the internal model of HDI Re and the loss absorbing capacity of deferred taxes is calculated and deducted from the SCR.
The risk profile of HDI Re is in line with the assumptions underlying the internal model.

No future management actions are included in the internal model.

Not taken into account in the internal model is the non-life lapse risk. Reinsurance treaties are usually signed for a period of 12 month. Of the expected profit from the signed treaties, only an immaterial amount could theoretically be removed through a unilateral cancellation by the cedant. Furthermore, HDI Re never experienced such a unilateral cancellation and deems it unlikely due to its cedant structure. . This risk is immaterial to HDI Re.

Risk categories, assumptions and used data for the internal model

The risk modules examined in the internal model of HDI Re are underwriting risk, market risk, and reinsurance default risk.

The main assumption of the internal models of the Talanx group is that the major risk categories are given by negative developments of the capital market, by the occurrence of large natural perils losses and by the default of counterparties which are possibly linked to the first two assumptions. Based on this assumption the risk scenarios for the risk categories natural perils events, economic scenarios and reinsurance default are group wide identical and pre-defined. This assumption especially defines the dependencies between these three risk categories: that natural perils events have no substantial impact on the world wide economy and that reinsurance default is induced through very large natural perils losses and negative developments in the economy.

Thus, the internal model of HDI Re uses the group wide identical scenarios for a real world economy (including a volatility adjustment), for natural perils losses and for reinsurance default. All of these scenarios are calibrated to fit HDI Re's underlying risk profile. Underwriting risk is estimated individually, making use of the regular actuarial pricing of assumed business - each treaty undergoes such a pricing before it is signed – as well as the quarterly actuarial reserving process. The simulation of the risks is carried out modularly at a reasonable granular and adequate level. . Within each risk module, the granularity is reduced step by step until the prognosis at a risk module level is available. For underwriting risk, firstly a gross view is integrated before retrocession reduces the gross risk to net risk.

The internal model of HDI Re is based on a high number of internal data, especially the individual assets, past and current retrocession contracts and contract partners and past loss developments. Wherever beneficial in terms of data quality and data quantity HDI Re also implements external data sources. External data sources are regularly assessed and validated for its appropriateness for HDI Re.

Underwriting risk

Underwriting risk is split into premium risk and reserve risk, with premium risk being further split into natural perils risk and manmade (or other) risk.

The premium risk measures deviations from the final losses to be settled from contracts currently in force to the estimated loss potential when pricing the contracts. The premium risk is estimated by looking at loss frequency and severity distributions, for natural catastrophes by applying the group wide defined scenarios whenever possible. The premium risk is assessed at treaty level before being aggregated to segments and includes all relevant programme conditions, i.e. loss influencing clauses and treaty details.
The natural perils risk is simulated overwhelmingly in licensed software models like AIR Touchstone based on the input data provided by the cedants. As a result these licensed models provide gross event losses from the cedants point of view which after application of the reinsurance treaty parameters and the signed share of HDI Re represent the gross loss for HDI Re.

The reserve risk measures deviations of future loss increases from the estimated best estimate claims provisions. The starting point of the reserve risk calculation are loss triangles and current best estimate claims provisions. The loss triangles are stochastically expanded for one year, resulting in scenarios for the one year reserve development.

Based on the underwriting segments a defined dependency structure is applied to the simulated values, resulting into correlated values across the premium and the reserve risk which are also subject to a dependency structure between premium and reserve risk.

Market risk

The market risk captures developments of the assets but also impacts the risk of liabilities through discounting and currency exchange rates of technical provisions. To simulate the assets, the invested individual assets are compressed to homogenous groups (type of asset, rating, currency). The market values of these groups are then mapped to indices stemming from the economic scenario generator respectively asset portfolio individual fixed income indices.

Reinsurance default risk

Reinsurance default risk is estimated through scenarios of the reinsurance default model based on rating migration of the reinsurers. The rating migration is dependent on very large natural perils loss events and the economic environment as both effects possibly reduce the available excess funds of the reinsurance counterparties.

Explanation of significant differences between standard formula and internal model risk modules

Both calculation methods, internal model and standard formula, aim to calculate negative developments from the mean of the own funds on a one-year horizon at a security level of 0.5%. Nevertheless, there are substantial differences between the two methods.

The standard formula and internal model both follow a modular approach where each risk module is firstly calculated on a standalone basis, eventually by sub-modules, and then aggregated assuming a dependency structure. The main difference between the two approaches is that the standard formula calculates the risk of each module based on Europe-wide factors and is ultimately volume driven. In contrast, the internal model is calibrated to the individual risks within HDI Re's balance sheet.

The largest difference is within the premium risk, where the standard formula bases its results on volume, and the internal model bases its results on an individual assessment of the single treaties and its contractual obligations. This difference in premium risk automatically impacts the own funds through the risk margin,

as premium risk (together with reserve risk and reinsurance default risk) is one important part of the risk margin calculation.

The reserve risk calculation differs, as again the standard formula calculation is purely volume based while the internal model estimates the risk within homogenous risk groups based on individual loss triangles.

The underwriting risk of the standard formula is calculated for premium and reserve risk together, only at a later stage catastrophe risk is added. In the internal model catastrophe risk is part of the premium risk which is calculated separately from the reserve risk and later aggregated. Treaties with natural perils risk are separated from the remaining treaties and form – as part of the premium risk – the catastrophe risk.

In the market risk's internal model one main difference is that European government bonds are not subject to default in the standard formula, contrary to the internal model. Another major difference is that within the standard formula the interest rate risk is based solely on changes of the risk free yield curve, while the internal model also takes into account the interest rate volatility.

Contrary to the standard formula, the internal model includes dependencies and thus diversification effects between risk categories through advanced Copula simulations. The standard formula aggregates risk through the "square-root-formula".

E.4.2 Implementation of the internal model

HDI Re's internal model is embedded in a significant number of management processes, such as risk monitoring and reporting, capital allocation and investment and underwriting decisions. There is no explicit decision to exclude internal model results from a particular management process where the results could be relevant. Consistency across processes is also ensured via direct involvement of the risk management function.

E.5 Non-compliance with the minimum capital requirement and non-compliance with the solvency capital requirement

HDI Re's capital adequacy ratio is 206% as of 31 December 2019. The Company is sufficiently capitalized.

E.6 Any other information

There are no further material topics to be disclose under this chapter.

GLOSSARY:

Abbreviation	Description
AAM	Ampega Asset Management GmbH
ABS	Asset backed securities
AC	Audit committee
AF	Actuarial function
AIR	Air Worldwide Catastrophe Modelling
ALM	Asset liability management
AM Best	AM Best Company
AOTP	Actuarial Opinion on Technical Provisions
ARTP	Actuarial Report on Technical Provisions
AuM	Assets under management
BaFin	Bundesanstalt fuer Finanzdienstleistungsaufsicht
BECP	Best estimate for claims provisions
BEPP	Best estimate for premium provisions
BoD	Board of Directors
BOF	Basic own funds
BPS	Basis Points
CAR	Capital adequacy ratio
CBI	Central Bank of Ireland
CC	Compensation committee
CDO	Collateralized debt obligation
CFO	Chief Financial Officer
CLO	Collateralized loan obligation
CR	Combined ratio
CRO	Chief Risk Officer
DAC	Deferred acquisition costs
EBIT	Operating profit
EIOPA	European insurance and occupational pension authority
EPIFP	Expected profit included in future premium
EUR	Euro
FWH	Funds withheld
FX	Foreign Exchange
GTPL	General third party liability
GUG	General Underwriting Guidelines
GWP	Gross written premium
HDI Global	HDI Global SE
HDI V.A.G.	Haftpflichtverband Der Deutschen Industrie V.a.G

Abbreviation	Description
HoAF	Head of Actuarial Function
HoC	Head of Compliance
IAS / IFRS	International Accounting Standards / International Financial Reporting Standards
IBNER	Incurred but not enough reported
IBNR	Incurred but not reported
IC	Investment committee
ICS	Internal control system
IM	Internal Model
LoD	Line of defence
LPT	Loss portfolio transfer
LR	Loss ratio
MBS	Market backed securities
MCR	Minimum capital requirement
Mio	Million
MTPL	Motor third party liability
NatCat	Natural Catastrophe
Non Prop	Non-proportional
OCI	Other comprehensive income
OCS	Own credit spread
ORSA	Own risk and solvency assessment
OTC	Over the counter
P&L	Profit and loss
PCF	Pre-approved controlled function
PIM	Partial internal model
PRISM	Probability Risk and Impact System
Prop	Proportional
PVFP	Present value of future premium
QRT	Quantitative Reporting Template
QS	Quota share
RC	Risk committee
ResQ	ResQ reserving software
RM	Risk margin
RMS	Risk Management System
RSR	Regular supervisory report
RUG	Retrocession Underwriting Guidelines
SCR	Solvency capital requirement

Abbreviation	Description
SF	Standard formula
SLA	Service level agreement
SLT	System of limits and thresholds
SNA	Shareholder net assets
TERM	HDI Enterprise Risk Model
TINT	HDI Retail International
TP	Technical provisions
TRB	HDI Reinsurance Broker GmbH
TXD	HDI Retail Germany
TXI	HDI Industrial segment
UC	Underwriting committee
UPR	Unearned premium reserves
UW	Underwriting
VaR	Value at Risk
XL	Excess of loss

Appendix: Annual QRTs

The following listed QRTs are attached as a reference to this report and as per Article 4 (*Templates for the solvency and financial condition report of individual undertakings)* of the Regulation "….laying down implementing technical standards with regards to procedures, formats and templates of the SFCR in accordance with Directive 2009/138/EC".

Number	Name	Detail
S.02.01.02	BS-C1	Balance Sheet
S.05.01.01	Cover - Geo	P&L per geographical split, top 5 regions
S.05.02.01	Cover - LOB	P&L per LOB split, total basis
S.17.01.02	TP-E1	Technical provisions
S.19.01.21	Triangles	Claims development triangles
S22.01.21	Volatility adjustment	Impact of long term guarantee's & transitional measures
S.23.01.01	OF	Own Funds
S.25.03.01	SCR	SCR under IM
S.28.01.01	MCR	MCR

S.02.01.02: BS –C1

		Solvency II value
		C0010
Assets		
Intangible assets	R0030	0
Deferred tax assets	R0040	6,262
Pension benefit surplus	R0050	0
Property, plant & equipment held for own use	R0060	20
Investments (other than assets held for index-linked and unit-linked contracts)	**R0070**	**1,156,744**
Property (other than for own use)	R0080	
Holdings in related undertakings, including participations	R0090	
Equities	*R0100*	
Equities - listed	R0110	
Equities - unlisted	R0120	
Bonds	*R0130*	**1,002,864**
Government Bonds	R0140	91,058
Corporate Bonds	R0150	829,390
Structured notes	R0160	
Collateralised securities	R0170	82,416
Collective Investments Undertakings	R0180	145,093
Derivatives	R0190	
Deposits other than cash equivalents	R0200	8,787
Other investments	R0210	
Assets held for index-linked and unit-linked contracts	R0220	
Loans and mortgages	**R0230**	
Loans on policies	R0240	
Loans and mortgages to individuals	R0250	
Other loans and mortgages	R0260	
Reinsurance recoverables from:	**R0270**	**74,186**
Non-life and health similar to non-life	R0280	**74,186**
Non-life excluding health	R0290	71,081
Health similar to non-life	R0300	3,105
Life and health similar to life, excluding health and index-linked and unit-linked	R0310	
Health similar to life	R0320	
Life excluding health and index-linked and unit-linked	R0330	
Life index-linked and unit-linked	R0340	
Deposits to cedants	R0350	48,349
Insurance and intermediaries receivables	R0360	15,564
Reinsurance receivables	R0370	
Receivables (trade, not insurance)	R0380	199
Own shares (held directly)	R0390	
Amounts due in respect of own fund items or initial fund called up but not yet paid in	R0400	
Cash and cash equivalents	R0410	26,038
Any other assets, not elsewhere shown	R0420	
Total assets	**R0500**	**1,327,362**

S.02.01.02: BS –C1……..*continued*

Liabilities

Technical provisions - non-life	**R0510**	**869,606**
Technical provisions - non-life (excluding health)	**R0520**	**860,173**
TP calculated as a whole	R0530	
Best estimate	R0540	812,077
Risk margin	R0550	48,096
Technical provisions - health (similar to non-life)	**R0560**	**9,433**
TP calculated as a whole	R0570	
Best estimate	R0580	9,146
Risk margin	R0590	287
TP - life (excluding index-linked and unit-linked)	**R0600**	
Technical provisions - health (similar to life)	**R0610**	
TP calculated as a whole	R0620	
Best estimate	R0630	
Risk margin	R0640	
TP - life (excluding health and index-linked and unit-linked)	**R0650**	
TP calculated as a whole	R0660	
Best estimate	R0670	
Risk margin	R0680	
TP - index-linked and unit-linked	**R0690**	
TP calculated as a whole	R0700	
Best estimate	R0710	
Risk margin	R0720	
Contingent liabilities	R0740	
Provisions other than technical provisions	R0750	510
Pension benefit obligations	R0760	
Deposits from reinsurers	R0770	68,177
Deferred tax liabilities	R0780	21,323
Derivatives	R0790	
Debts owed to credit institutions	R0800	
Financial liabilities other than debts owed to credit institutions	R0810	
Insurance & intermediaries payables	R0820	-404
Reinsurance payables	R0830	0
Payables (trade, not insurance)	R0840	-1,172
Subordinated liabilities	**R0850**	**32,476**
Subordinated liabilities not in BOF	R0860	0
Subordinated liabilities in BOF	R0870	32,476
Any other liabilities, not elsewhere shown	R0880	0
Total liabilities	**R0900**	**990,517**

Excess of assets over liabilities	**R1000**	**336,846**

S.05.01.01: Cover per LOB splits, Non-life obligations

		Line of Business for: non-life insurance and reinsurance obligations (direct business and accepted proportional reinsurance)									Line of Business for: accepted non-proportional reinsurance				Total
		Income protection insurance	Motor vehicle liability insurance	Other motor insurance	Marine, aviation and transport insurance	Fire and other damage to property insurance	General liability insurance	Credit and suretyship insurance	Legal expenses insurance	Miscellaneous Financial Loss	Health	Casualty	Marine, aviation, transport	Property	
		C0020	C0040	C0050	C0060	C0070	C0080	C0090	C0100	C120	C0130	C0140	C0150	C0160	C0200
Premiums Written															
Gross - Direct Business	R0110														
Gross - Proportional reinsurance	R0120	29,359	29,981	25,457	107,794	102,273	274,631	3,994	25,948	11,279					**610,717**
Gross - Non-proportional Reinsurance	R0130										409	58,188	2,272	25,126	**85,995**
Reinsurers' share	R0140	1,083	11,375	7,551	3,592	6,539	1,805	2,141	0	0	283	6,613	859	17,611	**59,454**
Net	**R0200**	**28,275**	**18,606**	**17,906**	**104,202**	**95,734**	**272,826**	**1,853**	**25,948**	**11,279**	**125**	**51,575**	**1,413**	**7,515**	**637,257**
Premiums earned															
Gross - Direct Business	R0210														
Gross - Proportional reinsurance	R0220	17,757	19,117	18,277	78,131	80,291	241,950	3,527	25,570	5,646					**490,266**
Gross - Non-proportional reinsurance	R0230										409	58,188	2,248	25,132	**85,976**
Reinsurers' share	R0240	0	0	0	441	1,543	266	0	0		283	6,613	835	17,617	**56,668**
Net	**R0300**	**3,323**	**37,213**	**31,215**	**24,228**	**53,840**	**203,570**	**2,855**	**22,900**		125	51,575	1,412	7,515	**519,574**

Claims incurred															
Gross - Direct Business	R0310														
Gross - Proportional reinsurance	R0320	4,252	10,724	13,168	51,336	57,230	188,634	2,107	17,033	4,093					**348,577**
Gross - Non-proportional	R0330										94	48,358	1,168	8,453	**58,072**
Reinsurers' share	R0340	3,069	8,691	5,717	2,820	8,177	936	886	0	0	132	3,734	168	4,558	**38,888**
Net	**R0400**	**1,183**	**2,033**	**7,451**	**48,517**	**49,052**	**187,698**	**1,221**	**17,033**	**4,093**	**-38**	**44,623**	**999**	**3,895**	**367,761**

Changes in other technical provisions															
Gross - Direct Business	R0410														
Gross - Proportional reinsurance	R0420														
Gross - Non-proportional reinsurance	R0430														
Reinsurers' share	R0440														
Net	**R0500**														
Expenses incurred	R0550	13,973	3,786	4,406	19,525	21,307	67,837	774	6,579	1,940	1	444	12	65	140,649
Other expenses	R1200														
Total expenses	**R1300**	**13,973**	**3,786**	**4,406**	**19,525**	**21,307**	**67,837**	**774**	**6,579**	**1,940**	**1**	**444**	**12**	**65**	**140,649**

5.02.01: Geographical, Top 5 regions

		Home Country	Top 5 countries (by amount of gross premiums written) - non-life obligations					Total Top 5 and home country
		C0010	C0020	C0030	C0040	C0050	C0060	C0070
	R0010		DE	SE	GB	AT	AU	
		C0080	C0090	C0100	C0110	C0120	C0130	C0140
Premium written								
Gross - Direct Business	R0110							
Gross - Proportional reinsurance accepted	R0120		407,863	78,704	62,554	23,693	24,034	596,848
Gross - Non-proportional reinsurance accepted	R0130		68,798	0	0	372	0	69,170
Reinsurers' share	R0140		13,563	0	0	21,692	0	35,255
Net	**R0200**		**463,098**	**78,704**	**62,554**	**2,373**	**24,034**	**630,763**
Premium earned								
Gross - Direct Business	R0210							
Gross - Proportional reinsurance accepted	R0220		371,906	38,378	31,277	23,693	11,790	477,044
Gross - Non-proportional reinsurance accepted	R0230		68,798	0	0	372	0	69,170
Reinsurers' share	R0240		13,526	0	0	21,692	0	35,218
Net	**R0300**		**427,178**	**38,378**	**31,277**	**2,373**	**11,790**	**510,997**
Claims incurred								
Gross - Direct Business	R0310							
Gross - Proportional reinsurance accepted	R0320		269,199	26,159	23,208	16,604	8,411	343,582
Gross - Non-proportional reinsurance accepted	R0330		45,952	0	0	382	0	46,334
Reinsurers' share	R0340		-288	0	0	15,288	0	15,000
Net	**R0400**		**269,199**	**26,159**	**23,208**	**16,604**	**8,411**	374,916
Changes in other technical provisions								
Gross - Direct Business	R0410							
Gross - Proportional reinsurance accepted	R0420							
Gross - Non-proportional reinsurance accepted	R0430							
Reinsurers' share	R0440							
Net	**R0500**							
Expenses incurred	**R0550**	3,321	98,284	16,228	12,898	4,962	4,956	140,649
Other expenses	**R1200**							
Total expenses	**R1300**							**140,649**

S.17.01.02: Non-Life Technical Provisions

		Income protection insurance	Motor vehicle liability insurance	Other motor insurance	Marine, aviation and transport insurance	Fire and other damage to property insurance	General liability insurance	Credit and suretyship insurance	Legal expenses insurance	Miscellaneous financial loss
		C0030	C0050	C0060	C0070	C0080	C0090	C0100	C0110	C0130
Technical provisions calculated as a whole	**R0010**									
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP as a whole	**R0050**									
Technical Provisions calculated as a sum of BE and RM										
Best estimate										
Premium provisions										
Gross - Total	R0060	-1,775	-2,123	352	1,379	-2,553	-7,186	43	113	-144
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0140	658	0	6	136	-93	37	725	0	0
Net Best Estimate of Premium Provisions	R0150	-2,434	-2,123	346	1,244	-2,461	-7,224	-682	113	-144
Claims provisions										
Gross - Total	R0160	9,857	26,427	7,176	30,242	76,664	496,485	5,058	28,641	1,041
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0240	2,101	13,824	1,595	2,203	6,195	1,932	1,112	0	0
Net Best Estimate of Claims Provisions	R0250	7,757	12,603	5,581	28,039	70,469	494,553	3,946	28,641	1,041
Total Best estimate - gross	**R0260**	8,082	24,304	7,528	31,622	74,110	489,298	5,101	28,754	897
Total Best estimate - net	**R0270**	5,323	10,480	5,927	29,283	68,008	487,329	3,263	28,754	897
Risk margin	**R0280**	236	937	320	3,296	4,665	28,916	216	1,563	148
Amount of the transitional on Technical Provisions										
TP as a whole	R0290									
Best estimate	R0300									
Risk margin	R0310									
Technical provisions - total										
Technical provisions - total	**R0320**	8,318	25,241	7,848	34,918	78,775	518,214	5,317	30,317	1,045
Recoverable from reinsurance contract/SPV and Finite Re after the adjustment for expected losses due to counterparty default - total	**R0330**	2,759	13,824	1,601	2,339	6,103	1,969	1,837	0	0
Technical provisions minus recoverables from reinsurance/SPV and Finite Re- total	**R0340**	5,559	11,417	6,247	32,579	72,673	516,245	3,479	30,317	1,045

S.17.01.02: Non-Life Technical Provisions……..*continued*

		Accepted non-proportional reinsurance:				Total Non-Life obligations
		Non-proportional health reinsurance	Non-proportional casualty reinsurance	Non-proportional marine, aviation and transport reinsurance	Non-proportional property reinsurance	
		C0140	C0150	C0160	C0170	C0180
Technical provisions calculated as a whole	**R0010**					
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP as a whole	**R0050**					
Technical Provisions calculated as a sum of BE and RM						
Best estimate						
Premium provisions						
Gross - Total	R0060	0	-4	22	-251	**-12,127**
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0140	0	2	127	-37	**1,562**
Net Best Estimate of Premium Provisions	R0150	0	-6	-105	-214	**-13,689**
Claims provisions						
Gross - Total	R0160	1,064	122,567	2,836	25,292	**833,350**
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0240	346	31,209	1,381	10,726	**72,623**
Net Best Estimate of Claims Provisions	R0250	718	91,358	1,455	14,566	**760,726**
Total Best estimate - gross	**R0260**	1,064	122,563	2,858	25,041	**821,223**
Total Best estimate - net	**R0270**	718	91,352	1,350	14,353	**747,037**
Risk margin	**R0280**	51	6,662	80	1,293	**48,384**
Amount of the transitional on Technical Provisions						
TP as a whole	R0290					**0**
Best estimate	R0300					**0**
Risk margin	R0310					**0**
Technical provisions - total						
Technical provisions - total	**R0320**	1,115	129,225	2,938	26,335	**869,606**
Recoverable from reinsurance contract/SPV and Finite Re after the adjustment for expected losses due to counterparty default - total	**R0330**	346	31,211	1,508	10,689	**74,186**
Technical provisions minus recoverables from reinsurance/SPV and Finite Re- total	**R0340**	769	98,014	1,430	15,646	**795,421**

S19.01.21: Non-life Insurance claims information

Non-life Insurance Claims Information

Gross Claims Paid (non-cumulative)

		Development year (absolute amount)											In Current year	Sum of years (cumulative)
		0	1	2	3	4	5	6	7	8	9	10 & +		
		C0010	C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100	C0110	C0170	C0180
Prior	R0100											16	16	2,350
2010	R0160	-16,853	87,555	-295	5,833	2,202	2,389	203	2,196	19,429	426		426	103,085
2011	R0170	34,798	30,852	4,468	111	329	90	108	41	53			53	70,849
2012	R0180	50,518	22,208	4,279	1,429	63	75	102	34				34	78,708
2013	R0190	68,859	45,766	7,101	9,539	5,320	3,387	4,638					4,638	144,609
2014	R0200	68,345	74,501	15,650	14,042	12,105	4,830						4,830	189,473
2015	R0210	75,021	57,172	47,395	22,573	12,887							12,887	215,047
2016	R0220	33,413	66,146	20,517	15,298								15,298	135,374
2017	R0230	20,590	59,381	53,227									53,227	133,198
2018	R0240	24,297	91,367										91,367	115,664
2019	R0250	18,863											18,863	18,863
	R0260												201,638	1,207,221

Gross undiscounted Best Estimate Claims Provisions

		Development year (absolute amount)											Year end (discounted data)
		0	1	2	3	4	5	6	7	8	9	10 & +	
		C0200	C0210	C0220	C0230	C0240	C0250	C0260	C0270	C0280	C0290	C0300	C0360
Prior	R0100											38,751	37,023
2010	R0160						31,499	29,648	27,198	5,335	7,334		7,037
2011	R0170					348	256	283	174	846			785
2012	R0180	0	0	0	699	560	471	433	1,030				961
2013	R0190	0	0	99,855	88,052	67,701	61,007	12,291					11,522
2014	R0200	0	113,821	93,191	74,480	53,192	52,275						49,350
2015	R0210	210,940	147,744	98,361	65,999	63,448							60,249
2016	R0220	194,913	111,646	92,239	85,766								81,856
2017	R0230	232,093	180,107	163,761									157,905
2018	R0240	282,885	203,690										197,052
2019	R0250	240,915											229,607
	R0260												833,350

Impact of long term guarantees and transitional measures
S.22.01

		Amount with Long Term Guarantee measures and transitionals	Without transitional on technical provisions	Impact of transitional on technical provisions	Without transitional on interest rate	Impact of transitional on interest rate	Without volatility adjustment and without other transitional measures	Impact of volatility adjustment set to zero	Without matching adjustment and without all the others	Impact of matching adjustment set to zero	Impact of all LTG measures and transitionals
		C0010	C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100
Technical provisions	R0010	869,606	869,606		869,606		876,449	6,843	876,449		6,843
Basic own funds	R0020	359,322	359,322		359,322		353,607	-5,715	353,607		-5,715
Excess of assets over liabilities	R0030	336,846	336,846		336,846		331,131	-5,715	331,131		-5,715
Restricted own funds due to ring-fencing and matching portfolio	R0040										
Eligible own funds to meet Solvency Capital Requirement	R0050	359,322	359,322		359,322		353,607	-5,715	353,607		-5,715
Tier I	R0060	326,846	326,846		326,846		321,131	-5,715	321,131		-5,715
Tier II	R0070	32,476	32,476		32,476		32,476	0	32,476		0
Tier III	R0080										
Solvency Capital Requirement	R0090	174,857	174,857		174,857		175,154	298	175,154		298
Eligible own funds to meet Minimum Capital Requirement	R0100	342,583	342,583		342,583		336,895	-5,688	336,895		-5,688
Minimum Capital Requirement	R0110	78,685	78,685		78,685		78,819	134	78,819		134

S23.01.01: Own Funds

		Total		Tier 1 - unrestricted	Tier 1 - restricted	Tier 2	Tier 3
		C0010		C0020	C0030	C0040	C0050
Basic own funds before deduction for participations in other financial sector as foreseen in article 68 of Delegated Regulation (EU) 2015/35							
Ordinary share capital (gross of own shares)	R0010	**5,000**		5,000			
Share premium account related to ordinary share capital	R0030						
Initial funds, members' contributions or the equivalent basic own - fund item for mutual and mutual-type undertakings	R0040						
Subordinated mutual member accounts	R0050						
Surplus funds	R0070						
Preference shares	R0090						
Share premium account related to preference shares	R0110						
Reconciliation reserve	R0130	**195,846**		195,846			
Subordinated liabilities	R0140	**32,476**				32,476	
An amount equal to the value of net deferred tax assets	R0160						
Other own fund items approved by the supervisory authority as basic own funds not specified above	R0180	**126,000**		126,000			
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds							
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds	R0220						
Deductions							
Deductions for participations in financial and credit institutions	R0230						
Total basic own funds after deductions	**R0290**	**359,322**		**326,846**		**32,476**	
Ancillary own funds							
Unpaid and uncalled ordinary share capital callable on demand	R0300						
Unpaid and uncalled initial funds, members' contributions or the equivalent basic own fund item for mutual and mutual - type undertakings, callable on demand	R0310						
Unpaid and uncalled preference shares callable on demand	R0320						
A legally binding commitment to subscribe and pay for subordinated liabilities on demand	R0330						
Letters of credit and guarantees under Article 96(2) of the Directive 2009/138/EC	R0340						
Letters of credit and guarantees other than under Article 96(2) of the Directive 2009/138/EC	R0350						
Supplementary members calls under first subparagraph of Article 96(3) of the Directive 2009/138/EC	R0360						
Supplementary members calls - other than under first subparagraph of Article 96(3) of the Directive 2009/138/EC	R0370						
Other ancillary own funds	R0390						
Total ancillary own funds	**R0400**						
Available and eligible own funds							
Total available own funds to meet the SCR	**R0500**	**359,322**		326,846		32,476	
Total available own funds to meet the MCR	**R0510**	**359,322**		326,846		32,476	
Total eligible own funds to meet the SCR	**R0540**	**359,322**		326,846		32,476	
Total eligible own funds to meet the MCR	**R0550**	**342,583**		326,846		15,737	
SCR	**R0580**	**174,857**					
MCR	**R0600**	**78,685**					
Ratio of Eligible own funds to SCR	**R0620**	**205.50%**					
Ratio of Eligible own funds to MCR	**R0640**	**435.38%**					

		C0060
Reconciliation reserve		
Excess of assets over liabilities	R0700	**336,846**
Own shares (held directly and indirectly)	R0710	
Foreseeable dividends, distributions and charges	R0720	10,000
Other basic own fund items	R0730	**131,000**
Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fenced funds	R0740	
Reconciliation reserve	**R0760**	**195,846**
Expected profits		
Expected profits included in future premiums (EPIFP) - Life Business	R0770	
Expected profits included in future premiums (EPIFP) - Non- life business	R0780	15,404
Total Expected profits included in future premiums (EPIFP)	**R0790**	**15,404**

S25.03.01: Solvency Capital Requirement (SCR)

Solvency Capital Requirement - for undertakings using on Full Internal Models

Unique number of component	Components description	Calculation of the Solvency Capital Requirement	Amount modelled	USP	Simplifications
C0010	C0020	C0030	C0070	C0090	C0120
1	Market Risk	130,196	0		- None
2	Counterparty default risk	5,739	0		- None
3	Life underwriting risk	-	0		- None
5	Non-Life underwriting risk	150,065	0		- None
7	Operational risk (Standard Formula approach)	12,295	0		- None
9	LAC Deferred Taxes	(24,995)	0		- None

Calculation of Solvency Capital Requirement		C0100
Total undiversified components	R0110	273,299
Diversification	R0060	-98,443
Capital requirement for business operated in accordance with Art. 4 of Directive 2003/41/EC	R0160	
Solvency Capital Requirement excluding capital add-on	R0200	174,857
Capital add-on already set	**R0210**	
Solvency capital requirement	R0220	174,857
Other information on SCR		
Amount/estimate of the overall loss-absorbing capacity of technical provisions	R0300	
Amount/estimate of the overall loss-absorbing capacity ot deferred taxes	R0310	-24,995
Capital requirement for duration-based equity risk sub-module	R0400	
Total amount of Notional Solvency Capital Requirements for remaining part	R0410	
Total amount of Notional Solvency Capital Requirements for ring fenced funds	R0420	
Total amount of Notional Solvency Capital Requirement for matching adjustment portfolios	R0430	
Diversification effects due to RFF SCR aggregation for article 304	R0440	

S28.01.01: Minimum Capital Requirement (MCR)

Linear formula component for non-life insurance and reinsurance obligations

MCR calculation Non Life		Non-life activities	
		Net (of reinsurance/SPV) best estimate and TP calculated as a whole	Net (of reinsurance) written premiums in the last 12 months
		C0020	C0030
Medical expense insurance and proportional reinsurance	R0020	0	0
Income protection insurance and proportional reinsurance	R0030	5,323	27,976
Workers' compensation insurance and proportional reinsurance	R0040	0	0
Motor vehicle liability insurance and proportional reinsurance	R0050	10,480	20,059
Other motor insurance and proportional reinsurance	R0060	5,927	14,751
Marine, aviation and transport insurance and proportional reinsurance	R0070	29,283	103,590
Fire and other damage to property insurance and proportional reinsurance	R0080	68,008	89,750
General liability insurance and proportional reinsurance	R0090	487,329	267,809
Credit and suretyship insurance and proportional reinsurance	R0100	3,263	696
Legal expenses insurance and proportional reinsurance	R0110	28,754	29,485
Assistance and proportional reinsurance	R0120	0	0
Miscellaneous financial loss insurance and proportional reinsurance	R0130	897	11,279
Non-proportional health reinsurance	R0140	718	409
Non-proportional casualty reinsurance	R0150	91,352	56,034
Non-proportional marine, aviation and transport reinsurance	R0160	1,350	1,743
Non-proportional property reinsurance	R0170	14,353	13,675

Linear formula component for life insurance and reinsurance obligations

MCR calculation Life		Life activities	
		Net (of reinsurance/SPV) best estimate and TP calculated as a whole	Net (of reinsurance/SPV) total capital at risk
		C0050	C0060
Obligations with profit participation - guaranteed benefits	R0210		
Obligations with profit participation - future discretionary benefits	R0220		
Index-linked and unit-linked insurance obligations	R0230		
Other life (re)insurance and health (re)insurance obligations	R0240		
Total capital at risk for all life (re)insurance obligations	R0250		

		Non-life activities	Life activities
		C0010	C0040
MCRNL Result	R0010	162,189	
MCRL Result	R0200		

Overall MCR calculation		C0070
Linear MCR	R0300	162,189
SCR	R0310	174,857
MCR cap	R0320	78,685
MCR floor	R0330	43,714
Combined MCR	R0340	78,685
Absolute floor of the MCR	R0350	3,200
		C0070
Minimum Capital Requirement	**R0400**	**78,685**