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Hannover Re (Ireland) Designated Activity Company

2017

Solvency and Financial Condition Report

hannover re®

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Executive Summary

Key figures

in USD 000's	2017	2016
Solvency II Balance Sheet		
Assets	6,654,400	6,603,407
Technical Provisions	4,421,277	4,176,926
Other Liabilities	693,418	672,973
Excess of Assets over Liabilities	1,539,706	1,753,508
Eligible Own Funds to meet the Solvency Capital Requirement (SCR)		
Tier 1 Basic Own Funds	1,538,990	1,753,508
Tier 2 Basic Own Funds	346,823	339,813
Tier 3 Ancillary Own Funds	169,219	213,814
Total Eligible Own Funds (SCR)	2,055,032	2,307,135
Eligible Own Funds to meet the Minimum Capital Requirement (MCR)		
Tier 1 Basic Own Funds	1,538,990	1,753,508
Tier 2 Basic Own Funds	101,531	128,289
Total Eligible Own Funds (MCR)	1,640,521	1,881,797
Capital Requirements		
Solvency Capital Requirement	1,128,124	1,425,429
Minimum Capital Requirement	507,656	641,443
Coverage Ratio		
Ratio of Eligible Own Funds to SCR	182%	162%
Ratio of Eligible Own Funds to MCR	323%	293%

A. Business and Performance

Hannover Re (Ireland) Designated Activity Company ("HRI" or "the Company") is an Irish regulated entity authorised by the Central Bank of Ireland to carry on both non-life and life reinsurance business. HRI is part of the Hannover Re Group. Hannover Re, with gross premium of more than EUR 17 billion, is the third-largest reinsurer in the world. The Hannover Re Group today has a network of more than 140 subsidiaries, branches and representative offices worldwide.

HRI plays a pivotal role within this network and is one of the main risk carriers for Hannover Re. We offer reinsurance solutions to leverage our significant capital base for the benefit of clients worldwide as well as other Hannover Re Group entities.

The HRI Loss before tax (IFRS) for the financial year 2017 was USD (260.3m) (2016 Profit of USD 123.6m). HRI recorded an underwriting loss of USD (326.7m) (2016 Profit of USD 60.4m), an investment result of USD 29.4m (2016: 54.5m) and other income and expenses not related to the underwriting or investment result amounted to USD 37.0m (2016: 8.7m).

Details on the Business and Performance can be found in Section A.

B. System of Governance

The Company recognises the importance of a strong System of Governance. In our governance system the central functions are closely interlinked with one another and the roles, tasks and reporting lines are both clearly defined and documented in the context of the so-called "three lines of defence" model.

The first line of defence consists of operational management of the risks and controls on a day-to-day basis. The risk management function ensures the second line of defence - risk monitoring. It also receives support from the actuarial function and the compliance function. The third line of defence consists of process-independent monitoring executed by the internal audit function.

All key functions are equipped with appropriate resources and skills. The reporting lines to one another and to the Board Member responsible have been clearly defined. The governance structure of the Company has not materially changed in the year to 31 December 2017.

The individual elements of the System of Governance of the Company are explained in Section B.

C. Risk Profile

In the context of its business operations HRI enters into a broad variety of risks. These risks are deliberately accepted, steered and monitored. They specifically concern underwriting risks pertaining to Property & Casualty, Life & Health, as well as capital market risks, liquidity risks and counterparty default risks. Operational, strategic and reputational risks also arise in the course of business operations. Further details on the Company Risk Profile are included in Section C.

Hannover Re quantifies risks using the internal capital model. For the purposes of calculating the Solvency Capital Requirement HRI uses the full internal model. Operational risk capital was shown on a Standard Formula basis at year end 2016 and on an internal model basis at year end 2017 as regulatory approval for the operational risk module of the internal model has been received. The Solvency Capital Requirement is presented in the following table.

Solvency Capital Requirement (SCR) – breakdown by risk category

In USD 000's	2017	2016
Underwriting risk - Property & Casualty	421,699	127,926
Underwriting risk - Life & Health	817,090	1,005,053
Market risk	417,924	530,706
Counterparty default risk	84,484	76,267
Operational risk	290,572	119,956
Diversification	**750,517**	**274,654**
Total risk (pre-tax)	**1,281,251**	**1,585,254**
Deferred tax	153,127	159,826
Total risk (post-tax)	**1,128,124**	**1,425,429**

D. Valuation for Solvency Purposes

For the purposes of calculating the eligible own funds, HRI values the assets and liabilities pursuant to the provisions of S.I. No. 485/2015 European Union (Insurance and Reinsurance) Regulations 2015.

The valuation for Solvency II purposes is set in principle at the fair value (market value). Insofar as IFRS values appropriately reflect the fair value, these values are applied to Solvency II.

The calculation of technical provisions can differ significantly under Solvency II and IFRS. The IFRS technical provisions are grounded in US GAAP and use locked in assumptions for long duration contracts. The Solvency II technical provisions consist of best estimate liability which is based on probabilistic best estimate cashflows with a risk margin derived from our internal capital model.

An analysis of the valuation of the assets and liabilities per the Solvency II balance sheet can be found in Section D.

E. Capital Management

The Ratio of Eligible Own Funds to SCR at 31 December 2017 was 182% (2016: 162%). Own funds in the Solvency II balance sheet consist of basic own funds, which comprise the excess of assets over liabilities (Tier 1 capital) and subordinated loans (Tier 2 capital). Within the Tier 3 Own Funds is included an Ancillary Own Funds (“AOF”) item approved by the Central Bank of Ireland on 14 December 2015.

Further details on capital management are included in Section E.

A. Business and Performance

A.1.1 Business Model

The principal activity of the Company is the transaction of international life & health reassurance and property & casualty reinsurance business.

Life & Health

As one of the largest, internationally operating and established life and health reinsurers, Hannover Re offers clients worldwide reinsurance protection in all lines of life and health insurance. With 24 Life & Health offices on all continents, Hannover Re has an outstanding international network at its disposal.

The Company plays a pivotal role within this network and is one of the two main risk carriers in life and health reinsurance for Hannover Re. We seek to use our global mandate to offer reinsurance solutions to leverage our significant capital base for the benefit of life and health clients worldwide. Our focus is to combine our in-house skills with the considerable resources of the network to develop solutions which can be written, either as retrocession for our sister companies or directly with life insurance companies.

The Company's Life & Health ("L&H") business is divided into Financial Solutions and Risk Solutions business.

The Company has significant experience in developing Financial Solutions for clients which cover all treaties in which the primary emphasis is on financing or capital management components. Our in-house expertise in this area means that we have the tools to implement effective solutions in a short space of time. A strong and liquid capital base allows us to provide both cash and non-cash financing solutions to service our clients' needs.

Our Risk Solutions business is focused on reinsurance of mortality business. Our clients are highly rated entities located throughout the world with a strong focus on North America and the United Kingdom.

On 22 December 2017, the US President signed into law the US Tax Cuts and Jobs Act. The law is effective 1 January 2018. This includes a base erosion anti-abuse tax (BEAT) which had it applied in 2017 would have resulted in significant additional tax payables by affiliated companies. It was agreed effective 1 January 2018, to allow our US Affiliates to recapture the underlying contracts. As part of the overall agreement it was also agreed that the Company would retrocede other US contracts to other affiliates also effective 1 January 2018. The overall impact of these transactions is an IFRS pre-tax loss of USD 247.5m. The Solvency II impact of these transactions is a pre-tax loss of USD 200m. The impact of transactions has also been reflected in the 2017 IFRS financial statements and annual Solvency II balance sheet.

The Company also operates a Life branch in Canada.

Property & Casualty

Hannover Re is also one of the largest international property and casualty reinsurers. Through its network of 19 offices in 18 countries, Hannover Re writes business in most property and casualty lines of business.

Within this network the Company plays an important role as one of the major risk carriers. The Company uses both its significant capital base and in-house expertise to provide solutions to other Hannover Re Group entities worldwide coupled with a mandate to provide reinsurance solutions to insurance companies in North America and the United Kingdom. The Company has increased its focus on the provision of solutions to other Hannover Re Group entities in recent years while continuing to manage its existing book of business and existing client relationships.

The Company writes reinsurance transactions where structured elements may be incorporated to enable the coverage to be tailored to the individual needs of our clients. The appropriate pricing for the actual risks transferred is a crucial element of the considerations. Our risk management and aggregation control tools are consistent with those applied within the property/casualty reinsurance business group of Hannover Re.

Our major lines of business include general and automobile liability, professional indemnity, workers compensation and property. With respect to the latter we endeavour to avoid huge aggregate exposures from major natural catastrophe perils.

We also continue to run off an existing portfolio of treaties from other parts of the world. Existing treaties stay on our books until expiration or commutation.

Structured features will remain a cornerstone of our product offerings, thereby reducing the volatility of our transactions and hence the capital requirements for our overall book of business.

Our transactions generally cover all or most lines of business written by our clients. The form of these covers will depend on the requirements of our clients as we seek to provide solutions which are tailored to these particular requirements. The majority of our business is written in the form of quota share or aggregate excess of loss reinsurance.

With our considerable experience in assessing risks and our expertise in structuring transactions, combined with the financial strength of the Company and the extensive Hannover Re Group network we are very well positioned and look forward to further successful and profitable years ahead of us. Our experience combined with flexibility in thinking enables us to provide our clients with state of the art structured reinsurance solutions that are in line with international accounting rules, regulatory compliance and risk-transfer standards. Building on and further enhancing our international knowledge and skills will put us in an excellent position to continue meeting high level client demand and challenges in the future.

A.1.2 Results of Operations

The Loss after tax for 2017 was USD (228.4m) (2016 Profit of USD 108.5m).

Net premium written decreased by 12.9% to USD 2,878.1m (2016 USD 3,302.8m). Net premium earned decreased by 9.9% to USD 2,915.9m (2016: USD 3,235.0m).

The underwriting result for the year was USD (326.7m) (2016 Profit of USD 60.4m) of which the L&H underwriting result for the year was USD (340.8m) (2016: USD 13.2m) and the P&C underwriting result for the year was USD 14.1m (2016: USD 47.1m). The loss on the L&H segment was primarily due to the impact transactions relating to the US Tax Cuts and Jobs Act as discussed in Section A.1.1 above.

The investment result for the year was USD 29.4m (2016: USD 54.5m). There were higher realised gains in 2016 on assets primarily consisting of fixed income securities. There was a small increase in interest income on the portfolio of 1% compared with 2016.

The Other Activities result for the year was USD 37.0m (2016: USD 8.7m). The improvement in the Other Activities result was primarily related to unrealised gains on the embedded credit derivative of USD 41.4m compared with unrealised gains on the embedded credit derivative of USD 13.9m in 2016.

A.1.3 Headquarters, supervisors and auditors

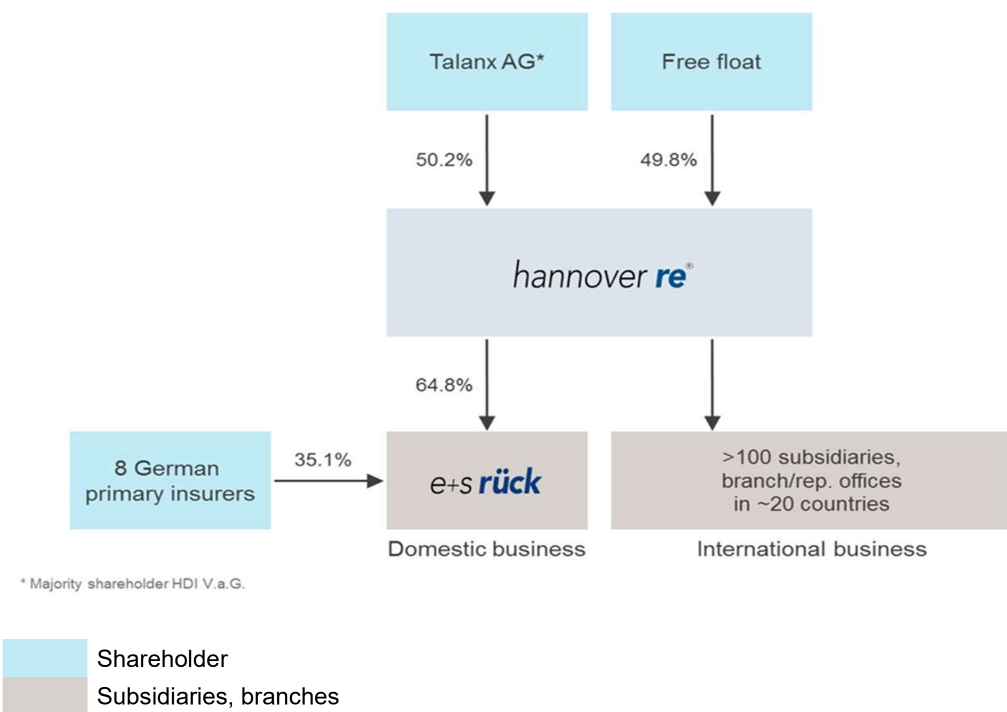
HRI is an Irish Designated Activity Company, with its registered office located in 4 Custom House Plaza, Harbourmaster Place, International Financial Services Centre, Dublin 1, Republic of Ireland.

The Company's ultimate parent undertaking is HDI Haftpflichtverband der Deutschen Industrie V.a.G., a company incorporated and operating in Germany. The largest group in which the results of the Company are consolidated is that headed by HDI Haftpflichtverband der Deutschen Industrie V.a.G.

The smallest group in which the results of the Company are consolidated is that headed by Hannover Rück SE. Hannover Rück SE is a European stock corporation, Societas Europaea (SE), with its headquarters located in Karl-Wiechert-Allee 50, 30625 Hannover, Germany and has been entered in the Commercial Register of the District Court of Hannover under the number HR Hannover B 6778.

A rounded 50.2% of Hannover Rück SE shares are held by Talanx AG. HDI Haftpflichtverband der Deutschen Industrie V.a.G. (HDI) in turn holds a stake of 79% in Talanx AG.

Hannover Re as a sub-group of the Talanx Group



Hannover Re (Ireland) DAC is subject to supervision by the Central Bank of Ireland (“CBI”), located in Insurance Supervision Division, Central Bank of Ireland, New Wapping Street, North Wall Quay, Dublin 1, D01 F7X3, Republic of Ireland.

Hannover Rück SE as well as Talanx and HDI are subject to supervision by the Federal Financial Supervisory Authority (“BaFin”), located in Graurheindorfer Straße 108, 53117 Bonn, Germany, postbox 1253, 53002 Bonn, Germany, phone +049 22 8/41 08-0, fax +049 22 8/41 08 15 50, e-mail poststelle@bafin.de, De-Mail poststelle@bafin.de-mail.de. Talanx AG is located in Riethorst 2, 30659 Hannover, Germany.

The auditor appointed for Hannover Re (Ireland) DAC is KPMG, located in 1 Harbourmaster Place, International Financial Services Centre, Dublin 1, Republic of Ireland.

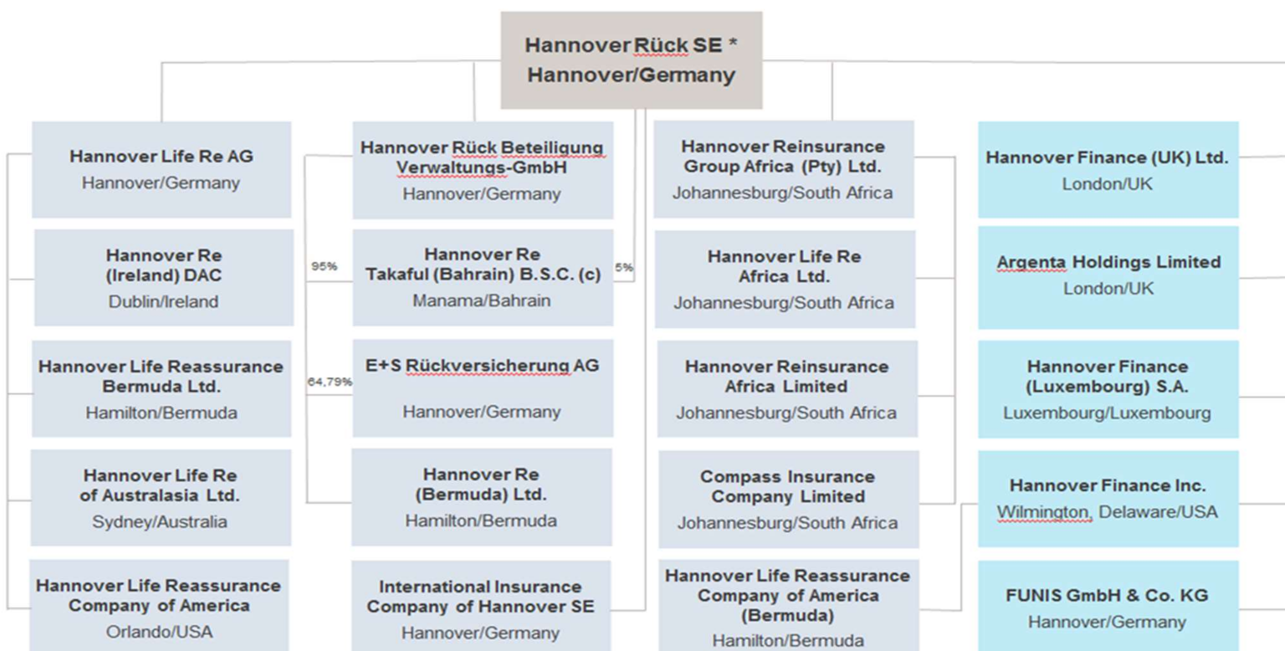
The Group auditor appointed for Hannover Re within the meaning of Section 318 of the German Commercial Code (HGB) is KPMG AG Wirtschaftsprüfungsgesellschaft (KPMG AG), located in Osterstraße 40, 30159 Hannover, Germany.

A.1.4 Group structure

Hannover Rück SE and its subsidiaries (collectively referred to as the “Hannover Re Group” or “Hannover Re”) transact all lines of Property & Casualty and Life & Health reinsurance. The Group is present on all continents.

The Group consists of more than 140 subsidiaries, branches and representative offices worldwide with a total workforce of 3,251.

Subsidiaries of Hannover Rück SE



*Unless otherwise stated the shareholding is 100%.

Insurance companies

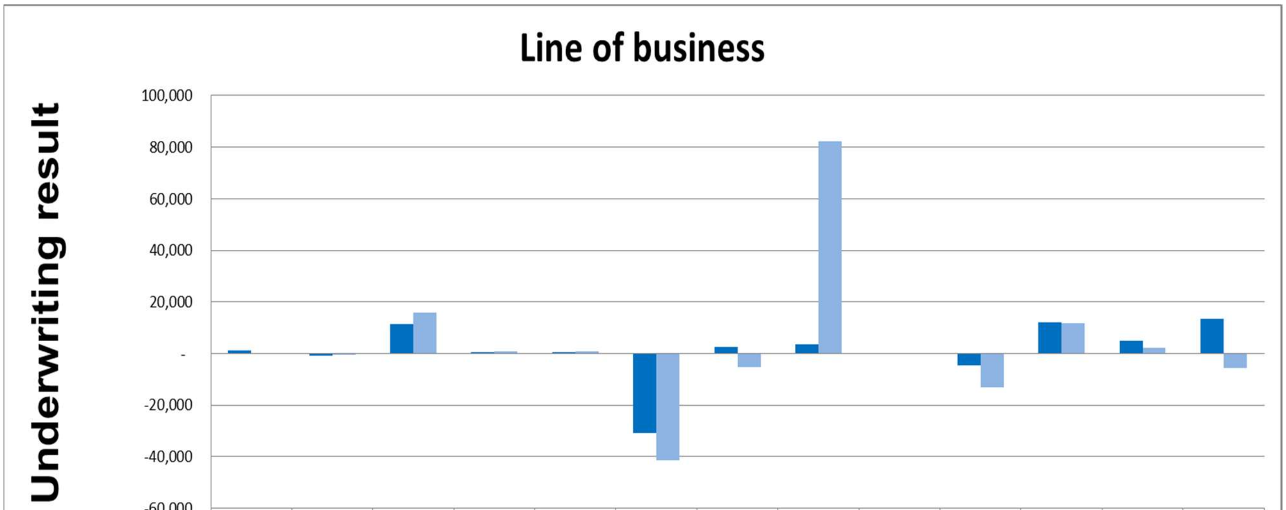
Non-insurance companies

A.2 Underwriting Performance

HRI made an underwriting loss of USD (326.7m) during the financial year 2017 (2016 Profit of USD 60.4m), with net earned premiums in the amount of USD 2,915.9m (2016: USD 3,235.0m), net claims incurred in the amount of USD 2,952.1k (2016: 2,676.1m) as well as other income and expenses attributable to the underwriting performance in the amount of USD 290.5m (2016: USD 498.5m).

Property & Casualty – Line of business

HRI made an underwriting profit of USD 14.1m for the P&C lines of business (2016: Profit of USD 47.1m). The underwriting result analysed by Solvency II for the P&C lines of business is as follows (in USD 000's):



	Proportional Medical Expense Insurance	Proportional Marine, aviation and transport insurance	Proportional General liability insurance	Proportional Credit and suretyship insurance	Proportional Income protection insurance	Proportional Motor vehicle liability insurance	Proportional Other motor insurance	Proportional Fire and other damage to property insurance	Proportional Miscellaneous financial loss insurance	Non-Proportional Health	Non-Proportional Casualty	Non-Proportional Marine, aviation, transport	Non-Proportional Property
Underwriting result 2017	1,014	-889	11,245	419	552	-30,731	2,470	3,719	-3	-4,536	12,224	5,030	13,551
Underwriting result 2016	-	-632	15,942	800	742	-41,395	-5,423	82,181	-	-13,207	11,617	2,219	-5,739

The significant drivers of the underwriting result in the financial year 2017 were the Non-Proportional Property (USD 13.6m), the Non-Proportional Casualty (USD 12.2m), Proportional General Liability (USD 11.2m) and the Non-Proportional Marine, Aviation and Transport (USD 5.0m) lines of business.

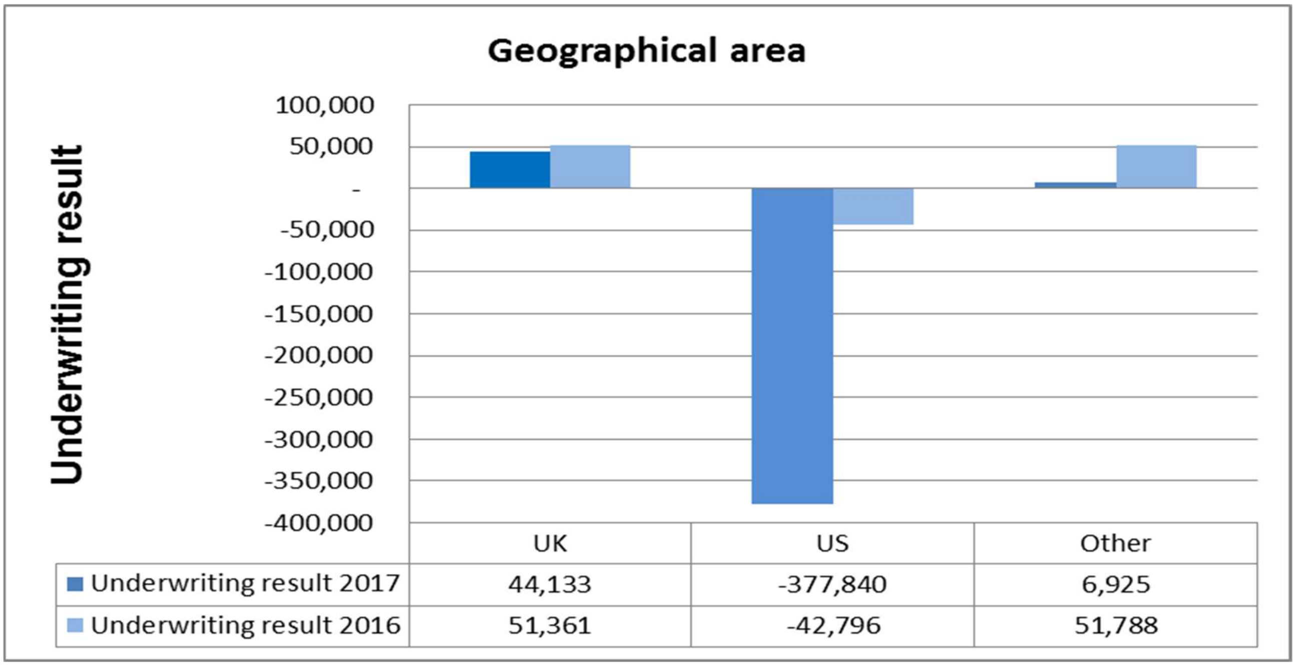
These lines of business, together with the Proportional Motor Vehicle Liability (USD -30.7m), account for 80% of the overall P&C underwriting result.

Life & Health – Line of business

HRI made an underwriting loss of USD (340.8m) for the L&H lines of business (2016: Profit of USD 13.3m). The significant driver of the underwriting result in the financial year 2017 was the losses made on transactions related to the BEAT tax as described in section A.1.2 Results of Operations.

Geographical area

The underwriting result analysed by geographical area is as follows (in USD 000's):



	UK	US	Other
Underwriting result 2017	44,133	-377,840	6,925
Underwriting result 2016	51,361	-42,796	51,788

The UK and the US are the two most material geographical areas where the Company carries out business. In 2017, the UK and US geographical areas accounted for 79% of total net earned premium. The "Other" underwriting area primarily consists of worldwide P&C business retroceded to HRI from other Group companies on a quota share basis.

A.3 Investment Performance

The Company recorded an investment result of USD 29.0m in 2017 (2016: USD 54.5m). The investment income and expenses are analysed by Solvency II asset classes in the overview below.

Investment income

	2017		2016	
in USD 000's	Ordinary income	Realised gains	Ordinary income	Realised gains
Government Bonds	29,282	19,984	30,211	30,158
Corporate Bonds	28,491	5,197	30,536	8,863
Collateralised securities	5,484	-	4,270	3,633
Collective Investment Undertakings	1,451	193	614	-
Derivatives	-	3,516	-	501
Deposits other than cash equivalents	479	-	474	-
Other investments	5,042	-	459	11,630
Cash and cash equivalents	20	-	28	-
Investment income attributable to underwriting result :				
Net funds transferred interest	(21,446)	(22,899)	(18,219)	(19,396)
Total	**48,802**	**5,991**	**48,373**	**35,390**

Investment expenses

in USD 000's	Realised losses	Other expenses	Realised losses	Other expenses
Government Bonds	(3,478)	-	(270)	-
Corporate Bonds	(85)	-	(103)	-
Collateralised securities	-	-	(2,587)	-
Derivatives	(2,344)	-	(2,896)	-
Other investments	(24)	(1,360)	(1,922)	(5,403)
Investment management expenses	-	(3,299)	-	(3,582)
Custody fees and other interest expenses	-	(155)	-	(170)

Finance costs	-	(16,984)	-	(13,100)
Investment expenses attributable to underwriting result :				
Loan interest	-	1,897	-	788
Total	**(5,930)**	**(19,901)**	**(7,779)**	**(21,467)**

Certain investments are held to back the technical provisions. The income from these investments ("funds transferred interest") is reallocated from the investment result to the underwriting result. Likewise certain loans relate to the underwriting activities. The interest on these loans is reallocated from the investment result to the underwriting result.

HRI has invested in securitised assets in the form of Collateralised Debt Obligations ("CDOs"). These assets are recorded on HRI's Solvency II balance sheet as "R0170 – Collateralised securities". The resulting income and expenses can be taken from the above table. CDOs are asset backed financial instruments which consist of a portfolio of fixed income securities divided into several tranches. In principle, high rates of interest are to be viewed as the compensation for increasing probabilities of default, according to which the individual tranches are differentiated from one another.

Collateralised Debt Obligations

in USD 000's	2017	2016
Collateralised Debt Obligations	82,182	93,552
Total	**82,182**	**93,552**

The "available-for-sale" reserve in the Equity section of the HRI balance sheet is given below:

Available-for-sale reserve

in USD 000's	2017	2016
Available-for-sale reserve	49,666	55,036
Total	**49,666**	**55,036**

A.4 Performance of Other Activities

A.4.1 Other income and expenses

The following table displays IFRS other income and expenses not included in the underwriting or the investment result:

Other income

in USD 000’s	2017	2016
Unrealised gain on embedded derivative	41,365	13,854
Net gain on foreign exchange translation	2,133	-165
Unrealised gain on life settlements yield collar	487	2,347
Other various income	280	31
Unrealised gain on foreign currency swap	144	877
Total	**44,409**	**17,109**

Other expenses

In USD 000’s	2017	2016
Other expenses	-4,192	-4,955
Unrealised loss on foreign currency swap	-1,364	-1,406
Auditor’s remuneration (including non-audit services)	-1,143	-1,295
Depreciation	-195	-206
Unrealised loss on life settlement yield collar	-39	-328
Net loss on foreign exchange translation	0	-165
Total	**-6,933**	**-8,355**

The unrealised gain on the embedded derivative is the material driver of the performance of Other Activities.

Unrealised gain on embedded derivative

A small number of treaties meet criteria which require the application of the prescriptions in IFRS 4 ‘Insurance Contracts’ governing embedded derivatives. These accounting regulations require that certain derivatives embedded in reinsurance contracts be separated from the underlying insurance contract (“host contract”), reported separately at fair value in accordance with IAS 39 ‘Financial Instruments: Recognition and Measurement’ and recognised under investments. Fluctuations in the fair value of the derivative components are to be recognised in income in subsequent periods.

Within the scope of the accounting of “modified coinsurance” (“ModCo”) and “coinsurance funds held” (“CoFWH”) reinsurance treaties, under which securities deposits are held by the ceding companies and payments rendered on the basis of income from certain securities of the ceding company, the interest rate risk elements are clearly and closely related to the underlying reinsurance agreements. Embedded derivatives consequently result solely from the credit risk of the underlying securities portfolio.

The Company calculates a fair value for the embedded derivative in ModCo and CoFWH treaties using market information available for the underlying securities on the valuation date on the basis of a "credit spread" method. Under this method the derivative is valued at zero on the date the contract commences and its value then fluctuates over time according to changes in the credit spread of the underlying securities.

The cumulative value of the derivative is shown in the Statement of Financial Position under derivative financial instruments with the movement reported in the Statement of Comprehensive Income as an unrealised gain/(loss). This is an IFRS presentation for our financial statements only.

A.4.2 Significant leasing agreements

There are no significant operating or finance lease agreements.

A.5 Any other information

There is no other material information regarding business and performance.

B. System of Governance

B.1 General information on the System of Governance

B.1.1 Governance structure

B.1.1.1 Our Administrative, Management or Supervisory Body

HRI has an effective system of governance in place which provides for sound and prudent management. The elements of the System of Governance are described in the following chapter.

Board of Directors

The Board of Directors has ultimate responsibility for the strategy, management and operations of HRI. The Board is collectively responsible for promoting the success of HRI by directing, effectively supervising and overseeing its affairs in a prudent and ethical manner. The Board sets and upholds the values and standards necessary to ensure that HRI's obligations to shareholders and other stakeholders, including customers, employees and creditors, are met.

The Board sets the direction and mission for HRI and ensures it meets its strategic objectives. The strategic objectives are set in recognition of the Hannover Re Group ('Group') strategy.

The Board has reserved a number of matters for its decision, in accordance with the schedule set out in the Board Charter. These can be summarised as follows:

- Board and Management – comprising matters relating to appointment, endorsement and/ or removal of Board Members, Managing Directors, General Managers and other individuals who may have a material impact on the risk profile of the Company, establishment of the Board Sub-Committees (appointment of members and Chairperson) and delegating appropriate powers to each of the Committees;
- Corporate Governance – including responsibility to define the corporate governance system, effective and clear structures and reporting arrangements, oversight over the senior management and ensure that effective Internal Control Framework and the control functions are appropriately established;
- Risk Management, including ORSA – comprising matters relating to the approval of the Risk Management Strategy & Framework including Risk Appetite Statements, discharging the responsibility for HRI's risk management, establishing and monitoring the effectiveness of the Risk Committee and Own Risk and Solvency Assessment ('ORSA') process;
- Solvency and Capital Management – focussing on matters relating to roles and responsibilities for internal model governance and its strategic direction, ultimately ensuring the solvency and capitalisation of HRI remain adequate and appropriate at all times;
- Corporate Issues – including decisions, in conjunction with Group, on material changes in the legal structure or the nature of business undertaken by the Company (i.e. major reorganisations, matters of acquisitions, sale, modification of interests in other companies of strategic relevance), formulation and amendment of strategic principles for HRI, and other corporate issues derived from Company law;
- Operational Matters – ensuring appropriate strategy and processes are defined in relation to succession plan, contingency arrangements and outsourcing;
- Financial Matters, Transactions and Expenditure – comprising of matters such as approval of the annual financial and business plan based on the agreed strategy and risk appetite of

HRI, approval of annual regulatory returns, dividend payments, securities, guarantees or similar liabilities for third party payables outside the normal course of business, approval of any significant changes in accounting policies or practices, review of the Five Year Plan, the appointment and removal of auditors;

- Investment Activity – comprising matters such as approval of the investment strategy and guidelines, approval of the acquisition, disposal or mortgage of real estate or similar, including the construction and improvement of buildings. Approval of the appointment or dismissal of outside portfolio managers;
- Remuneration Matters – including, but not limited to annual review the performance of the Board and individual directors, relative to the Board's objectives.

Committees of the Board

The Board has delegated other matters for decision to the Committees of the Board, as contained in their respective documented terms of reference.

Those Committees are: the Audit Committee, Risk Committee, Investment Advisory Council Compensation Committee, and Canada Branch Steering Committee.

Day-to-day Management

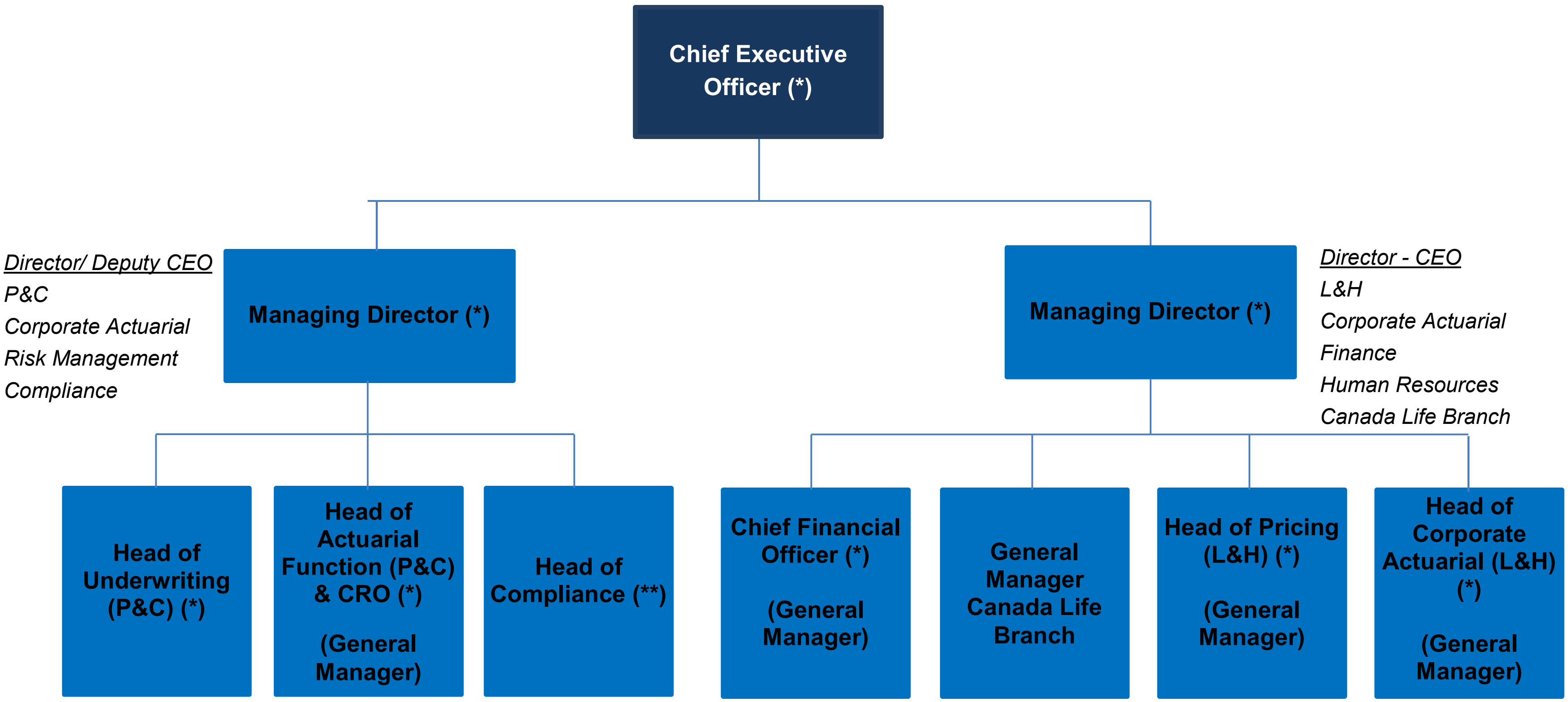
The Board has delegated responsibility for day-to-day management of the business in accordance with the strategy, objectives and policies set by the Board to the CEO and Deputy CEO. Day to day management is defined within the Board Charter as all matters not specifically reserved for approval by the Board or delegated to a Committee. An Operational Council, comprising members of senior management of the Company, assists the CEO and Deputy CEO in the exercise of their functions.

Underwriting authority is delegated in accordance with the Special Underwriting Guidelines – Life and Health, and the Special Underwriting Guidelines – ASI, approved by the Board.

Investments are managed in accordance with the HRI Investment Guidelines.

A high level organization chart, setting out the reporting lines within HRI, is attached behind:

Effective date: 06/10/2017



(*) Member of the Operational Council

(**) Permanent guest of the Operational Council

The organisation and collective effort of individual functions are decisive for our internal risk management and control system. In our system the central functions are closely interlinked with one another and the roles, tasks and reporting lines are both clearly defined and documented in the context of the so-called three lines of defence. The first line of defence consists of risk control and the original responsibility for risk at divisional level. The risk management function ensures the second line of defence - risk monitoring. It also receives support from the actuarial function and the compliance function. The third line of defence consists of process-independent monitoring executed by the internal audit function.

All key functions are equipped with appropriate resources and skills. The reporting lines to one another and to the Board Member responsible have been clearly defined.

B.1.2 Recruitment and Remuneration policy

B.1.2.1 Principles of the Recruitment and Remuneration Policy

The Board of Directors in conjunction with the Compensation Committee assesses remuneration packages in an effort to discourage imprudent risk taking. HRI's Recruitment and Remuneration Policy (the 'Policy'), in conjunction with the Corporate HRM Principles: Executive and Senior Management Compensation and Benefits, reflects HRI's objectives in respect of corporate governance as well as sustained and long term value for stakeholders. It also provides for an appropriate level of transparency.

The Policy seeks to ensure that employees of HRI are compensated with appropriate incentives in an effort to recognise and encourage enhanced performance in a fair and responsible manner for their individual contributions to the success of HRI. In doing so HRI reviews its remuneration with that of comparable organisations and comparable roles within those organisations.

The Policy also ensures that the duty to mitigate loss is fully recognised.

HRI is committed to ensuring that its remuneration practices enable it to:

- Appropriately compensate employees for the services they provide to the Company;
- Attract and retain employees with skills required to effectively manage the operations and intended future direction of the business;
- Motivate employees to perform in the best interests of HRI and its stakeholders;

HRI does not permit risk-taking that falls outside of HRI's risk appetite policies and guidelines.

This is achieved by ensuring compliance with strict policies and guidelines on recruitment and compensation and appropriate action in the event of non-compliance.

The Human Resources Manager monitors compliance with this Policy. Monitoring results are reported to the Board.

The Board is responsible for monitoring the ongoing performance of Senior Management at General Manager level and above. Senior Management at General Manager level and below is monitored by the CEO and Deputy CEO through day to day activities and in the more formal setting of the annual performance review process.

B.1.2.2 Information on the individual and collective performance criteria on which any entitlement to share options, shares or variable components of remuneration is based

Employees

HRI seeks to ensure that its employees are provided with appropriate incentives to encourage enhanced performance and are rewarded in a fair and responsible manner. The Hannover Re Ireland DAC Bonus Scheme (the Scheme) governs this process and ensures that the duty to mitigate loss is fully recognised.

Bonus payments are paid to all eligible employees based on individual performance over the previous 12 months and the financial results of the Group for the preceding financial year. Bonus payments under the Scheme are subject to the approval of the Operational Council.

Executive and Senior Management

The HRM Corporate Principles: Executive and Senior Management Compensation & Benefits provide clear guidelines for Executive and Senior Management remuneration which recognise the long term interests of the Hannover Re Group, its shareholders and employees.

Total compensation for Executive and Senior Management is highly geared towards performance with the proportion of “at risk” pay increasing/decreasing according to:

a) Group net income,

b) Business Group targets achievement (only for executives with business responsibility)

c) Individual target achievement

The Hannover Re Executive Board in cooperation with the Board of Directors of each Group operation conducts risk assessments of pay packages to ensure that they do not encourage imprudent risk-taking. HRM in Hannover provide appropriate service including benchmark and survey data to improve the effectiveness at managing the complex relationship between incentives and risk-taking.

B.1.2.3 A description of the main characteristics of supplementary pension or early retirement schemes for the members of the administrative, management or supervisory body and other key function holders

Retirement

The Company operates a pension plan on a defined contribution basis which means retirement benefits will depend on the total amount contributed by both the Company and individual together with investment income earned. At the time of retirement, the accumulated fund will be available to provide the individual with a range of benefits within approved Revenue limits.

B.1.3 Related party transactions

A loan of USD 75 m was repaid by the Company to its immediate parent Hannover Life Re AG during the reporting period.

B.2 Fit and proper requirements

Under the applicable F&P standards, the HRI CEO, on behalf of the Company, is required to satisfy herself on an ongoing basis that those individuals performing Pre-Approval Control Functions (‘PCFs’) and Control Functions (‘CFs’) roles comply with the standards set out in the legislation and guidance. In order to comply with the above requirements, the F&P process at HRI is performed in two phases:

- Due diligence performed for new CF/ PCF roles; and
- Ongoing due diligence conducted for existing CF/ PCFs, at least annually.

The purpose of the assessment is to ensure that relevant PCFs and CFs have the qualifications, experience and other necessary qualities and skills appropriate to the function they perform. The person must be able to demonstrate that they have:

- Professional qualifications and capability appropriate to the relevant function;
- Competence and skills appropriate to the relevant function, whether gained through training or professional experience;
- Competence and proficiency through past performance in previous functions;
- Sound knowledge of the business and their new role;
- Clear and comprehensive understanding of regulatory and legal environment, appropriate to their function;
- Have no concurrent responsibilities or conflicts of interest which would impair their ability to discharge their duties;
- Act honestly, ethically and with integrity, and
- Are financially sound.

Initial Due Diligence for PCF and CF roles

The initial due diligence process commences as soon as an offer for new role is accepted by the internal/external candidate (note: offers for relevant roles are conditional to the individual successfully completing F&P assessment and obtaining CBI approval, where applicable).

Annual re-assessment PCF and CF F&P compliance

Subsequent to initial due diligence, the Compliance Function conducts an annual re-assessment process for all PCF and CF roles, to ensure evidence of continuous compliance exists and declarations of compliance are renewed.

B.3 Risk Management System including the Own Risk and Solvency Assessment

B.3.1 Risk management system

The risk management system of HRI is articulated through a number of policies and frameworks, the key ones being the Risk Strategy, the Risk Management Framework and the System of Limits and Thresholds. The Risk Strategy describes the overall approach to risk and includes the Risk Appetite Statements. The Risk Management Framework sets out how the risk management system is structured in practice, the roles and responsibilities of the stakeholders in the process, and the risk assessment approach. The System of Limits and Thresholds provides the link between the internal model and its use in the risk management of HRI.

A risk register is used as the primary tool for identifying, measuring, monitoring, assessing and recording the risks faced by the business. The risks are identified, analysed and rated by the risk owner, with the support of the Risk Management function. The risk register covers both risks that the Company is currently exposed to and emerging risks.

A risk report is prepared quarterly by the Risk Management function for review and approval by the Risk Committee. The report includes amongst other things a summary of the risk register and an assessment of the identified risks, the System of Limits and Thresholds report, an update on whether any of the Risk Appetite Statements have been breached and an update on emerging risks. A risk report is also provided to the Board on a quarterly basis.

The ORSA process is conducted on an ongoing basis throughout the year and provides the link between the risk management system and the decision-making processes of the Company. The process is summarised into the ORSA Report, which is prepared by the Risk Management function with input from the other key functions, and is reviewed and approved by the Board at least annually.

B.3.2 Risk management function

The Risk Management function, led by the Chief Risk Officer, is responsible for ensuring the development and ongoing maintenance of an effective risk management system within HRI. The activities of the Risk Management function are overseen by the HRI Risk Committee.

The Risk Management Function’s responsibilities and authority are documented in detail within the Risk Management Framework and are subject to annual review by the Risk Committee and the Board. The Risk Committee’s duties and responsibilities are detailed in the Terms of Reference, which are also subject to annual review by the Board.

The Board has ultimate responsibility for the governance of the internal model in accordance with regulatory requirements, including approval of any major changes or extensions, deciding on the strategic direction of the internal model, review and approval of the policies governing the internal model and review of the validation of the model results. The Risk Committee is authorised by the Board to provide support in this respect by providing advice to the Board. This governance structure has been established for several years.

An internal model validation policy is in place that is approved by the Board and requires a validation exercise to be performed at least annually. The validation policy specifies both qualitative and quantitative tools and processes including comparison of actual to estimated results, review of the robustness of the model including the key drivers of capital, and stress and scenario tests to check the results for reasonableness.

B.3.3 Own Risk and Solvency Assessment (ORSA)

As mentioned earlier, the ORSA process is conducted on an ongoing basis throughout the year. The process and its results are summarised into the ORSA Report, which is prepared by the Risk Management function with input from the other key functions, and is reviewed and approved by the Board at least annually.

As part of the ORSA process, the risks faced by the Company are considered and the capital position of the Company is projected in line with the five year business plan to ensure that the capital position supports the business plan and the development of the risks faced. It also analyses the quality of the capital held and assesses the capital position under alternative scenarios. A number of qualitative and quantitative processes are utilised to assess the risks to which the Company is exposed. A range of stress and scenario tests is also employed to test the Company's exposure in stressed conditions.

The ORSA process is integrated into the decision-making processes of the Company through risk management actions taken as a result of the risk assessment processes, analysis of capital management options, analysis of large new business transactions and the selection of risk mitigation techniques.

B.4 Internal Control System

B.4.1 Elements of the internal control system

HRI implements effective internal controls that provide the Board and management with reasonable assurance in respect of the following:

- The Board and management have an understanding of the extent to which the objectives of HRI's operations are being achieved,
- Published financial statements are reliable, and
- Applicable laws and regulations are complied with at all times.

The Internal Control system consists of systematically designed organisational and technical measures and checks within the Company. It ensures that guidelines are followed and risks are managed so that the Company's strategy can be fully implemented. HRI formalises its Internal Control framework within the Internal Control Policy, further supplemented with the Hannover Re Internal Control System Guideline.

HRI Internal Control (IC) employs fundamental control principles applied consistently across HRI business (including its branches), as follows:

- Segregation of duties across the business and the key processes
- Clearly documented delegated authorities, reporting lines, roles & responsibilities
- Documented policies and procedures
- Documented key processes, subject to regular review:
    - BIC flowcharts

o Narrative processes

- Four Eyes review of all key reports/outputs.

B.4.2 Internal control framework

The HRI Internal Control framework incorporates the following components, which are set out in detail below:

- HRI Operations – the internal controls in place at Board and Senior Management level and across HRI's operations;
- Financial & Regulatory Reporting – the internal controls in place in relation to the production of accurate and reliable financial statements and regulatory reporting, and in particular the role(s) of the Chief Financial Officer and respective Heads of Actuarial Function/ Corporate Actuarial;
- Compliance with Laws and Regulations – including, but not limited to, the role of the Second Line of Defence Control Functions: Compliance, Risk Management and Actuarial Function;
- The Role of Internal and External Audit in providing an independent assessment on the effectiveness of internal controls.

B.4.3 Compliance function

The Board of Directors is responsible for maintaining a permanent Compliance Function within HRI. For this purpose, HRI formally appoints the Head of Compliance, who is supported by the Compliance Executive.

The Head of Compliance has a formal regular reporting line to the Deputy CEO. In addition, the Head of Compliance has a dotted reporting line to the Head of Group Legal Services in Germany. The Compliance Function reports to the Risk Committee on a quarterly basis and to the Board, as necessary.

The Compliance Function is implemented via the Compliance Charter, which has been approved by the HRI Board. The Charter provides for the independence of the Compliance Function from business activities and sets out the management reporting line to the CEO of HRI and the governance reporting lines into the Risk Committee and the Board of HRI.

The Head of Compliance has overall responsibility for co-ordinating the management of compliance risk, implementation of a robust compliance framework and for the delivery of the Annual Compliance Plan.

The Head of Compliance is responsible for assisting the business in identifying the procedures and controls necessary to meet legal and regulatory obligations and for ensuring that these are consistent with the Compliance Framework. The Compliance Executive supports the Head of Compliance in maintaining a strong compliance culture within HRI, co-ordinating the management of compliance risk and the delivery of the Annual Compliance Plan.

The roles, responsibilities and authority of the Compliance Function, as well as the overview of HRI Compliance framework is documented within the Compliance Charter.

B.5 Internal Audit Function

Hannover Re Group Auditing performs the Internal Audit Function for HRI. The provision of Internal Audit Services is governed by an SLA with Group Auditing, which is approved by the Audit Committee. The SLA is based on a three year rolling Internal Audit Plan (“the Audit Plan”).

There is an established Internal Audit Policy, outlining roles and responsibilities of the Internal Audit Function, as well as the roles and responsibilities of the Board, Audit Committee and HRI Management and employees in relation to the Internal Audit process. The key role of the Internal Audit Function is to assess the adequacy and effectiveness of the Internal Controls system and other elements of the HRI system of governance, in line with a risk based approach.

An Audit Plan is agreed as part of the SLA and comprises a three year Audit Cycle. This Cycle is designed to prioritise risk in the HRI Audit Universe. The Audit Cycle sets out the areas of the business that Group Auditing will review as part of the internal audit process and the timelines for the performance of such a review. The Audit Plan is approved by the HRI Audit Committee. The Audit Plan can be amended as required with agreement from the Audit Committee. The Audit Plan is drafted based upon an assessment of the risks facing HRI and the activities carried out by HRI. Management’s goals and objectives, together with its perceptions of risks and exposures, will also form a key input to Internal Audit’s strategic and operational planning process.

The Audit Plan identifies the business areas to be reviewed as part of the audit process. The scope of the audit for each business area is developed by Group Auditing in conjunction with the Internal Audit Liaison, Senior Management and relevant area management, and is set out in an Audit Instruction.

Group Auditing is responsible for allocating resources to audits and ensuring adequate rotation to maintain independence and impartiality.

The HRI Internal Audit Policy clearly articulates that Group Auditing have the right to review all activities and processes relevant to the performance of the audit/investigation and have full, free and unrestricted access to all the functions, records, assets, property and personnel necessary for the proper discharge of its responsibilities.

The Head of Group Auditing is subject to F&P requirements from HRI’s perspective, and for that purpose was designated as CF 2. An annual due-diligence process is conducted to ensure continuous compliance with F&P requirements. In addition, in line with Solvency II requirements for outsourced key control functions, an existing Non-Executive Director of HRI was appointed as the PCF responsible for outsourced Internal Audit Function (effective December 2015).

B.6 Actuarial Function

The responsibility for the Actuarial Function is delegated to the Head of Corporate Actuarial L&H and the Head of Corporate Actuarial P&C, who have a reporting line to the CEO and Deputy CEO respectively. Formalised Actuarial Function Terms of Reference are in place, outlining roles and responsibilities of the Actuarial Function, key requirements applicable to its structure, independence and remit.

The Actuarial Function and specifically the Head of the Actuarial Function have responsibilities under Solvency II and the CBI’s Domestic Actuarial Regime and Related Governance Requirements under Solvency II. These responsibilities cover the following key areas:

- Co-ordination of the calculation of the Technical Provisions under Solvency II

- Assess the consistency of the data used in the calculation of the Technical Provisions
- Actuarial Opinion on the Technical Provisions
- Actuarial Opinions on the Underwriting policy and Retrocession policy
- Actuarial Opinion on the ORSA process
- Annual Actuarial Function report to the Board including the Actuarial Report on Technical Provisions

The Board of Directors is responsible for maintaining a permanent Actuarial Function within the organisation. For this purpose, HRI formally appoints a Head of Actuarial Function, and grants sufficient human and technical resources to achieve the defined objectives. The appointment of the Head of Actuarial Function is subject to pre-approval by the Central Bank of Ireland in accordance with Fitness and Probity Regulations. The removal of the Head of Actuarial Function must be approved by the Board of Directors, in accordance with the CBI Corporate Governance Requirements.

B.7 Outsourcing

HRI has an Outsourcing Policy is in place which is reviewed annually by the Risk Committee and approved by the Board. Under the Outsourcing Policy, documented Service Level Agreements (SLAs) are required for each outsourced relationship and must set out service standards to be adhered to. The Head of Compliance acts as Outsourcing Coordinator and oversees compliance with the policy.

The outsourcing management process consists of the following five steps:

- Planning and classification
- Risk assessment and due diligence
- Contract management and notification
- Steering and monitoring
- Renewal and/or termination.

The Compliance Function maintains a register of all critical or important outsourcing arrangements which HRI are party to. The outsourcing risk, associated key controls and their effectiveness are monitored and assessed on regular basis as part of risk register cycle coordinated by the Risk Management Function.

In all cases, HRI benefits from the infrastructure, process and resources established within respective Group entities in executing relevant services outlined above.

Appropriate risk assessments and due diligences are conducted on annual basis to ensure that outsourced arrangements remain adequate and effective. An agreed annual review and reporting process is executed by responsible SLA Relationship Managers for each outsourced agreement, to ensure regular review against agreed service standards is carried out, documented and reported to Operational Council, and any issues escalated in a timely manner.

B.8 Any other information

B.8.1 Evaluating the appropriateness of the system of governance

The system of governance is considered to be appropriate for the Company, taking into account the nature, scale and complexity of the risks inherent in the business.

B.8.2 Other information

There is no other material information regarding the system of governance.

C. Risk Profile

In the context of its business operations HRI enters into a broad variety of risks. These risks are deliberately accepted, steered and monitored in order to be able to act on the associated opportunities. The parameters and decisions of the Board with respect to the risk appetite of HRI are based on the calculations of risk-bearing capacity and are fundamental to the acceptance of risks.

The risk profile of HRI reflects the Risk Strategy, which is to actively assume Life & Health and Property & Casualty underwriting risks, while accepting other risks including market, counterparty default and operational risks as a consequence of that strategy.

The risk profile is expected to materially change during 2018 due to the impact of the US Tax Cuts and Jobs Act.

Prudent Person Principle

HRI's assets are invested in line with the Investment Guidelines. The Investment Guidelines are designed in accordance with the 'prudent person principle'.

Risk Concentrations

HRI monitors and sets limits on its exposure to various risk concentrations including natural catastrophe exposures, per life concentrations, geographic concentrations, asset concentrations and counterparty exposure concentration.

Risk Mitigation

The key technique used to mitigate risks is retrocession. While HRI has both internal and external retrocession arrangements in place, it does not typically rely heavily on internal or external retrocession. Results are available gross and net of retrocession in order to monitor the continued effectiveness of the arrangements in place.

HRI uses derivative financial instruments to a limited extent. HRI currently only utilises forward currency contracts and foreign currency swaps. The primary purpose of the derivatives is to hedge the non-USD net technical liabilities or the foreign dominated investments.

Stress tests and scenario analysis

HRI performs a wide range of stress tests and sensitivity analysis to test the resilience of the balance sheet was included in the latest ORSA Report. These included:

- Various biometric stresses on the key exposures in the Life & Health line of business.
- Tailored stresses on the primary exposures in the Property & Casualty line of business.
- A number of economic stresses including an increase in credit spreads, increase in interest rates and currency up/down movements. These demonstrated that HRI would have sufficient capital to withstand these scenarios.
- Other relevant scenarios tailored to HRI such as a significant operational risk event, a large increase in a certain line of Property & Casualty business and the non-renewal of the ancillary own funds.

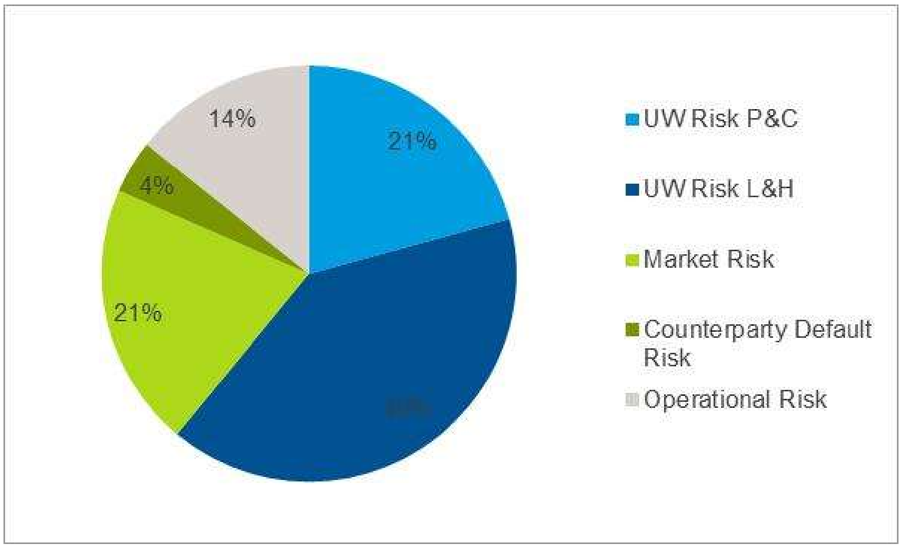
- Relevant combined and reverse stress tests.

Off-balance sheet exposures

Within the Tier 3 own funds is included an Ancillary Own Funds (“AOF”) item approved by the Central Bank of Ireland on 14 December 2015. The material terms and conditions of the Tier 3 Ancillary Own Funds are described further in Section E 1.2.2 Ancillary Own Funds. The counterparty for the AOF is Hannover Rück SE.

Quantitative information on Risk Exposures

The Solvency Capital Requirement split by individual risk categories as at 31 December 2017 is below.



C.1 Underwriting risk

C.1.1 Underwriting Risks Property/Casualty and Health Not Similar to Life Techniques

HRI focuses on writing structured and tailor-made reinsurance as well as aggregate covers through its Property & Casualty line of business. Due to the relatively risk remote nature of that business, the risks are low compared to the premium volume. In particular there is relatively low reserve risk and catastrophe risk associated with the structured solutions. HRI also writes intercompany solutions, where the risks and rewards of business assumed in connected companies are shared with HRI.

There has been no material change in Property & Casualty underwriting risk over the reporting period.

C.1.2 Underwriting Risks Life and Health Similar to Life Techniques

HRI’s Life & Health business is divided into Financial Solutions and Risk Solutions business.

Financial Solutions cover all treaties in which the primary emphasis is on financing or capital management components. These include providing both cash and non-cash financing solutions to service clients’ needs, mainly in the US market.

The Risk Solutions business is focused on reinsurance of mortality business but does include other exposures such as morbidity, lapse and longevity. There is a strong focus on North America, the United Kingdom and Asia.

The largest source of risk is Life & Health underwriting risk and in particular long-term mortality risk and short-term pandemic risk. This reflects HRI's risk profile and is expected due to the exposure to underlying life assurance business. Due to the long term nature of this business a relative increase in mortality rates in each future year has a significant impact in terms of the present value of this change.

There has been no material change in Life & Health underwriting risk over the reporting period.

C.2 Market risk

HRI's market risk includes interest rate risks, currency risks, default and spread risks and equity risks.

Currency risk has been somewhat mitigated since the change in functional currency to US dollars as the currency of the majority of technical liabilities and own funds is now matched to the currency of the assets. Some residual exposure to exchange rate volatility on the own funds remains due to non-dollar denominated assets and business.

HRI's portfolio currently consists in large part of fixed-income securities, and hence interest rate and credit spread risks account for the bulk of the market risk. HRI manages interest rate and currency risks through its asset liability matching program.

HRI is also exposed to changes in credit spreads, where an increase in credit spreads on its investments will reduce the market value of the assets without any corresponding change in the value of liabilities, which remain valued on a risk-free basis.

There has been no material change in market risk over the reporting period.

C.3 Credit risk

Credit risk or counterparty default risk consists primarily of the risk of complete or partial failure of a counterparty and the associated default on payment. Counterparty default risk is controlled through counterparty exposure limits. Retrocession partners and broker partners are carefully selected and monitored in respect of their creditworthiness in order to minimise counterparty default risk as much as possible. The creditworthiness of cedants and retrocessionaires is monitored through a quarterly review of credit ratings, as provided by external rating agencies. A group-wide Cession Limits system is also in place which must be used before any third party retrocession is placed. It assesses whether there is capacity available for the placement and the creditworthiness of the counterparty.

There has been no material change in credit risk over the reporting period.

C.4 Liquidity risk

Liquidity risk refers to the risk of being unable to meet financial obligations as they fall due. Due to the nature of the business written by HRI, there is a risk that while HRI has sufficient capital, there could be a short or medium-term liquidity strain. To mitigate this risk, the liquidity position is assessed at least quarterly. The analysis considers the current liquidity position plus known liquidity requirements in the foreseeable future, such as cash financing transactions or loan maturities.

As at 31 December 2017, the expected profit included in future premiums (EPIFP) is USD 1,280m. The majority of HRI's business has no surrender values and therefore the EPIFP is any negative BEL by Line of Business.

There has been no material change in liquidity risk over the reporting period.

For the "total amount of the expected profit included in future premiums" required by Art. 295 (5) of the Delegated Regulation 2015/35 please refer to the Quantitative Reporting Template S.23.01.01., item R0790. We explicitly do not use this figure for our liquidity management.

C.5 Operational risk

Operational risk is defined as the risk of loss arising from inadequate or failed internal processes, from personnel and systems, or from external events. Unlike underwriting risks which are deliberately entered into, exposure to operational risk is not desired but is unavoidable. HRI's focus is therefore on minimising operational risk as much as possible.

The risk is strongly associated with human error, systems failure and inadequate controls and procedures. Operational risk, if unmitigated, may result in financial loss, unavailability of services, information deficiencies or loss, and damage to reputation. HRI maintains an Operational Risk Register, where the key areas of operational risk are defined, assigned to risk owners, monitored and assessed each quarter. The results of the assessment are reported to the Risk Committee. The key areas where operational risk has the potential to impact HRI's business are as follows:

- Business continuity
- Business processes and data quality
- Compliance
- Fraud
- Human Resources
- IT
- Outsourcing

There has been no material change in HRI's exposure to operational risk over the reporting period.

C.6 Other material risks

HRI is also exposed to other material risks that are not covered by the categories in the previous sections. These risks include reputational, strategic and emerging risk. These risks are all measured, monitored and rated through HRI's risk register and are regularly reported on to the Risk Committee and/or Board, as appropriate. Group-wide frameworks for managing these risks have also been rolled out and adopted by HRI.

Reputational risk is defined as the risk that adverse publicity regarding HRI's business practices and associations, whether accurate or not, could cause a loss of confidence in the integrity of the company. The risk of loss of confidence relates to all stakeholders, which include existing and potential clients, brokers, suppliers and supervisors. It has the capacity to damage our existing business and our future potential.

Strategic risk refers to the risk of being unable to implement appropriate business plans and strategies, make decisions, allocate resources or adapt to changes in the business environment. It can also arise due to external factors such as changes in the accounting rules, changes in taxation or regulatory changes.

Emerging risks are potential new future risks or evolving risks which are difficult to quantify and may have a high loss potential. Emerging risks are marked by a high degree of uncertainty.

C.7 Any Other Information

There is no other material information regarding the risk profile.

D. Valuation for Solvency Purposes

General valuation principles

The valuation of assets and liabilities pursuant to Solvency II is based on economic and market-consistent principles, and takes account of inherent risks.

In line with this concept the assets and liabilities are valued as follows:

- Assets should be valued according to the amount with which they could be exchanged between knowledgeable willing parties in an arm's length transaction.
- Liabilities should be valued according to the amount with which they could be exchanged between knowledgeable willing parties in an arm's length transaction.
- The fair value of money should be reflected, i.e. all cash flows have to be discounted.
- When valuing liabilities, no value adjustments are made in order to account for the creditworthiness of the insurance or reinsurance company.
- The valuation of assets and liabilities is based on the assumption that the company will continue its business activity ("going concern principle").
- Individual assets and liabilities are valued separately.
- Concepts of materiality shall apply. Absent or erroneous information pertaining to items shall be deemed significant if it could influence the individual or aggregated business decisions of the recipients.
- Simplifications may be applied when the method is deemed appropriate for the type, scope and complexity of the inherent risk.

The underlying principle used for determining the market values of assets and liabilities, with the exception of technical provisions, is the valuation principle pursuant to International Accounting Standards, as was adopted by the EU Commission pursuant to the Directive (EC) No. 1606/2002. For example, the guideline for determining fair values pursuant to IFRS 13 Fair Value Measurement, serves as a source of orientation.

The cash flow view plays a key role in the valuation of technical provisions:

- The value of technical provisions corresponds to the current amount insurance and reinsurance undertakings would have to pay if they were to transfer their insurance and reinsurance obligations immediately to another insurance or reinsurance undertaking.
- Technical provisions must be calculated in a prudent, reliable and objective manner.
- The value of technical provisions shall be equal to the sum of a best estimate and a risk margin
- The calculation of the best estimate (so-called "Best Estimate Liability" or "BEL") utilises cash flow projections, which reflect the settlement of insurance and reinsurance liabilities over the course of the term.
- The BEL is supplemented by a risk margin. The calculation of the risk margin is done using a Cost of Capital approach.

Any valuation methods used must always work in sync with Article 75, respectively Articles 77 to 82 and Article 86 of the Directive 2009/138/EC.

Assessing active markets

In the course of valuing assets, it is necessary to assess as to whether a market is either active or not. Only when a market is active may the current value be taken directly from these markets or derived from comparable assets traded there, in order to determine the market value of assets. If a market cannot be categorised as active, the market value is to be determined using valuation models. Whether or not a market can be viewed as an active market hinges on a discretionary decision regarding the type of financial instruments and local markets. At HRI this is, however, based on the following predetermined parameters.

- Business transactions occur with sufficient frequency and corresponding volume, so that price information is continuously available
- The products which are traded on the market are homogeneous
- Contractually willing buyers/sellers can, as a rule, be found at any time
- Prices are freely accessible to the public

An active market is deemed not to exist when, due to the complete and long-term decline in buyers and/or sellers, market liquidity is no longer established. Should transactions be verified as resulting exclusively from forced deals, compulsory liquidations or distressed sales, this is just as much an indicator for an inactive market as are high bid/ask spreads.

In the event that an inactive market has been verified, we use valuation models for the calculation of market values. Please refer to section D.4 Alternative methods for valuation.

Note

Due to computational reasons rounding errors of +/- one unit can occur in the tables.

Solvency II balance sheet as of 31 December 2017

The following two pages show the HRI Solvency II balance sheet as at 31 December 2017.

The valuation of these items is further described in subsections "D.1 Assets", “D.2 Technical Provisions”, "D.3 Other liabilities" and “D.4 Alternative methods for valuation”.

In USD 000's	Item	Solvency II
Assets		
Intangible assets	R0030	-
Deferred tax assets	R0040	9,166
Pension benefit surplus	R0050	-
Property, plant & equipment held for own use	R0060	142
Investments (other than assets held for index-linked and unit-linked contracts)	R0070	2,912,386
Property (other than for own use)	R0080	-
Holdings in related undertakings, including participations	R0090	50,000
Equities	R0100	-
Equities - listed	R0110	-
Equities - unlisted	R0120	-
Bonds	R0130	2,723,905
Government Bonds	R0140	1,454,560
Corporate Bonds	R0150	1,187,163
Structured notes	R0160	-
Collateralised securities	R0170	82,182
Collective Investments Undertakings	R0180	23,532
Derivatives	R0190	5,263
Deposits other than cash equivalents	R0200	10,922
Other investments	R0210	98,765
Assets held for index-linked and unit-linked contracts	R0220	-
Loans and mortgages	R0230	10,180
Loans on policies	R0240	-
Loans and mortgages to individuals	R0250	-
Other loans and mortgages	R0260	10,180
Reinsurance recoverables from:	R0270	148,150
Non-life and health similar to non-life	R0280	(42,300)
Non-life excluding health	R0290	(42,300)
Health similar to non-life	R0300	-
Life and health similar to life, excluding health and index-linked and unit-linked	R0310	190,450
Health similar to life	R0320	-
Life excluding health and index-linked and unit-linked	R0330	190,450
Life index-linked and unit-linked	R0340	-
Deposits to cedants	R0350	2,940,486
Insurance and intermediaries receivables	R0360	578,837
Reinsurance receivables	R0370	4,085
Receivables (trade, not insurance)	R0380	25,960
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	25,008
Any other assets, not elsewhere shown	R0420	-
Total assets	**R0500**	**6,654,400**

In USD 000's	Item	Solvency II
Liabilities		
Technical provisions – non-life	R0510	770,599
Technical provisions – non-life (excluding health)	R0520	698,675
TP calculated as a whole	R0530	-
Best Estimate	R0540	674,931
Risk margin	R0550	23,744
Technical provisions - health (similar to non-life)	R0560	71,924
TP calculated as a whole	R0570	-
Best Estimate	R0580	69,345
Risk margin	R0590	2,579
Technical provisions - life (excluding index-linked and unit-linked)	R0600	3,651,695
Technical provisions - health (similar to life)	R0610	195,668
TP calculated as a whole	R0620	-
Best Estimate	R0630	159,646
Risk margin	R0640	36,022
Technical provisions – life (excluding health and index-linked and unit-linked)	R0650	3,456,027
TP calculated as a whole	R0660	-
Best Estimate	R0670	2,378,258
Risk margin	R0680	1,077,769
Technical provisions – index-linked and unit-linked	R0690	(1,018)
TP calculated as a whole	R0700	-
Best Estimate	R0710	(1,018)
Risk margin	R0720	-
Contingent liabilities	R0740	-
Provisions other than technical provisions	R0750	8,212
Pension benefit obligations	R0760	-
Deposits from reinsurers	R0770	(15,086)
Deferred tax liabilities	R0780	8,451
Derivatives	R0790	6,277
Debts owed to credit institutions	R0800	-
Financial liabilities other than debts owed to credit institutions	R0810	202,062
Insurance & intermediaries payables	R0820	92,047
Reinsurance payables	R0830	41,508
Payables (trade, not insurance)	R0840	-
Subordinated liabilities	R0850	346,823
Subordinated liabilities not in BOF	R0860	-
Subordinated liabilities in BOF	R0870	346,823
Any other liabilities, not elsewhere shown	R0880	3,125
Total liabilities	**R0900**	**5,114,695**
Excess of assets over liabilities	**R1000**	**1,539,706**

D.1 Assets

D.1.1 Deferred tax assets R0040

in USD 000's	Solvency II	IFRS
Deferred tax assets	9,166	16,738

In the IFRS financial statements balance sheet deferred tax is provided in full in accordance with IAS 12 Income Taxes, using the balance sheet liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantially enacted at the Statement of Financial Position date. Deferred tax assets and liabilities are not discounted.

In the Solvency II balance sheet, deferred taxes may result from the following:

- Taxable / deductible temporary differences between the Solvency II balance sheet and the tax base (tax balance sheet); and
- Unused tax loss and tax credits that may be carried forward.

A deferred tax asset (under Solvency II and the statutory account valuations) is recognised only to the extent that it is probable that future tax profits will be available against which the asset can be utilised. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Differences in valuation

The difference in valuation relates to the taxable / deductible temporary differences between the Solvency II balance sheet and the tax base (tax balance sheet).

D.1.2 Property, plant & equipment held for own use R0060

in USD 000's	Solvency II	IFRS
Property, plant & equipment held for own use	142	819

The market value of internally-used property is calculated as follows:

The market value of the leasehold improvements is Nil as it is assumed that the improvements will revert to the lessor at the expiration of the lease.

With regard to the fixtures, fittings and equipment the valuation base pursuant to the Solvency II balance sheet is seen as identical with the valuation base used for annual accounts in line with commercial law. A revaluation is not conducted for reasons of materiality.

Differences in valuation

The difference between the valuation bases found in the Solvency II balance sheet and the IFRS financial statements is attributable to the net book value of the leasehold improvements under IFRS.

D.1.3 Participations and related undertakings R0090

in USD 000's	Solvency II	IFRS
Participations and related undertakings	50,000	50,000

The investment was made towards the end of 2016 and during 2017 further shares were issued at the original cost therefore cost is considered to be remain the best estimate of fair value.

D.1.4 Bonds R0130

in USD 000's	Solvency II	IFRS
Bonds	2,723,905	2,716,211

Government bonds, corporate bonds, structured notes and collateralised securities are predominantly valued on the basis of quoted prices, which have been realised on active markets. If no publicly available price quotations are available or the markets in which they originate are deemed to be inactive, the items are valued on a theoretical basis.

Market quotations are provided by selected price service agencies, trading information systems or intermediaries (brokers) deemed to be trustworthy. The potential sources of price information available are allocated a ranking within a hierarchy. As a rule, price quotations issued by price service agencies are allocated the highest priority, while those provided by intermediaries are allocated the lowest. Exceptions can occur, for example, for selected market segments / currency combinations.

Differences in valuation

The difference between the Solvency II valuation bases and the IFRS financial statements totalling USD 7.6m is attributable to the fixed income securities are acquired with the intent and ability to be held until maturity. Under IFRS they are initially recognised at fair value and directly attributable costs. Subsequent to the initial measurement they are measured at amortised cost. The corresponding premiums or discounts are recognised in profit or loss across the duration of the instruments using the effective interest rate method. For Solvency II these assets are valued at fair market value.

D.1.5 Collective Investment Undertakings R0180

in USD 000's	Solvency II	IFRS
Collective Investment Undertakings	23,532	23,532

Collective investment undertakings consist of High Yield Bond Funds and Debt Funds.

The High Yield Bond Funds are actively managed funds, focused on publicly traded bonds. These assets are predominantly valued on the basis of quoted prices, which have been realised on active markets. If no publicly available price quotations are available or the markets in which they originate are deemed to be inactive, the items are valued on a theoretical basis.

D.1.6 Derivatives R0190

in USD 000's	Solvency II	IFRS
Derivatives	5,263	83,034

Financial derivatives (e. g. options or forwards) are valued based on quoted market prices. If there are no market prices, the positions are evaluated theoretically.

Foreign exchange forward contracts, swaps and forward purchases can be evaluated by using the discounted cash flow method on the payoff profiles

The discount rates and the interest rate differentials are the two main factors used in calculating the valuation of the derivatives currently held by HRI.

Differences in valuation

The embedded credit derivative is implicitly included within the value of Deposits to cedants valuation under Solvency II as these assets are valued at fair value. In the IFRS financial statements the embedded credit derivative is separately reported as a derivative. This resulted in a USD 77.8m difference on the valuation of the derivative assets between Solvency II and the stator accounts.

D.1.7 Deposits other than cash equivalents R0200

in USD 000's	Solvency II	IFRS
Deposits other than cash equivalents	10,922	-

The deposits other than cash equivalents are short-term highly liquid investments with less than 90 days' maturity from the date of acquisition. The funds are normally invested for periods of less than one month. They are carried at face value which is a reasonably approximate fair value at the reporting date.

Differences in valuation

The difference between the Solvency II value and the IFRS financial statements value result from the reclassification of short term bank deposits which are classified as cash and cash equivalents in the IFRS financial statements.

D.1.8 Other investments R0210

in USD 000's	Solvency II	IFRS
Other investments	98,765	98,765

Life settlements are valued on a policy-by-policy basis, using a discounted cash flow method. The fair value of a policy at the point of purchase is assumed to be equal to the purchase price. The fair-value at future dates is assumed to be the present value of expected future cash flows discounted at the risk-free term structure of spot rates (based on swaps) plus a policy-specific risk margin. The main risks associated with these instruments are mortality and interest rate risk. The yield collars, which are purchased and valued on a policy-by-policy basis, are calculated as the difference between the fair value of the underlying policy and that fair value capped at the annual rate implied in the contract. Yield collars mitigate downside risk but also cap potential gains.

The secured notes are valued at fair value. The fair value of these notes is calculated using an internal model based on changes in interest rates and credit spreads. The main risks associated with these instruments are counterparty, lapse and mortality risk.

D.1.9 Loans and mortgages R0230

in USD 000's	Solvency II	IFRS
Loans and mortgages	10,180	10,171

The surplus note is with a related special purpose financial captive insurance company. The fair value is the principal balance with interest accrued to contract terms. The main risk associated with this investment is counterparty and credit risk.

D.1.10 Reinsurance recoverables R0270

The valuation of Reinsurance recoverables is described in Section D.2 Technical provisions.

D.1.11 Deposits to cedants R0350

in USD 000's	Solvency II	IFRS
Deposits to cedants	2,940,486	4,617,508

These assets primarily consist of funds held on certain contracts representing the collateral contractually withheld by our cedants to cover the technical liabilities HRI has reinsured. These assets are valued at market value using a mark-to-market method. These assets primarily consist of government, semi-government and corporate bonds. Such investments are typically held in trust and managed in accordance with approved investment guidelines.

Differences in valuation

There are three main reasons for the difference in valuation of Deposits to cedants.

Certain HRI treaties have “notional” funds withheld accounts. HRI does not bear investment risk on these assets and the actual cash flows received/paid are only settled after the depletion/utilisation of the funds withheld balance. Therefore the fair value of these notional funds withheld are deemed to be nil for the purposes of Solvency II as no cash flow takes place. There is an offsetting decrease to the best estimate liability.

The Solvency II balance sheet requires that the deposits are reported separately depending on whether the treaty is assumed (R0350 - Deposits to cedants) or ceded (R0770 – Deposits from reinsurers). The IFRS financial statements do not require this split. Therefore a reclassification between these two line items is required for the purposes of Solvency II.

Also the Deposits to cedants are valued at fair value Solvency II whereas they are valued at amortized cost in the IFRS financial statements. This resulted in an increase in the asset under Solvency II.

D.1.12 Insurance and intermediaries receivables R0360

in USD 000's	Solvency II	IFRS
Insurance and intermediaries receivables	578,837	612,996

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.

Differences in valuation

A certain HRI treaty has a "notional" receivable balance. The fair value of this balance is deemed to be nil for the purposes of Solvency II as no cash flow takes place. There is an offsetting decrease to the best estimate liability.

D.1.13 Reinsurance receivables R0370

in USD 000's	Solvency II	IFRS
Reinsurance receivables	4,085	4,085

The carrying amount of Reinsurance 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 retrocessionaires. The risk of non-payment is mitigated by the use of offset clauses in the underlying contract. Following our review of the receivable balances, no impairment was necessary.

D.1.14 Receivables (trade, not insurance) R0380

in USD 000's	Solvency II	IFRS
Receivables (trade, not insurance)	25,960	25,960

The carrying amount of Receivables (trade, not insurance) is a reasonable approximation of fair value.

D.1.15 Cash and cash equivalents R0410

in USD 000's	Solvency II	IFRS
Cash and cash equivalents	25,008	35,930

The Cash and cash equivalents are carried at face value and consist of cash at banks. They are carried at face value which is a reasonable approximation to fair value at the reporting date.

Differences in valuation

The difference between the Solvency II value and the IFRS financial statements value result from the reclassification of short term bank deposits which are classified as cash and cash equivalents in the IFRS financial statements.

D.2 Technical Provisions

The technical provision (TP) under Solvency II is determined as the sum of the best estimate liability (BEL) and the risk margin (RM).

Determining the TP, the risk-free yield curve in line with EIOPA requirements are used. Neither volatility nor a matching adjustment is applied. Furthermore, the risk-free yield curve is not adjusted as set out in article 308c of the directives 2009/138/EC.

A temporary deduction according to article 308d of the directives 2009/138/EC is not applied.

The concept of calculating the TP “as a whole” is currently not applied to any business written.

Under Solvency II, all contracts must be valued over their entire term (Ultimate View of the Contract Limits).

For Solvency II purposes, all contracts have to be evaluated over the whole lifetime (ultimate view). In general, a contract boundary is set on that future date where at least one of the following criteria is met:

- The future date where the (re)insurance undertaking has a unilateral right to terminate the contract
- The future date where the (re)insurance undertaking has a unilateral right to reject premiums payable under the contract
- The future date where the (re)insurance undertaking has a unilateral right to amend the premiums or benefits payable under the contract in such a way that the premiums fully reflect the risks.

In case no contract boundaries exist, the projection is based on a look-through approach, i.e. the policies are projected until their natural expiry.

The BEL is shown on a gross basis in the following, i.e. before the reduction of reinsurance recoverables, and the RM is shown on a net basis, i.e. reflecting the risk mitigating effect of retrocessions. This is consistent with the methodology used in the Solvency II balance sheet.

Best Estimate Liability (BEL)

The calculation of the BEL is based on the projection of future cash in- and outflows like premiums, claims, and expenses. Best estimate assumptions are used in the calculation of the BEL. The expenses consist of direct administration expenses and costs of on-going operations.

As described in Section “Deposits to cedants R0350”, cash flows in connection with funds withheld (increase, decrease or interest on funds withheld) of the underlying business are usually netted against the liability cash flows. Exceptions from this rule are funds held with inherent capital market risk and funds withheld with insufficient offset possibilities (with the respective liabilities). The respective amounts are shown separately on the asset side of the balance sheet, if applicable. The netting of the deposits has no impact on the own funds.

For the Property & Casualty business there are not any material financial options and guarantees (FOGs). For the Life & Health business, there is an immaterial amount of FOGs for US business only. It is included in the BEL.

The projections are done separately for assumed and retroceded business using the same bases, methods and assumptions.

Risk Margin (RM)

According to article 37 (1) of the delegated acts (EU) 2015/35, a uniform cost-of-capital approach is used for calculating the risk margin.

The Cost of Capital (CoC) factor is 6%. The required capital is the SCR under Solvency II according to Hannover Re’s internal model (operational risk according to standard formula). The allocation of the SCR to the lines of business reflects the contribution to the SCR (Art. 37). The distributed capital is run off in future years using appropriate risk drivers for each line of business.

The following have not been used by HRI in the calculation of the Solvency II technical provisions:

- Matching adjustment
- Volatility adjustment
- Transitional risk-free interest rate term structure
- Transitional deduction.

D.2.1 Life & Health: Valuation Principles

S.12.01.02 Life and Health SLT Technical Provisions included in the “Quantitative Reporting Templates” section shows the technical provisions associated with each HRI Life & Health line of business.

Valuation Bases

In all cases the technical provisions have been calculated as the sum of the Best Estimate Liability and Risk Margin.

The Best Estimate Liability is calculated as the present value of future cashflows arising within the contract boundary using current best estimate assumptions and the relevant risk-free interest term structure. The cashflows projected include the following:

- Premiums
- Benefits
- Commissions
- Profit sharing payments
- Expenses

Included in the Best Estimate Liability is an estimation of incurred but not reported claims and outstanding claims where relevant.

The Risk Margin is calculated using the cost-of-capital approach as set out in Delegated Acts Solvency II Article 37. The approach used falls under Method 1 of the hierarchy of methods as set out in Guideline 62 of the EIOPA Guidelines on the Valuation of Technical Provisions (i.e. to approximate the individual risks or sub-risks within some or all modules and sub-modules to be used for the calculation of future Solvency Capital Requirements).

Life

Methods

This line of business covers a significant number of treaties, originating primarily in the US and to a lesser extent in the UK and Asia as well as a small number of treaties coming from the rest of the world. The underlying business covers term, permanent and annuity business through traditional reinsurance arrangements, with and without financing, as well as through more structured financing reinsurance arrangements which are more risk remote.

A combination of seriatim data and model points is used to project the best estimate future cashflows using actuarial projection programmes.

The Best Estimate Liability also includes cashflows related to administration and overhead expenses generated within HRI.

Main Assumptions

The primary assumptions for the traditional risk reinsurance arrangements are mortality and lapse.

The base mortality for the US originated business has been developed from Hannover Re's in-house US mortality system and calibrated to emerging experience. The base mortality for the UK originated business has been developed based on a UK industry mortality table, calibrated to recent experience. Mortality assumptions include assumptions for future mortality improvement, developed from US and UK population mortality improvements respectively. The mortality assumption for the Asian business has also been developed based on industry mortality tables and there is no assumption for future mortality improvement.

Lapse assumptions are based on current best estimates, reflecting factors such as duration, issue age, product type, sales channel, risk classes and single/joint life. For term business in the US, premiums increase significantly in the post level period and the lapse assumption varies by the relationship of the post level premium to the level premium.

The primary assumptions for the US originated financing reinsurance arrangements are mortality and lapse but also extend to premium payment patterns (for flexible premium products) and benefit utilization patterns (for annuity products). For the structured transactions, cedant recapture assumptions are also material.

The assumptions for the traditional financing are set based on original pricing and historical experience where credible. For the structured transactions, the experience assumptions are generally those developed at pricing but treaty performance relative to expected is monitored and updates made if required.

Valuation Differences

The following table shows the difference between the Solvency II technical provisions and the technical provisions reported in the financial statements:

SII & IFRS Technical provisions

In USD 000's

Line of Business	BEL	RM	TP	IFRS Technical Provisions*	Comparison SII and IFRS
Life	2,377,240	1,077,769	3,455,009	3,522,375	(67,366)

*IFRS Technical Provision = Benefit reserve + IBNR + O/S claims reserve + UPR + Profit Commission Reserve- DAC

The IFRS reserves in the financial statements have been calculated under USGAAP principles.

For the traditional arrangements, the benefit reserve component is calculated using a Gross Premium Valuation approach for acquired business and a Net Premium Valuation approach otherwise. The benefit reserve component reflects the best estimate assumptions at the start of the contract with a provision for adverse deviation, whereas Solvency II reflects the current best estimate view of assumptions. The best estimate view of these assumptions has evolved over time arising from own emerging experience and industry studies.

The Solvency II technical provisions include a risk margin. The benefit reserve assumptions include a provision for adverse deviation but the IFRS technical provisions do not include a further explicit risk margin similar to the Solvency II methodology.

The Best Estimate Liability is calculated using current risk free interest rates whereas the benefit reserve is calculated using a valuation interest rate set at the start of the contract. The average valuation interest rate is higher than the current risk free rates.

There are large differences between the Solvency II and IFRS technical provisions related to where balances are shown on the respective balance sheets. The IFRS technical provision above does not include contract deposits of USD 535.9m whereas these form part of the Solvency II technical provision. On the other hand, for some treaties the structure is set such that the only actual cashflows that occur are the transfer of reinsurer's margin and the claims in excess of the funds withheld balance. The funds withheld accounts (USD 747.9m) do not create any cashflows between the insurance company and reinsurance company, with no investment risk borne by HRI on the assets, and therefore the BEL is set using the actual cashflows expected in each of the treaties.

For the structured transactions the IFRS reserves are zero. The corresponding Solvency II technical provisions are negative for these deals, representing the expectation of receipt of future fee income, with insignificant risk margins given the remoteness of the risk being provided for.

The Incurred but not reported and outstanding claims reserves are consistent between IFRS and Solvency II.

Health

Methods

This line of business comprises treaties where the material underlying risks relate to Long Term Care, Medicare Supplement Insurance and Medicare Advantage products originating in the US as well as critical illness and long term care products originating in Asia. The Best Estimate Liability is calculated using actuarial models built in an actuarial modelling programme to project the future cashflows using model points (developed from seriatim data) or in aggregate at a treaty/plan level depending on the level of detail provided by clients.

Main Assumptions

The primary assumptions are morbidity, lapse and mortality as well as premium increase rates which are a feature of the underlying Medicare Supplement and Long Term Care business in the US.

Assumptions are set based on original pricing, client provided information, historical experience, and industry specific information.

Valuation Differences

The following table shows difference between the Solvency II technical provisions and the technical provisions reported in the financial statements:

SII & IFRS Technical provisions

In USD 000's

Line of Business	BEL	RM	TP	IFRS Technical Provisions*	Comparison SII and IFRS
Health	159,646	36,022	195,668	193,277	2,391

The IFRS reserves have been calculated under USGAAP principles or in some cases set equal to the client reported US Statutory reserves. For those calculated under USGAAP the benefit reserve component reflects the best estimate assumptions at the start of the contract with a provision for adverse deviation, whereas Solvency II reflects the current best estimate view of assumptions. The best estimate view of these assumptions has evolved over time arising from own emerging experience and industry studies.

The Solvency II technical provisions include a risk margin. The benefit reserve assumptions include a provision for adverse deviation but the IFRS technical provisions do not include a further explicit risk margin similar to the Solvency II methodology.

The Best Estimate Liability is calculated using current risk free interest rates whereas the benefit reserve is calculated using a valuation interest rate set at the start of the contract. The average valuation interest rate is higher than the current risk free rates.

Reinsurance Recoverable

The following table shows the reinsurance recoverable amount per line of business:

SII Reinsurance Recoverable

In USD 000's

Line of Business	Reinsurance recoverable
Life	190,450
Health	0

The reinsurance recoverable reflects retrocession in place, both internally within the Hannover Re Group and externally to third parties. Where appropriate, a default adjustment is included. The balance also reflects a provision established in respect of the impact of US tax reform.

In general the same approach is used to calculate the reinsurance recoverable as for the calculating the gross Best Estimate Liability, with best estimate future cashflows projected in actuarial systems. The exception to this is for a stop loss agreement where a statistical method is applied

The technical provision included in the financial statements for retroceded business is USD 228.5m. Similar to the assumed technical provisions, there are differences in assumptions and the interest rates used in the calculations. For one treaty, the ceded funds withheld account (USD 180.1m) does not create any cashflows, with no investment risk borne by HRI or the retrocessionaire on the assets, and therefore the BEL is set using the actual cashflows expected in the treaty.

Material Changes in Assumptions

As part of the regular and ongoing review of all assumptions, updates were made on the US originating traditional life reinsurance business is respect of base mortality, future premiums, future policyholder options, lapse assumptions and expense assumptions to reflect experience. There were also model developments and management actions implemented during the year. These changes resulted in an overall increase in the Best Estimate Liability. In light of US tax reform legislation passed in December 2017 a restructure of the US portfolio was anticipated and a provision was established in respect of the anticipated future cashflows arising from these changes.

Level of Uncertainty in the Technical Provisions

The main area of uncertainty around the level of the technical provisions relates to the potential deviation of actual experience from the underlying assumptions and the sensitivity of cash flows to changes in those assumptions.

The most material uncertainty comes from the traditional life and health risk business. Small changes in the mortality rates can have significant effects on the claim payments.

Changes in lapse rates are material for certain products as well. The directionality of the lapse effect is dependent on the treaty and type of reinsurance. In aggregate, the impact of an increase or decrease in lapse rates are both broadly neutral, with offsetting movements between treaties.

Given the risk remoteness of the deals, the structured transactions are a more limited source of uncertainty. The recapture rights of the cedants are an area of uncertainty. Given the risk remoteness of the deals, the structured transactions are a more limited source of uncertainty. The recapture rights of the cedants are an area of uncertainty.

D.2.2 Property & Casualty: Valuation Principles

S.17.01.02 Non-life Technical Provisions included in Section F Quantitative Reporting Templates shows the technical provisions associated with each HRI Property & Casualty line of business. For management reporting purposes underwriting performance is reviewed on a treaty-by-treaty basis as this is how the business is structured. Therefore the analysis below is performed strictly to meet the Solvency II narrative reporting requirements.

For the purposes of calculating the Technical Provisions the same approach is applied regardless of line of business, so the description below applies across all lines of business above.

Methodology

HRI calculate the best estimate liability (“BEL”) on a treaty by treaty basis. Because of the structured nature of the business written by HRI traditional actuarial techniques would not be appropriate, even at a Solvency II segment level, to calculate the best estimate liability at a portfolio level.

In general, the BEL is based on the IFRS reserve minus the expected margin to be earned on the treaty. The expected margin is the weighted average margin derived at the time of pricing, which reflects the present value of the full range of possible outcomes modelled. So the BEL also reflects the weighted average outcome rather than a median scenario. In addition for older treaties where the margin has been recognised a portfolio level reserve is held to reflect the possibility of negative outcomes. However if a particular treaty is not performing as expected a treaty specific approach will be adopted.

Best Estimate Premium Provision

Premium provisions relate to claims events occurring after the valuation date and during the remaining in-force coverage period of policies. The cash flow projections comprise of all future claims payments and expected future premiums stemming from these events.

The best estimate includes all future cash flows associated with existing obligations. Premium provisions take account of expected profits during remaining periods on risk and of the time value of money over the period until settlement of relevant cash outflows. Thus, the best estimate may be negative.

Only premiums that relate to incepted business arising from 'unearned exposure' are taken into account in premium provisions.

Best Estimate Claims Provision

All future payments as well as any future premium resulting from those losses which occurred up to the valuation date are taken into account so as to calculate a best estimate claims provision irrespective of loss reporting date. Thus, any cash flow includes also loss payments and premiums for losses which are incurred but not reported at the valuation date. The best estimate claim provision calculation does not include any implicit or explicit redundancy or deficiency of calculated reserves.

Given the payment information up to the due date an ultimate loss estimator and a respective payout pattern is calculated for each treaty so as to project a cash flow of outstanding claims until ultimate loss is achieved.

Current assumptions

There are a number of treaties with specific assumptions as to their ultimate loss position. These are updated as experience develops or circumstances change and documented appropriately.

For treaties where the margin has been recognised a portfolio wide reserve is held on a best estimate basis.

Some treaties written by HRI contain features, such as the start of maintenance fees for example, to encourage the cedant behaviour that was anticipated at the inception of the treaty, such as commutation at a certain point. The expected margin reflects these features and the probability of commutation or payment of additional premiums or fees. So expected cedant behaviour is reflected in the BEL and any exceptions due to poor performance for example are reflected accordingly as necessary.

Expenses

The technical provisions include all cash flows arising from expenses that will be incurred in serving all recognised reinsurance obligations over the lifetime. Furthermore, expenses used for the technical provision calculation include both, allocated and unallocated (overhead) expenses. Allocated expenses are those expenses, which could be directly allocated to individual claims. Overhead expenses include all other expenses, which the undertaking incurs to settle its obligations and which are not directly assignable to settling claims.

Treaty boundary

For the calculation of technical provisions all expected cash flows allocated to treaties have to be projected into the future. For HRI, all treaties are evaluated over the whole lifetime (ultimate-view). Therefore, for purposes of measurement, the boundary of a reinsurance treaty is the point at which HRI would no longer be required to provide coverage.

Renewals are treated as a new treaty when HRI is no longer required to provide coverage, or the existing treaty does not confer any substantive rights on the ceding company. Obligations that do not relate to premiums which have already been paid do not belong to the treaty, unless HRI can compel the ceding company to pay the future premium.

Allowing for future management actions

HRI makes no allowance for future management actions within the calculation of the P&C technical provisions.

Reinsurance Recoverables within technical provisions

The technical provisions held correspond to the probability-weighted average of all future cash flows including cash flows recoverable from reinsurance contracts. This takes account of the time value of money and the adjustment for the expected losses due to the default of the counterparty. The following table shows the reinsurance recoverables associated with each relevant HRI Property & Casualty line of business, in USD 000's:

Line of Business	Reinsurance recoverable
Motor vehicle liability reinsurance	(69,956)
Marine, aviation and transport	1,814
Fire and other damage to property reinsurance	23,707
General liability	1,283
Non-proportional property reinsurance	852
Total	**(42,300)**

Risk-free interest rates

HRI does not use any transitional measures, the volatility adjustment or the matching adjustment, so the liabilities are discounted at the basic risk-free rate. The relevant risk free discount rate will apply to each currency.

Risk margin

The Risk Margin is calculated using the cost-of-capital approach as set out in Delegated Acts Solvency II Article 37. The approach used falls under Method 1 of the hierarchy of methods as set out in Guideline 62 of the EIOPA Guidelines on the Valuation of Technical Provisions (i.e. to approximate the individual risks or sub-risks within some or all modules and sub-modules to be used for the calculation of future Solvency Capital Requirements).

Comparison of IFRS reserves to Solvency II Technical Provisions

The following table shows a comparison of the gross IFRS reserves versus the Solvency II Technical Provisions in USD 000's:

IFRS Reserves[(1)]	857,189
Adjustments to Solvency II basis[(2)]	(70,613)
Best Estimate Liability	786,576
Risk margin	26,323
Total P&C Technical Provisions	**812,899**

(1) IFRS Reserves = Claims Reserves + IBNR + UPR +Contingent Commission Reserve – Funds Withheld – DAC

(2) Adjustments are the removal of prudence in the IFRS reserves, reflection of contract boundaries and discounting

D.3 Other Liabilities

D.3.1 Provisions other than technical provisions R0750

in USD 000's	Solvency II	IFRS
Provisions other than technical provisions	8,212	8,212

The following items are listed in the Solvency II balance sheet under non-technical provisions:

- Prov. for audit fees and annual report expenses
- Prov. for stock appreciation rights
- Prov. for stock awards
- Outstanding invoices
- Bonuses
- Other various provisions

The carrying amount of other payables and accrued expenses is deemed to be a reasonable approximation to fair value.

D.3.2 Deposits from reinsurers R0770

in USD 000's	Solvency II	IFRS
Deposits from reinsurers	(15,086)	1,000,140

Deposit from reinsurers consists of funds withheld and contract deposits due to/(from) reinsurers.

The funds withheld liabilities primarily consist of funds held on certain contracts representing the collateral contractually withheld by HRI to cover the technical liabilities that the retrocessionaires have reinsured. These liabilities are valued at market value using a mark-to-market method. These liabilities primarily consist of government and corporate bonds. Such investments are typically held in trust and managed in accordance with approved investment guidelines.

Differences in valuation

There are three main reasons for the difference in valuation of Deposits from reinsurers.

The IFRS contract deposits liabilities for the majority of the L&H business are reclassified as the "Best-estimate liability" in the Solvency II balance sheet. The bases, methods and main assumptions used for their valuation are discussed in the technical provisions section (see section D.2).

Certain HRI treaties have "notional" ceded funds withheld accounts. The actual cash flows received/paid are only settled after the depletion/utilisation of the funds withheld balance. Therefore the fair value of these notional funds withheld are deemed to be nil for the purposes of Solvency II as no cash flow takes place. There is an offsetting decrease to the reinsurance recoverable.

The Solvency II balance sheet requires that the deposits are reported separately depending on whether the treaty is assumed (R0350 - Deposits to cedants) or ceded (R0770 – Deposits from reinsurers). The IFRS financial statements does not require this split. Therefore a reclassification between these two line items is required for the purposes of Solvency II.

D.3.3 Deferred tax liabilities R0780

in USD 000's	Solvency II	IFRS
Deferred tax liabilities	8,451	7,486

In the IFRS financial statements balance sheet deferred tax is provided in full in accordance with IAS 12 Income Taxes, using the balance sheet liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantially enacted at the balance sheet date. Deferred tax assets and liabilities are not discounted.

In the Solvency II balance sheet, deferred taxes may result from the following:

- Taxable / deductible temporary differences between the Solvency II balance sheet and the tax base (tax balance sheet); and
- Unused tax loss and tax credits that may be carried forward.

Differences in valuation

The difference in valuation relates to the taxable / deductible temporary differences between the Solvency II balance sheet and the tax base (tax balance sheet).

D.3.4 Derivatives R0790

in USD 000's	Solvency II	IFRS
Derivatives	6,277	6,277

Recognition and valuation of obligations pertaining to derivatives are described in "D.1.6 Derivatives R0190".

D.3.5 Financial liabilities other than debts owed to credit institutions R0810

in USD 000's	Solvency II	IFRS
Financial liabilities other than debts owed to credit institutions	202,062	532,766

Financial liabilities are valued using the expected cash value of future payment streams for the purposes of Solvency II.

Differences in valuation

The main reason for the difference is a reclassification of certain Tier 2 subordinated loans to R0870 Subordinated liabilities in Basic Own Funds for the purposes of Solvency II.

The remaining difference is due to loans and borrowings being measured at amortised cost using the effective interest method in the IFRS financial statements. The Solvency II value includes future interest payments and is discounted.

D.3.6 Insurance and intermediary payables R0820

in USD 000's	Solvency II	IFRS
Insurance and intermediary payables	92,047	92,047

The carrying amount of Insurance and intermediary payables is deemed to be a reasonable approximation of fair value. Balances payable include actual account balances due plus an estimate of the amount due for the period for which accounts have not yet been received. The payable balance relates to a number of different cedants.

D.3.7 Reinsurance payables R0830

in USD 000's	Solvency II	IFRS
Reinsurance payables	41,508	51,440

The carrying amount of Reinsurance payables is deemed to be a reasonable approximation of fair value. Balances payable include actual account balances due plus an estimate of the amount due for the period for which accounts have not yet been received. The payable balance relates to a number of different retrocessionaires.

Differences in valuation

A certain HRI treaty has “notional” receivable balances. The fair value of these balances are deemed to be nil for the purposes of Solvency II as no cash flow takes place. There is an offsetting increase to the reinsurance recoverable.

D.3.8 Subordinated liabilities R0870

in USD 000's	Solvency II	IFRS
Subordinated liabilities	346,823	-

Financial liabilities are valued using the expected cash value of future payment streams for the purposes of Solvency II.

Differences in valuation

Tier 2 subordinated loans are classified as R0870 Subordinated liabilities in Basic Own Funds for the purposes of Solvency II. The IFRS financial statements do not make any distinction in the classification of the loans and as such they are classified as R0810 Financial liabilities other than debts owed to credit institutions.

The remaining difference is due to loans and borrowings being measured at amortised cost using the effective interest method in the IFRS financial statements. The Solvency II value includes future interest payments and is discounted.

D.3.9 Any other liabilities, not elsewhere shown R0880

in USD 000's	Solvency II	IFRS
Any other liabilities, not elsewhere shown	3,125	3,125

The carrying amount of any other liabilities, not elsewhere shown is deemed to be a reasonable approximation of fair value.

D.4 Alternative methods for valuation

Valuation principles are applied pursuant to Solvency II. In addition to the general valuation principles the following valuation hierarchy is applied to the recognition and valuation of assets and other liabilities.

1. Stock exchange prices observed on active markets are utilised as part of the standard valuation method. The use of stock exchange prices should be based on the criteria stipulated for an active market, which are defined in the International Accounting Standards (IAS).
2. If no stock exchange prices in active markets are available for the assets and liabilities to be valued, stock exchange prices from similar assets and liabilities are used. Adjustments are made in order to reflect the differences.
3. In instances where the criteria for the use of stock exchange prices are not fulfilled, alternative valuation methods are utilised (different methods to those described in number 2). If alternative valuation methods are used these should be – to the greatest extent possible – based on market data, and should contain – to the least extent possible – company-specific influencing factors.

HRI uses alternative valuation methods for some balance sheet items, which are subsequently described in more detail in Section D.4.1 below.

D.4.1 Further information on alternative valuation methods

For the calculation of market values for assets and other liabilities which are not listed on a stock exchange, or whose relevant markets are deemed to be inactive at the point in time of valuation, we use the following valuation models and methods as an alternative. They represent the standard and recognised methods used for the respective assets, and are used in order to be able to determine a market price in spite of the absence of available valuations from active markets.

Financial instruments	Parameters	Valuation models / methods
Unlisted plain-vanilla bonds, loans	Interest rate curves	Present value method
Unlisted, structured bonds	Interest rate curve, volatility surfaces	Hull-White, Black-Karasinski, Libor Market Model among others
Unlisted CDO/CLO	Risk premiums, default rates, prepayment speed and recovery rates	Present value method
Unlisted equities and participations	Acquisition costs, cash flows, EBIT multiples,	Capitalised earnings method, discounted cash flow method,

	book value as applicable	multiples-based approaches
Unlisted fixed income funds	Audited net asset values (NAV)	Net asset value method
Currency forwards	Interest rate curves, spot and forward rates	Interest rate parity model
Life settlements	Interest rate curves, spot rates, mortality rates	Discounted cashflow method

The majority of assets valued using alternative valuation methods are valued on the basis of the present value method. This is a predominantly assumption-free method, with which the future cash flows of securities are discounted with the use of suitable interest rate curves. These curves are derived from appropriate market data observed on publicly accessible markets. Broadly speaking, this procedure is premised on the assumption generally accepted in the market that price differences for comparable securities listed in transparent markets with regard to risk, term and creditworthiness are predominantly the result of issuance-specific characteristics and lower liquidity, and are thus deemed immaterial with regard to their influence on market value.

Specific assumptions are made in the valuation of CLOs. They relate to prepayment rates and retrieval rates. The prepayment rate describes the scope available for the instrument to repay to the bearer parts of the outstanding nominal amount before maturity. The retrieval rate is the proportion of the nominal amount repaid to the bearer subsequent to proceedings triggered by a potential default. Both parameters are estimated with an industry-standard fixed value. They do, however, have a comparably limited influence on the valuation. The significant valuation parameters here are either directly observable market data or are derived from market data.

If particular structures are embedded into the security such as, for example, termination rights, further valuation models are also utilised such as, for example, the Hull-White Model or the Libor Market Model. The models calculate, for example, the probability of termination rights being exercised with the help of swaption volatilities. No noteworthy assumptions are utilised here either.

The use of models includes different model risks, which can lead to a degree of valuation uncertainty:

- Modelling risk (appropriateness and suitability of the model)
- Data quality risk (incomplete or obsolete data for the model calibration or parameterisation)
- Risk pertaining to the validity of assumptions and estimations.
- Risks in the model implementation

Through a process of regular validation in which a systematic, quantitative and qualitative assessment of the appropriateness of valuation models and methods is undertaken, model risks can be limited. Furthermore, the model results (for items which are predominantly valued using alternative valuation methods) are continuously subject to plausibility checks as part of daily quality assurance processes.

D.5 Any other information

There is no other material information regarding the valuation of assets and liabilities for solvency purposes.

E. Capital Management

E.1 Own Funds

E.1.1 Management of own funds

The objective of own funds management is to maintain sufficient own funds to cover the SCR and MCR with an appropriate buffer on a continuous basis.

The own funds are categorised into three tiers, according to their capacity to absorb losses. Own fund items included in Tier 1 are of the highest quality and, as they are permanently available, demonstrably absorb unexpected losses to enable an undertaking to continue in the case of winding-up, as well as on a going-concern basis. Tier 2 relates to basic own funds, the characteristic of which is that they are able to absorb losses in the case of winding-up of the undertaking (e.g. classic subordinated loans) but not on a going-concern basis. Own funds items not classified as Tier 1 or Tier 2 shall be classified as Tier 3, for example a deferred tax asset or ancillary own funds, which are items of capital other than basic own-funds which can be called up to absorb losses.

The time horizon used for business planning is five years, which aligns with the ORSA and the business plan.

E.1.2 Tiering

The own funds of HRI split by tier as at 31 December 2017 compared to 31 December 2016 was comprised as follows:

in USD 000's	2017	2016
Tier 1	1,538,990	1,753,508
Tier 2	346,823	339,813
Tier 3	169,219	213,814
Total eligible own funds to meet SCR	**2,055,032**	**2,307,135**

None of the Tier 1 own funds is restricted capital. There is an upper limit 15% of the SCR on the amount of Tier 3 capital that can be counted towards covering the SCR.

The eligible amount of basic own funds to cover the MCR as at 31 December 2017 compared to 31 December 2016 was comprised as follows:

in USD 000's	2017	2016
Tier 1	1,538,990	1,753,508
Tier 2	101,531	128,289
Total eligible own funds to meet MCR	**1,640,521**	**1,881,797**

There are currently no ring-fenced funds or restrictions on capital fungibility.

E.1.3 Basic own funds

Share capital

The ordinary share capital of HRI as of 31 December 2017 amounts to USD 54.6m. The shares are paid in full. Each share carries an equal voting right and an equal dividend entitlement. At the balance sheet date there are no shares held by the undertaking. Paid-in ordinary share capital including its related Capital Contribution account form the highest quality own funds which can be relied on to absorb losses on a going concern basis.

Capital Contribution

The Capital Contribution account, approved by the CBI, related to ordinary share capital at 31 December 2017 is USD 1,240.5m.

Net deferred tax asset

The net deferred tax asset per the Solvency II balance sheet at 31 December 2017 is USD 0.7m.

Reconciliation reserve

The reconciliation reserve equals the total Solvency II excess of assets over liabilities reduced by all of the following:

- Share capital
- Net deferred tax asset
- Capital Contribution;

The reconciliation reserve is USD 243.9m.

Structure of basic own funds (2017)

in USD 000's	Total	Tier 1 unrestricted	Tier 1 restricted	Tier 2	Tier 3
Ordinary share capital	54,635	54,635	-	-	-
Capital Contribution	1,240,468	1,240,468	-	-	-
Reconciliation reserve	243,888	243,888	-	-	-
Net deferred tax asset	716	-	-	-	716
Subordinated liability	346,823	-	-	346,823	-
Total	**1,886,530**	**1,538,991**	**-**	**346,823**	**716**

Structure of basic own funds (2016)

in USD 000's	Total	Tier 1 unrestricted	Tier 1 restricted	Tier 2	Tier 3
Ordinary share capital	54,635	54,635	-	-	-
Capital Contribution	1,240,468	1,240,468	-	-	-
Reconciliation reserve	458,405	458,405	-	-	-
Net deferred tax asset	-	-	-	-	-
Subordinated liability	339,813	-	-	339,813	-
Total	**2,093,321**	**1,753,508**	**-**	**339,813**	**-**

E.1.4 Ancillary own funds

Within the Tier 3 own funds is included an Ancillary Own Funds (AOF) item approved by the Central Bank of Ireland on 14 December 2015. The material terms and conditions of the Tier 3 AOF are as follows:

	Ancillary Own Funds
Counterparty	Hannover Rück SE
Initial Consideration	EUR 1
Subordinated loan tranche	USD 50m
Total Commitment Sum	The lower of 15% of SCR and 300m
Rank	Tier 3

Upon drawdown of these Ancillary Own Funds, Hannover Rück SE will provide subordinated loans that qualify as Tier 2 basic own funds items. The method of valuation has not changed over the time period.

E.1.5 Comparison of IFRS Financial Statements Equity and Solvency II excess of assets over liabilities

The table below shows the difference between the IFRS Financial Statements Equity and Solvency II Excess of assets over liabilities for 2017.

In USD 000's	2017	2016
Solvency II Excess of assets over liabilities	1,539,706	1,753,508
Total shareholders' equity - IFRS	1,479,947	1,713,980
Difference	**59,759**	**39,528**

The difference is further analysed into the key drivers of this revaluation in the table below:

In USD 000's	2017	2016
Difference relating to non-technical positions	(9,095)	(11,168)
Difference relating to technical positions	77,390	56,934
Difference relating to deferred tax	(8,536)	(6,238)
Total	**59,759**	**39,528**

The reasons for the difference in valuation on a line by line basis are further described in Section D Valuation for Solvency Purposes.

E.2 Solvency Capital Requirement and Minimum Capital Requirement

E.2.1 Solvency Capital Requirement

The Solvency Capital Requirement split by risk categories as at 31 December 2017 with a comparison to 31 December 2016 is below.

In USD 000's	2017	2016
Underwriting risk - Property & Casualty	421,699	127,926
Underwriting risk - Life & Health	817,090	1,005,053
Market risk	417,924	530,706
Counterparty default risk	84,484	76,267
Operational risk	290,572	119,956
Diversification	750,517	274,654
Total risk (pre-tax)	**1,281,251**	**1,585,254**
Deferred tax	153,127	159,826
Total risk (post-tax)	**1,128,124**	**1,425,429**

The most material changes in the SCR over the reporting period were as follows:

- a decrease in Life & Health underwriting risk due to the effect of the stop loss agreement on mortality solutions business.
- an increase in Property & Casualty underwriting risk due to significant new business volumes.
- a decrease in market risk due to lower asset volume, assumption updates and model refinements.
- Operational risk capital is shown on a Standard Formula basis at year end 2016 and on an internal model basis at year end 2017 as regulatory approval for the operational risk module of the internal model has been received.

E.2.2 Minimum Capital Requirement

The Minimum Capital Requirement at year end 2017 was USD 507.7m. The ratio of eligible own funds for the Minimum Capital Requirements was 323%. This compares to a Minimum Capital requirement of USD641.4m and ratio 293% at year-end 2016. The MCR is currently equal to the cap which is the maximum level of the MCR i.e. 45% of the SCR.

E.3 Use of the duration-based equity risk sub-module in the calculation of the Solvency Capital Requirement

This is not applicable to HRI.

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

E.4.1 Technical Specifications on the Internal Model

HRI documents the uses of the internal model in a Use Test Register. The key local applications are:

- assessing the overall required capital including the diversification benefit
- in risk budgeting and allocation
- monitoring of risk appetite statements
- for strategic decisions
- in pricing
- testing risk mitigation options
- to quantify the severity and frequency of the risks faced by HRI.

There are also locally important uses at a group level such as setting margins and investment benchmarks and informing the strategic asset allocation.

The complete risk landscape of Hannover Rück SE consists of the primary categories of underwriting risks (Property and Casualty, Life & Health), market risks, counterparty default risks, operational risks and other risks.

The scope of the internal model is such that the risk categories addressed quantitatively by the model are life underwriting risk, P&C underwriting risk, market risk, counterparty default risk and operational risk. These risks and their interactions are accounted for in the representation of target variables through the application of stochastic simulation models. There are no separate modules for other risks in the internal model for the following reasons:

- In contrast to existing risks, emerging risks concern potential risks that can develop at short notice. It is more appropriate to assess these risks on a qualitative basis. Capital requirements arising from emerging risks would only occur when a qualitative assessment leads to the conclusion that the risks could materialise.
- Liquidity risk relates to the short-term payments which could necessitate the sale of assets. A financial loss can occur if the sales process leads to deterioration in the market price, as a consequence of the scale of the transaction or due to illiquid markets. It is assumed that the company is not in a position to execute transactions which could lead to a shift in the market. Market illiquidity is covered within the calibration of economic scenarios, and is therefore covered by market risk.
- Reputational risk and strategic risk do not affect the available capital over a one-year horizon, but rather the franchise value of the company exclusively. They are therefore excluded from the scope of the internal model.

It should be noted that concentration risk is taken into account in the calculation of required capital for every risk category.

E.4.2 Implementation of the Internal Model

A stochastic model is used to project own funds under a range of different scenarios. The Solvency Capital Requirement is derived from the 99.5 percentile of the resulting distribution. The internal model currently covers all business units and risk categories.

E.4.3 Comparison of the Internal Model with the Standard Formula

Generally speaking, the internal model represents a probability calculation approach, while the standard formula is factor-based. For natural and man-made catastrophes, the internal model uses exposure data for all risks whereas the standard formula only uses exposure data for EU proportional business. Premium figures are used for all other areas. Retrocessions and reinsurance cover are applied precisely in the internal model, whereas the standard formula only permits the use of approximate values. Further differences arise from correlation assumptions and the presentation of retrocessions. The latter cannot be expressed exactly in the standard formula.

In the internal model, the premium and reserve risk on the P&C line of business is modelled by estimating marginal distributions for every risk factor, with their mutual dependencies assessed on the basis of company-specific historical data or expert judgement. This results in more refined segmentation than under the standard formula. It also leads to non-linear dependency structures, whereas a correlation approach would be used under the standard formula. The internal model covers all risks from provisions relating to incepted unearned premiums within the reserve risk sub-module instead of the premium risk sub-module. The volume measure for a reserve risk of a particular segment is the best estimate ultimate claims provision relating to that segment instead of the best estimate outstanding ultimate claim provision as set out in the regulations.

For Life & Health underwriting risk, the standard formula does not sufficiently allow for the portfolio and diversification effects of a globally active reinsurer. It also does not allow for diversification between geographies. Relatively static scenarios or factors are used to determine the necessary amount of capital for every risk category within market risk. The internal model allows for diversification between geographies and thus generates a more comprehensive set of scenarios in an integrated way. While the standard formula explicitly allows for concentration risk, this risk is implicitly represented in the internal model where applicable.

Default risks in the internal model follow a stochastic model for credit spreads. This produces a complete distribution of random variables, which represents the counterparty default risk. The standard formula calculates the required capital for the counterparty default risk on the basis of multiples of standard deviations of the respective loss distribution. The internal model uses a comprehensive matrix in which the transitions between the individual valuations are described, as opposed to the standard formula, which is premised on the probability of default for every valuation class and on certain correlation assumptions between the counterparties. The internal model includes a fixed recovery rate for every counterparty, and permits the full use of collaterals. In the standard formula, the recovery rate and the use of collaterals depends on the economic situation of the counterparty. For new business, the internal model uses the fully stochastic exposure at default, subject to any risk mitigation measures, while the standard formula uses the difference between the SCRs with and without the corresponding measures as the constant exposure at default.

The risk measure used is the change in own funds as used to calculate the SCR over a one year time horizon. The confidence level used is the 1-in-200 year, or 99.5%, level, in line with Solvency II guidance.

Data

All data used in the internal model is subject to the data standards for internal models. This design is appropriate in order to be able to supply timely data which is free from significant errors. HRI relies on data which is also used in other business applications to ensure consistent information and data usage within the company. Examples include the individual data sets from cash flow projections underlying the calculation of the Best Estimate Liability and the IFRS accounting methods, through which a reference point is provided for other established reporting processes. Subsequently, many individual data sets are subject to numerous quality assessments and both internal and external auditing.

The plausibility and credibility of information and data is established by way of repeated discussion with the suppliers. Calibration assumptions are reported and made transparent in calibration reports, which are discussed with the suppliers of information and the recipients of model results. The effect of influencing parameters is presented in sensitivity analyses. In particular, significant assumptions which are based on expert assessments are documented separately.

Relevant historical company data and internal company data is used to calibrate the model, particularly for underwriting risk. Long-term market data is used for the calibration of market and counterparty risk.

The risk profile of HRI consists of Property & Casualty and Life & Health underwriting risks, market risks, counterparty default risks, operational risks and other risks including strategic risk, emerging risk, liquidity risk and reputational risk. The risk categories explicitly covered by the internal model are underwriting risks, market risk, counterparty default risk and operational risk. The other risks are managed and monitored using other appropriate methods.

E.5 Non-compliance with the Minimum Capital Requirement and non-compliance with the Solvency Capital Requirement

E.5.1 Non-Compliance with Minimum Capital Requirement

There have been no instances of non-compliance with the Minimum Capital Requirement.

E.5.2 Significant Non-Compliance with Solvency Capital Requirement

There have been no instances of non-compliance with the Solvency Capital Requirement.

E.6 Any other information

There is no other material information regarding capital management.

Abbreviations and Glossary

AOF	Ancillary Own Funds
BaFin	Bundesanstalt für Finanzdienstleistungsaufsicht, Federal Financial Supervisory Authority
BEL	Best Estimate Liability
BOF	Basic Own Funds
CBI	Central Bank of Ireland
CDO	Collateralised Debt Obligation
CLO	Collateralised Loan Obligation
CEO	Chief Executive Officer
CFs	Control Functions
CoFWH	Coinsurance funds withheld
CoC	Cost of Capital
DAC	Deferred Acquisition Cost
EBIT	Earnings before interest and taxes
EIOPA	European Insurance and Occupational Pensions Authority
EPIFP	Expected profits included in future premiums
F&P	Fitness and Probity
FOGs	Financial options and guarantees
GAAP	Generally Accepted Accounting Principles
HGB	Handelsgesetzbuch, German Commercial Code
HRI	Hannover Re (Ireland) Designated Activity Company
IBNR	Incurred But Not Reported
HRM	Human Resource Management
IAS	International Accounting Standard
IFRS	International Financial Reporting Standards
L&H	Life and Health
MCR	Minimum Capital Requirement
ModCo	Modified coninsurance
NAV	Net asset value
ORSA	Own Risk and Solvency Assessment
P&C	Property and Casualty
PCFs	Pre-approval Control Functions
RM	Risk margin
SCR	Solvency Capital Requirement
SE	Societas Europaea
SLA	ServiceLevel Agreement
TP	Technical Provisions
UPR	Unearned Premium Reserve

Quantitative Reporting Templates

All values are in USD 000's if not otherwise stated.

If a value amounts to less than USD 0.5, we show "0" in the respective cell. Empty cells represent the fact that HRI has no value to state.

Rounding differences of +/- one unit can occur in the following tables.

S.02.01.02
Balance sheet

		Solvency II value
Assets		**C0010**
Goodwill	**R0010**	
Deferred acquisition costs	**R0020**	
Intangible assets	**R0030**	-
Deferred tax assets	**R0040**	9,166
Pension benefit surplus	**R0050**	-
Property, plant & equipment held for own use	**R0060**	142
Investments (other than assets held for index-linked and unit-linked contracts)	**R0070**	2,912,386
Property (other than for own use)	**R0080**	-
Holdings in related undertakings, including participations	**R0090**	50,000
Equities	**R0100**	-
Equities - listed	**R0110**	-
Equities - unlisted	**R0120**	-
Bonds	**R0130**	2,723,905
Government Bonds	**R0140**	1,454,560
Corporate Bonds	**R0150**	1,187,163
Structured notes	**R0160**	-
Collateralised securities	**R0170**	82,182
Collective Investments Undertakings	**R0180**	23,532
Derivatives	**R0190**	5,263
Deposits other than cash equivalents	**R0200**	10,922
Other investments	**R0210**	98,765
Assets held for index-linked and unit-linked contracts	**R0220**	-
Loans and mortgages	**R0230**	10,180
Loans on policies	**R0240**	-
Loans and mortgages to individuals	**R0250**	-
Other loans and mortgages	**R0260**	10,180
Reinsurance recoverables from:	**R0270**	148,150
Non-life and health similar to non-life	**R0280**	- 42,300
Non-life excluding health	**R0290**	- 42,300
Health similar to non-life	**R0300**	-
Life and health similar to life, excluding health and index-linked and unit-linked	**R0310**	190,450
Health similar to life	**R0320**	-
Life excluding health and index-linked and unit-linked	**R0330**	190,450
Life index-linked and unit-linked	**R0340**	-
Deposits to cedants	**R0350**	2,940,486
Insurance and intermediaries receivables	**R0360**	578,837
Reinsurance receivables	**R0370**	4,085
Receivables (trade, not insurance)	**R0380**	25,960
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**	25,008
Any other assets, not elsewhere shown	**R0420**	-
Total assets	**R0500**	6,654,400

Liabilities		Solvency II value C0010
Technical provisions – non-life	**R0510**	770,599
Technical provisions – non-life (excluding health)	**R0520**	698,675
Technical provisions calculated as a whole	**R0530**	-
Best Estimate	**R0540**	674,931
Risk margin	**R0550**	23,744
Technical provisions - health (similar to non-life)	**R0560**	71,924
Technical provisions calculated as a whole	**R0570**	-
Best Estimate	**R0580**	69,345
Risk margin	**R0590**	2,579
Technical provisions - life (excluding index-linked and unit-linked)	**R0600**	3,651,695
Technical provisions - health (similar to life)	**R0610**	195,668
Technical provisions calculated as a whole	**R0620**	-
Best Estimate	**R0630**	159,646
Risk margin	**R0640**	36,022
Technical provisions – life (excluding health and index-linked and unit-linked)	**R0650**	3,456,027
Technical provisions calculated as a whole	**R0660**	-
Best Estimate	**R0670**	2,378,258
Risk margin	**R0680**	1,077,769
Technical provisions – index-linked and unit-linked	**R0690**	- 1,018
Technical provisions calculated as a whole	**R0700**	-
Best Estimate	**R0710**	- 1,018
Risk margin	**R0720**	-
Other technical provisions	**R0730**	
Contingent liabilities	**R0740**	-
Provisions other than technical provisions	**R0750**	8,212
Pension benefit obligations	**R0760**	-
Deposits from reinsurers	**R0770**	- 15,086
Deferred tax liabilities	**R0780**	8,451
Derivatives	**R0790**	6,277
Debts owed to credit institutions	**R0800**	-
Financial liabilities other than debts owed to credit institutions	**R0810**	202,062
Insurance & intermediaries payables	**R0820**	92,047
Reinsurance payables	**R0830**	41,508
Payables (trade, not insurance)	**R0840**	-
Subordinated liabilities	**R0850**	346,823
Subordinated liabilities not in Basic Own Funds	**R0860**	-
Subordinated liabilities in Basic Own Funds	**R0870**	346,823
Any other liabilities, not elsewhere shown	**R0880**	3,125
Total liabilities	**R0900**	5,114,695
Excess of assets over liabilities	**R1000**	1,539,706

S.05.01.02
Premiums, claims and expenses by line of business

		Line of Business for: non-life insurance and reinsurance obligations (direct business and accepted proportional reinsurance)								
		Medical expense insurance	Income protection insurance	Workers' compen-sation 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
		C0010	**C0020**	**C0030**	**C0040**	**C0050**	**C0060**	**C0070**	**C0080**	**C0090**
Premiums written										
Gross - Direct Business	**R0110**									
Gross - Proportional reinsurance accepted	**R0120**	1,397	18,980	-	684,399	44,733	18,691	516,837	23,515	107,016
Gross - Non-proportional reinsurance accepted	**R0130**									
Reinsurers' share	**R0140**	1,327	5,792	-	75,650	318	20,183	155,027	27,524	100,469
Net	**R0200**	70	13,188	-	608,749	44,415	-1,492	361,810	-4,009	6,547
Premiums earned										
Gross - Direct Business	**R0210**									
Gross - Proportional reinsurance accepted	**R0220**	524	17,734	-	710,007	45,014	17,678	473,394	16,407	84,867
Gross - Non-proportional reinsurance accepted	**R0230**									
Reinsurers' share	**R0240**	498	2,834	-	51,774	239	17,971	109,368	19,475	80,712
Net	**R0300**	26	14,901	-	658,233	44,776	-293	364,026	-3,068	4,155
Claims incurred		-	-	-	-	-	-	-	-	-
Gross - Direct Business	**R0310**	-	-	-	-	-	-	-	-	-
Gross - Proportional reinsurance accepted	**R0320**	210	5,311	-	479,561	25,456	20,111	353,973	2,083	62,663

		Line of Business for: non-life insurance and reinsurance obligations (direct business and accepted proportional reinsurance)								
		Medical expense insurance	Income protection insurance	Workers' compen-sation 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
		C0010	**C0020**	**C0030**	**C0040**	**C0050**	**C0060**	**C0070**	**C0080**	**C0090**
Gross - Non-proportional reinsurance accepted	**R0330**	-	-	-	-	-	-	-	-	-
Reinsurers' share	**R0340**	200	1,506	-	356	69	20,928	75,572	11,110	59,532
Net	**R0400**	11	3,805	-	479,205	25,386	- 817	278,401	- 9,027	3,131
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**	14	10,848	-	228,418	17,322	1,431	90,734	- 3,857	639
Other expenses	**R1200**									
Total expenses	**R1300**									

		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
		Legal expenses insurance	Assistance	Miscella-neous financial loss	Health	Casualty	Marine, aviation, transport	Property	
		C0100	**C0110**	**C0120**	**C0130**	**C0140**	**C0150**	**C0160**	**C0200**
Premiums written									
Gross - Direct Business	**R0110**				-	-	-	-	
Gross - Proportional reinsurance accepted	**R0120**	-	-	43	-	-	-	-	1,415,609
Gross - Non-proportional reinsurance accepted	**R0130**	-	-	-	18,800	- 4,621	2,034	17,458	33,670
Reinsurers' share	**R0140**	-	-	44	-	-	5		388,691
Net	**R0200**	-	-	- 2		-			1,060,588
Premiums earned									
Gross - Direct Business	**R0210**								
Gross - Proportional reinsurance accepted	**R0220**	-	-	30					1,365,655
Gross - Non-proportional reinsurance accepted	**R0230**				17,487	- 253	2,756	16,797	36,787
Reinsurers' share	**R0240**	-	-	32	-	-	5		285,382
Net	**R0300**	-	-	- 1		-			1,117,060

		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
		Legal expenses insurance	Assistance	Miscellaneous financial loss	Health	Casualty	Marine, aviation, transport	Property	
		C0100	C0110	C0120	C0130	C0140	C0150	C0160	C0200
Claims incurred									
Gross - Direct Business	**R0310**	-	-	-					
Gross - Proportional reinsurance accepted	**R0320**	-	-	21					949,388
Gross - Non-proportional reinsurance accepted	**R0330**				23,679	-30,963	- 4,776	- 9,150	- 21,210
Reinsurers' share	**R0340**	-	-	20			-		169,299
Net	**R0400**	-	-	1	23,679	-30,963	-	-	758,880
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**	-	-	1	2,323	10,813	2,664	10,309	371,660
Other expenses	**R1200**								
Total expenses	**R1300**								371,660

		Line of Business for: life insurance obligations						Life reinsurance obligations		Total
		Health insurance	Insurance with profit participation	Index-linked and unit-linked insurance	Other life insurance	Annuities stemming from non-life insurance contracts and relating to health insurance obligations	Annuities stemming from non-life insurance contracts and relating to insurance obligations other than health insurance obligations	Health reinsurance	Life reinsurance	
		C0210	C0220	C0230	C0240	C0250	C0260	C0270	C0280	C0300
Premiums written										
Gross	**R1410**							106,826	1,761,727	1,868,553
Reinsurers' share	**R1420**							-	51,054	51,054
Net	**R1500**	0	0	0	0	0	0	106,826	1,710,672	1,817,499
Premiums earned										
Gross	**R1510**							91,648	1,759,468	1,851,115
Reinsurers' share	**R1520**							-	52,246	52,246
Net	**R1600**	0	0	0	0	0	0	91,648	1,707,222	1,798,870
Claims incurred										
Gross	**R1610**							73,839	1,898,136	1,971,975
Reinsurers' share	**R1620**							-	- 217,537	- 217,537
Net	**R1700**	0	0	0	0	0	0	73,839	2,115,672	2,189,512
Changes in other technical provisions										
Gross	**R1710**							-	-	-
Reinsurers' share	**R1720**							-	-	-
Net	**R1800**	0	0	0	0	0	0	-	-	-
Expenses incurred	**R1900**							31,944	275,919	307,863
Other expenses	**R2500**									-
Total expenses	**R2600**									307,863

S.05.02.01
Premiums, claims and expenses by country

		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		China	Germany	UK	UK (Gib)	USA	
		C0080	C0090	C0100	C0110	C0120	C0130	C0140
Premiums written								
Gross - Direct Business	R0110							
Gross - Proportional reinsurance accepted	R0120		268,061	388,770	120,806	413,127	112,797	1,303,561
Gross - Non-proportional reinsurance accepted	R0130		-	965	1,039	-	15,474	17,477
Reinsurers' share	R0140		-	373,510	-	-	5,110	378,621
Net	R0200		268,061	16,224	121,844	413,127	123,161	942,418
Premiums earned								
Gross - Direct Business	R0210		-	-	-	-	-	-
Gross - Proportional reinsurance accepted	R0220		273,701	393,680	122,152	355,495	106,022	1,251,050
Gross - Non-proportional reinsurance accepted	R0230		-	965	1,039	-	14,778	16,781
Reinsurers' share	R0240		-	272,321	-	-	3,846	276,167
Net	R0300		273,701	122,324	123,191	355,495	116,954	991,665
Claims incurred								
Gross - Direct Business	R0310		-	-	-	-	-	-
Gross - Proportional reinsurance accepted	R0320		172,269	306,662	75,278	234,262	76,948	865,419
Gross - Non-proportional reinsurance accepted	R0330		-	433	-282	-	-17,141	-16,990
Reinsurers' share	R0340		-	174,482	-	-	-65	174,417
Net	R0400		172,269	132,614	74,996	234,262	59,872	674,012

		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		China	Germany	UK	UK (Gib)	USA	
		C0080	C0090	C0100	C0110	C0120	C0130	C0140
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		112,672	-8,080	34,279	130,695	65,459	335,025
Other expenses	R1200							-
Total expenses	R1300							335,025

		Home country	Top 5 countries (by amount of gross premiums written) - life obligations					Total Top 5 and home country
		C0150	C0160	C0170	C0180	C0190	C0200	C0210
	R1400		UK	USA				
		C0220	C0230	C0240				C0280
Premiums written								
Gross	R1410		129,749	1,564,079				1,693,828
Reinsurers' share	R1420		-	13,690				13,690
Net	R1500		129,749	1,550,389				1,680,138
Premiums earned								
Gross	R1510		129,749	1,552,956				1,682,705
Reinsurers' share	R1520		-	13,690				13,690
Net	R1600		129,749	1,539,266				1,669,015
Claims incurred								
Gross	R1610		113,633	1,746,866				1,860,499
Reinsurers' share	R1620		-	-222,482				-222,482
Net	R1700		113,633	1,969,347				2,082,981
Changes in other technical provisions								
Gross	R1710		-	-				-
Reinsurers' share	R1720		-	-				-
Net	R1800		-	-				-
Expenses incurred	R1900		23,869	237,570				261,439
Other expenses	R2500							-
Total expenses	R2600							261,439

S.12.01.02
Life and Health SLT Technical Provisions

		Insurance with profit participation	Index-linked and unit-linked insurance			Other life insurance			Annuities stemming from non-life insurance contracts and relating to insurance obligation other than health insurance obligations	Accepted re-insurance	**Total (Life other than health insurance, incl. Unit-Linked)**
				Contracts without options and guaran-tees	Contracts with options or guaran-tees		Contracts without options and guaran-tees	Contracts with options or guaran-tees			
		C0020	**C0030**	**C0040**	**C0050**	**C0060**	**C0070**	**C0080**	**C0090**	**C0100**	**C0150**
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 calculated as a whole	**R0020**										
Technical provisions calculated as a sum of BE and RM											
Best Estimate											
Gross Best Estimate	**R0030**									2,377,240	2,377,240
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	**R0080**									190,450	190,450

		Insurance with profit participation	Index-linked and unit-linked insurance			Other life insurance			Annuities stemming from non-life insurance contracts and relating to insurance obligation other than health insurance obligations	Accepted re-insurance	**Total (Life other than health insurance, incl. Unit-Linked)**
				Contracts without options and guarantees	Contracts with options or guarantees		Contracts without options and guarantees	Contracts with options or guarantees			
		C0020	**C0030**	**C0040**	**C0050**	**C0060**	**C0070**	**C0080**	**C0090**	**C0100**	**C0150**
Best estimate minus recoverables from reinsurance/SPV and Finite Re - total	**R0090**									2,186,790	2,186,790
Risk Margin	**R0100**									1,077,769	1,077,769
Amount of the transitional on Technical Provisions											
Technical Provisions calculated as a whole	**R0110**										
Best estimate	**R0120**									-	-
Risk margin	**R0130**										
Technical provisions - total	**R0200**									3,455,009	3,455,009

		Health insurance (direct business)			Annuities stemming from non-life insurance con-tracts and relating to health insurance obli-gations	Health reinsurance (reinsurance accepted)	**Total (Health similar to life insurance)**
			Contracts without options and guaran-tees	Contracts with options or guaran-tees			
		C0160	**C0170**	**C0180**	**C0190**	**C0200**	**C0210**
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 calculated as a whole	**R0020**						
Technical provisions calculated as a sum of BE and RM							
Best Estimate							
Gross Best Estimate	**R0030**					159,646	159,646
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty	**R0080**					-	-
Best estimate minus recoverables from reinsurance/SPV and Finite Re - total	**R0090**					159,646	159,646
Risk Margin	**R0100**					36,022	36,022
Amount of the transitional on Technical Provisions							
Technical Provisions calculated as a whole	**R0110**						-
Best estimate	**R0120**					-	-
Risk margin	**R0130**						-
Technical provisions - total	**R0200**					195,668	195,668

S.17.01.02

Non-life Technical Provisions

		Direct business and accepted proportional reinsurance								
		Medical expense insurance	Income protection insurance	Workers' compen-sation 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
		C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100
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 calculated as a whole	**R0050**									
Technical provisions calculated as a sum of BE and RM										
Best estimate										
Premium provisions										
Gross	**R0060**	-	74	-	61,888	280	0	12,324	-139	241
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	**R0140**	-	-	-	-24,067	-	-	10,390	321	-
Net Best Estimate of Premium Provisions	**R0150**	-	74	-	85,954	280	0	1,934	-460	241

		Direct business and accepted proportional reinsurance								
		Medical expense insurance	Income protection insurance	Workers' compen-sation 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
		C0020	**C0030**	**C0040**	**C0050**	**C0060**	**C0070**	**C0080**	**C0090**	**C0100**
Claims provisions										
Gross	**R0160**	-	7,074	-	120,365	641	299	16,886	130,302	935
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	**R0240**	-	-	-	-45,890	-	1,814	13,317	962	-
Net Best Estimate of Claims Provisions	**R0250**	-	7,074	-	166,255	641	-1,515	3,569	129,340	935
Total Best estimate - gross	**R0260**	-	7,149	-	182,253	921	299	29,210	130,163	1,176
Total Best estimate - net	**R0270**	-	7,149	-	252,209	921	-1,515	5,503	128,880	1,176
Risk margin	**R0280**	-	252	-	9,803	-	-	167	1,462	6
Amount of the transitional on Technical Provisions										
Technical Provisions calculated as a whole	**R0290**	-	-	-	-	-	-	-	-	-
Best estimate	**R0300**	-	-	-	-	-	-	-	-	-
Risk margin	**R0310**	-	-	-	-	-	-	-	-	-

		Direct business and accepted proportional reinsurance								
		Medical expense insurance	Income protection insurance	Workers' compen-sation 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
		C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100
Technical provisions - total										
Technical provisions - total	**R0320**	-	7,401	-	192,056	921	299	29,378	131,625	1,182
Recoverable from reinsurance contract/SPV and Finite Re after the adjustment for expected losses due to counterparty default - total	**R0330**	-	-	-	-69,956	-	1,814	23,707	1,283	-
Technical provisions minus recoverables from reinsurance/SPV and Finite Re - total	**R0340**	-	7,401	-	262,012	921	-1,515	5,670	130,342	1,182

		Direct business and accepted proportional reinsurance			Accepted non-proportional reinsurance				Total Non-Life obligation
		Legal expenses insurance	Assistance	Miscellaneous financial loss	Non-proportional health reinsurance	Non-proportional casualty reinsurance	Non-proportional marine, aviation and transport reinsurance	Non-proportional property reinsurance	
		C0110	C0120	C0130	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									
Best estimate									
Premium provisions									
Gross	-	-	-	52	293	7,241	42	99,674	181,969
Total recoverable from reinsurance/SPV and Finite Re	**R0140**	-	-	-	-	-	-	356	-13,000
Net Best Estimate of Premium Provisions	**R0150**	-	-	52	293	7,241	42	99,318	194,969

		Direct business and accepted proportional reinsurance			Accepted non-proportional reinsurance				Total Non-Life obligation
		Legal expenses insurance	Assistance	Miscellaneous financial loss	Non-proportional health reinsurance	Non-proportional casualty reinsurance	Non-proportional marine, aviation and transport reinsurance	Non-proportional property reinsurance	
		C0110	C0120	C0130	C0140	C0150	C0160	C0170	C0180
Claims provisions									
Gross	R0160	-	-	119	61,903	66,068	9,638	148,077	562,307
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0240	-	-	-	-	-	-	496	29,300
Net Best Estimate of Claims Provisions	R0250	-	-	119	61,903	66,068	9,638	147,581	591,607
Total Best Estimate - gross	R0260	-	-	171	62,196	73,309	9,679	247,750	744,276
Total Best Estimate - net	R0270	-	-	171	62,196	73,309	9,679	246,898	786,576
Risk margin	R0280	-	-	-	2,327	2,738	360	9,209	26,323
Amount of the transitional on Technical Provisions									
Technical Provisions calculated as a whole	R0290	-	-	-	-	-	-	-	-
Best Estimate	R0300	-	-	-	-	-	-	-	0
Risk margin	R0310	-	-	-	-	-	-	-	0
Technical provisions - total									
Technical provisions - total	R0320	-	-	171	64,523	76,047	10,039	256,959	770,599
Recoverable from reinsurance contract/SPV and Finite Re after the adjustment for expected losses due to counterparty default - total	R0330	-	-	-	-	-	-	852	-42,300
Technical provisions minus recoverables from reinsurance/SPV and Finite Re - total	R0340	-	-	171	64,523	76,047	10,039	256,107	812,899

S.19.01.21
Non-life insurance claims

Accident year / Underwriting year	Z0020	UWY

Gross Claims Paid (non-cumulative)
(absolute amount)

Development year

Year		0	1	2	3	4	5	6	7	8	9	10&+		In current year	Sum of years (cumu-lative)
		C0010	C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100	C0110		C0170	C0180
Prior	R0100											2,742,162	R0100	1,708	2,742,162
N-9	R0160	74,425	96,447	63,824	9,741	15,992	18,225	8,025	7,014	960	343		R0160	343	294,996
N-8	R0170	91,969	162,688	71,866	21,757	20,937	8,494	27,832	3,978	970			R0170	970	410,491
N-7	R0180	18,038	111,291	108,770	25,788	15,781	32,744	7,931	4,034				R0180	4,034	324,377
N-6	R0190	41,748	105,839	138,681	14,564	20,018	9,850	4,988					R0190	4,988	335,688
N-5	R0200	197,919	99,474	124,204	26,940	11,649	12,128						R0200	12,128	472,315
N-4	R0210	222,692	89,023	127,012	19,044	9,163							R0210	9,163	466,935
N-3	R0220	182,292	33,629	110,711	12,778								R0220	12,778	339,409
N-2	R0230	546,714	464,215	46,769									R0230	46,769	1,057,698
N-1	R0240	468,665	449,415										R0240	449,415	918,080
N	R0250	321,973											R0250	321,973	321,973
												Total	R0260	864,270	7,684,124

Gross undiscounted Best Estimate Claims Provisions
(absolute amount)

Development year

Year		0	1	2	3	4	5	6	7	8	9	10&+
		C0200	C0210	C0220	C0230	C0240	C0250	C0260	C0270	C0280	C0290	C0300
Prior	R0100											57,349
N-9	R0160									21,388	14,976	
N-8	R0170								10,414	5,128		
N-7	R0180							8,942	9,532			
N-6	R0190						18,791	18,949				
N-5	R0200					23,781	23,085					
N-4	R0210				67,897	53,842						
N-3	R0220			60,397	48,144							
N-2	R0230		109,167	51,356								
N-1	R0240	215,790	70,339									
N	R0250	218,695										

		Year end (dis-counted data)
		C0360
	R0100	56,204
	R0160	14,618
	R0170	4,950
	R0180	9,360
	R0190	18,541
	R0200	22,358
	R0210	52,348
	R0220	47,136
	R0230	49,451
	R0240	69,874
	R0250	217,467
Total	R0260	562,307

S.23.01.01
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 2015/35						
Ordinary share capital (gross of own shares)	R0010	54,635	54,635		-	
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	243,887				
Subordinated liabilities	R0140	346,823		-	346,823	-
An amount equal to the value of net deferred tax assets	R0160	715				715
Other own fund items approved by the supervisory authority as basic own funds not specified above	R0180	1,240,468	1,240,468	-	-	-
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	1,886,529	1,538,990	-	346,823	715

		Total	Tier 1 - unrestricted	Tier 1 - restricted	Tier 2	Tier 3
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**	169,219			-	169,219
Total ancillary own funds	**R0400**	169,219			-	169,219
Available and eligible own funds		-	-	-	-	-
Total available own funds to meet the SCR	**R0500**	2,055,748	1,538,990	-	346,823	169,934
Total available own funds to meet the MCR	**R0510**	1,885,813	1,538,990	-	346,823	
Total eligible own funds to meet the SCR	**R0540**	2,055,032	1,538,990	-	346,823	169,219
Total eligible own funds to meet the MCR	**R0550**	1,640,521	1,538,990	-	101,531	
SCR	**R0580**	1,128,124				
MCR	**R0600**	507,656				
Ratio of Eligible own funds to SCR	**R0620**	182%				
Ratio of Eligible own funds to MCR	**R0640**	323%				

		C0060	
Reconciliation reserve			
Excess of assets over liabilities	**R0700**	1,539,706	
Own shares (held directly and indirectly)	**R0710**		
Foreseeable dividends, distributions and charges	**R0720**		
Other basic own fund items	**R0730**	1,295,818	
Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fenced funds	**R0740**		
Reconciliation reserve	**R0760**	243,887	
Expected profits			
Expected profits included in future premiums (EPIFP) - Life business	**R0770**	1,280,723	
Expected profits included in future premiums (EPIFP) - Non-life business	**R0780**		
Total Expected profits included in future premiums (EPIFP)	**R0790**	1,280,723	

S.25.03.21
Solvency Capital Requirement - for undertakings on Full Internal Models

Unique number of component	Components description	Calculation of the Solvency Capital Requirement
C0010	**C0020**	**C0030**
101	Market risk according to IM	417,924
102	Counterparty default risk according to IM	84,484
103	Life underwriting risk according to IM	817,090
104	Non-life underwriting risk according to IM	421,699
105	Operational risk according to IM	290,572
107	LAC TP according to IM	0
108	LAC DT according to IM	-153,127

Calculation of Solvency Capital Requirement		**C0100**
Total undiversified components	**R0110**	1,878,642
Diversification	**R0060**	-750,517
Capital requirement for business operated in accordance with Art. 4 of Directive 2003/41/EC (transitional)	**R0160**	
Solvency capital requirement excluding capital add-on	**R0200**	1,128,124
Capital add-ons already set	**R0210**	
Solvency capital requirement	**R0220**	1,128,124
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**	-153,127
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 nSCR aggregation for article 304	**R0440**	

S.28.01.01
Minimum Capital Requirement - Only life or only non-life insurance or reinsurance activity

Linear formula component for non-life insurance and reinsurance obligations

		C0010
MCR_{NL} Result	R0010	204,669

		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	-	70
Income protection insurance and proportional reinsurance	R0030	7,149	13,188
Workers' compensation insurance and proportional reinsurance	R0040	-	-
Motor vehicle liability insurance and proportional reinsurance	R0050	252,209	608,749
Other motor insurance and proportional reinsurance	R0060	921	44,415
Marine, aviation and transport insurance and proportional reinsurance	R0070	-1,515	-1,492
Fire and other damage to property insurance and proportional reinsurance	R0080	5,503	361,810
General liability insurance and proportional reinsurance	R0090	128,880	-4,009
Credit and suretyship insurance and proportional reinsurance	R0100	1,176	6,547
Legal expenses insurance and proportional reinsurance	R0110	-	-
Assistance and proportional reinsurance	R0120	-	-
Miscellaneous financial loss insurance and proportional reinsurance	R0130	171	-2
Non-proportional health reinsurance	R0140	62,196	18,800
Non-proportional casualty reinsurance	R0150	73,309	-4,621
Non-proportional marine, aviation and transport reinsurance	R0160	9,679	2,028
Non-proportional property reinsurance	R0170	246,898	15,105

Linear formula component for life insurance and reinsurance obligations

		C0040
MCRL Result	R0200	585,132

		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	493,741	
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	1,853,713	
Total capital at risk for all life (re)insurance obligations	R0250		754,194,151

Overall MCR calculation

		C0070
Linear MCR	R0300	789,802
SCR	R0310	1,128,124
MCR cap	R0320	507,656
MCR floor	R0330	282,031
Combined MCR	R0340	507,656
Absolute floor of the MCR	R0350	4,318
Minimum Capital Requirement	R0400	507,656

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