

Aegon

# Blue Square Re N.V.

Solvency and Financial Condition Report **2018**



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The BSR Annual Report is available upon request through the website: [www.bluesquarere.com](http://www.bluesquarere.com)

## Scope of the report

This report is Blue Square Re N.V.'s Solvency and Financial Condition Report (SFCR) for the year ended December 31st, 2018.

This report informs Blue Square Re N.V.'s stakeholders about its:

- A. Business and Performance;
- B. System of Governance;
- C. Risk Profile;
- D. Valuation for Solvency Purposes; and
- E. Capital Management.

Part of the SFCR are the Quantitative Reporting Templates (QRT's), these are separately disclosed on the following website:

[www.bluesquarere.com](http://www.bluesquarere.com)

The SFCR report contains both quantitative and qualitative information. The main focus of this report is on the Solvency II Balance Sheet, its relation to IFRS and on the Solvency Capital Requirement ("SCR"). Material differences between Blue Square Re's financial statements based on IFRS-EU and the Delegated Regulation Solvency II, are discussed in section D.

## Basis of presentation

This report is prepared in accordance with the requirements of Solvency II Directive and Delegated Regulation (in particular articles 51, 53–55 of the Solvency II Directive, and articles 290-298 of the Delegated Regulation), and relevant EIOPA Guidelines (in particular 'Guidelines on reporting and public disclosure' (EIOPA-BoS-15/109) as issued by the European Insurance and Occupational Pensions Authority (EIOPA)).

The figures reflecting monetary amounts in the SFCR are presented in Euro (€) thousands unless otherwise stated. Where figures are rounded, the rounded amounts may not add up to the rounded total in all cases. All ratios and variances are calculated using the underlying amount rather than the rounded amount.

Where IFRS figures are disclosed, the figures are prepared in accordance with the International Financial Reporting Standards as adopted by the European Union (IFRS-EU).

In the event of differences between the financial or other information as contained in this SFCR and the annual accounts for 2018 of Blue Square Re, the financial or other information as disclosed in such annual accounts for 2018 will prevail.

The 2018 SFCR of Blue Square Re has been prepared and disclosed under the responsibility of the Supervisory Board. This document was approved on April 16th, 2019 by the Blue Square Re Supervisory Board.

Blue Square Re N.V. is referred to in this document as 'Blue Square Re', 'BSR', or 'the Company', and the parent company, Aegon N.V. together with its member companies are referred to as 'Aegon Group' or simply 'Aegon'.

While the information contained in this report is purported to be true and accurate to the best of BSR's knowledge, this is nonetheless an unaudited report.

# Summary

## Introduction

Blue Square Re is a subsidiary of Aegon N.V., the ultimate parent of the Aegon Group, one of the world's leading providers of life insurance, pensions and asset management.

### Aegon Global facts and figures:

- Helping people to achieve a lifetime of financial security
- Global Life insurance, accident & health cover, pensions and retirement plans, annuities, savings products and investments provider serving 28.5 million customers in over 20 countries across Europe, Asia and the Americas
- Over 26,500 employees
- Manages EUR 316 billion in assets under management on behalf of savers and investors worldwide
- Main global brands are Aegon and Transamerica

The 2018 Solvency Financial Condition Report provides Blue Square Re's stakeholders with insights into:

## A. Business and performance

Located in the Netherlands, Blue Square Re is the internal reinsurer for Aegon sourced businesses worldwide. Aegon N.V. is the parent company of Blue Square Re.

Our business model focusses on the reinsurance of life, health and non-life business originating from other parts of the Aegon group, for the purposes of risk pooling and risk retention.

Blue Square Re's premium income amounts to EUR 33 million for the year ended 2018. Shareholders' equity at 31 December 2018 amounts to EUR 41 million.

The key financial indicator for Solvency II is the Solvency II ratio, which at 31 December 2018 is 135% (2017: 128%), based on the Solvency Capital Requirement (SCR) calculated under Standard Formula. The ratio increased in 2018 due to the repricing of the Dutch longevity reinsurance transaction with higher margins, and the expected return on inforce business, offset by non-life losses during the year, expense variances and model and assumption updates of the portfolio.

### Business Developments

In 2018, the Company renegotiated the premium of the Dutch longevity reinsurance transaction after the adoption of the Aegon NL trend model in 2017. After resetting the fixed leg as contractually agreed, the Company also applied the internal Aegon economic framework to re-price the fixed leg with higher margins. This increased the fixed leg and thus the future income.

During the year 2018, three new contracts were onboarded in addition to maintaining or renewing existing contracts: a new Catastrophic cover with Aegon Santander Portugal, a new contract with Aegon Mongeral Brazil on Personalized Insurance and a second tranche of High Net Worth life insurance with Transamerica Life Insurance Bermuda ('TLIB').

At the end of 2018 the company signed a letter of intent with Aegon Transamerica, to novate a portfolio of Aegon Insights business from Transamerica to Blue Square Re. This deal will grow the portfolio of Blue Square Re.

Operationally significant improvements have been made by the Company in 2018. The Company continued and improved the use of actuarial cashflow models for life contracts, alongside tools that automate the processing of model outputs and use the calculation power of cloud computing, to reduce the run time of models and allow further actuarial analysis to be performed.

To further automate and improve the handling and the quality of data the Company receives from its customers, the Company implemented a database that organizes and validates data from the seriatim files of the reinsurance cedants.

To improve the efficiency and quality of reporting, the Company implemented a reporting database in the cloud. This tool enables the users of the Company to easily map data to required formats in a transparent way and to have clear lineage of the reported data.

In the fourth quarter a range of valuation assumptions across several contracts were updated, resulting in only a modest financial impact. This is because there has only been minor variation between the current best estimate assumptions and actual experience.

In light of an EIOPA Q&A on risk mitigating techniques published during 2018, the company performed an analysis of the Dutch longevity reinsurance and the longevity index derivative, using a wide range of scenarios. The results show that the underlying (basis) risk of the Silver hedge is not material and the company can continue to include capital relief from risk mitigation in Q4 (with a haircut for the basis risk).

### Employees

Blue Square Re itself does not have employees, but is serviced by employees of Aegon Nederland. Related expenses are charged to Blue Square Re.

Full details on Blue Square Re's business and performance are described in section A. Business and Performance.

## B. System of governance

### Corporate governance

The Company is a fully regulated entity within Aegon Group. Our corporate governance structure is in place to ensure the safe and efficient management of the Company, its operations and to protect the interests of its customers.

Blue Square Re's risk management governance structure has four basic layers:

- The Supervisory Board;
- The Management Board;
- The Risk & Capital Committee (RCC); and
- The Investment Committee.

Blue Square Re's Management Board is responsible for the overall management of the Company. The Blue Square Re Supervisory Board oversees the Management Board and the general course of affairs of Blue Square Re in relation to the Company's business and corporate strategy.

The Blue Square Re Risk & Capital Committee oversees, and actively monitors and investigates, all BSR risk taking and risk management decisions. The Blue Square Re Investment Committee assesses the compliance of investments with investment mandates set by the Management Board.

The systems of governance did not see material changes other than the appointment of two new Management Board members.

### Risk governance

Blue Square Re's Enterprise Risk Management (ERM) framework is aligned to the Aegon Group ERM framework. This framework is designed to identify and manage potential events and risks that may affect the Company. It involves:

- Understanding which risks the Company is facing
- Establishing an enterprise-wide framework through which risk can be assessed
- Establishing risk tolerances for the level of exposure to a particular risk
- Utilising risk policies to set minimum standards to be met
- Monitoring risk exposure and actively maintaining oversight over the Company's overall risk and solvency positions.

## Control environment

In addition to risk management, Blue Square Re's Solvency II control environment consists of an internal control framework, an actuarial function and an internal audit function. The internal control framework serves to facilitate compliance with applicable laws, regulation and administrative processes and it provides for an adequate control environment including appropriate control activities for key processes. The actuarial function has end-to-end accountability for the adequacy and reliability of reported technical provisions, including policy setting and monitoring of compliance regarding actuarial risk tolerances. Blue Square Re's internal audit function is independent and objective in performing its duties in evaluating the effectiveness of Blue Square Re's internal control system.

Full details on Blue Square Re's system of governance are described in section B. System of Governance.

## C. Risk profile

### Key risks

As an internal reinsurer, BSR accepts and manages risk, sourced from other Aegon units, for the benefit of its customers and other stakeholders. The Company's largest exposures are to insurance related (underwriting) risks, such as changes in mortality rates or claim rates on property insurance.

The key risks as reflected in the Company's Standard Formula Solvency Capital Requirement are:

### SFCR Section

Amounts in € million	Components description from QRT S.25.01	2018	2017
C.3.2 Market risk	Market risk (SF)	13	13
C.3.3 Credit risk*	Counterparty default risk (SF)	2	2
C.3.1 Underwriting risk	Life underwriting risk (SF)	50	50
	Health underwriting risk (SF)	10	10
	Non-life underwriting risk (SF)	10	11
C.3.5 Operational risk	Operational risk (SF)	1	1
E.2.1 Solvency Capital Requirement	LAC-DT	-/-14	-/-15
	Diversification**	-/-25	-/-25
	Other capital requirements	-	-
	<b>Standard Formula SCR</b>	<b>48</b>	<b>46</b>
	<b>Solvency II ratio</b>	<b>135%</b>	<b>128%</b>

\* In this table the term 'credit risk' excludes spread risk, migration risk and default (market risk concentration) risk relating to financial investments. These risks are shown under 'market risk'.

\*\* Diversification reflects diversification between risk modules/components

The risk exposures for BSR have largely remained stable over the year with a minor reduction in the non-life space due to the termination of some contracts. The main contributor to the increase in SCR over the year is the update to loss absorbing capacity of deferred taxes (LACDT) from 100% in 2017 to 90% in 2018 to reflect new tax rates proposed by the Dutch Government.

### Risk management

The Company manages risk based on risk appetite and policies established across the Aegon Group with appropriate local application and consideration. These are key elements of the Aegon Risk Management Framework applicable to the Company. More generally, Aegon's integrated approach to risk management involves common measurement of risk and scope of risk coverage to allow for aggregation of the overall Aegon Group's risk position.

Risk mitigation techniques are employed within the business. Techniques are adopted to reduce risk exposures within risk appetite. Examples include reinsurance and derivative hedging programmes.

Sensitivity and scenario analysis is utilised to test the overall financial strength of the business and the exposure to specified risk exposures. Sensitivities and scenario analysis is a core part of the risk framework in allowing the business to measure, monitor and manage risk exposures at any time.

Full details on BSR's risk profile are described in section C. Risk Profile.

## D. Valuation for Solvency Purposes

The valuation of assets and technical provisions for Solvency II purposes is derived predominantly from the same data and models as used in preparation of the Statutory Accounts, and a key internal process control is to reconcile from the audited Statutory Accounts to the valuation of assets and technical provisions for Solvency II reporting.

Full details on the reconciliation between Blue Square Re's International Financial Reporting Standards ('IFRS') as adopted by the EU balance sheet and its Solvency II balance sheet are described in section D. Valuation for Solvency Purposes.

## E. Capital management

### Overview of 2018 and key results

Subject to specifications of the SII rules and regulations, the Own Funds are the assets of the Company less the liabilities. Under Solvency II, firms must hold regulatory capital, called the Solvency Capital Requirement ('SCR') in addition to those liabilities in order to ensure that they will still be in a position, with a probability of at least 99.5%, to meet their obligations to policyholders and beneficiaries over the following 12 months. The minimum level and composition of an insurer's Own Funds is determined by reference to its SCR. For Blue Square Re, the Standard Formula is used for the measurement of the SCR. The Minimum Capital Requirement ('MCR') is the minimum level of security below which financial resources should not fall.

### Solvency II key figures

<i>Amounts in € million</i>	<b>December 31, 2018</b>	December 31, 2017	%
Own Funds	65.4	59.5	10%
SCR	48.5	46.3	5%
Solvency II ratio	135%	128%	
MCR	12.1	11.6	5%

The year-end Solvency II ratio is 135% (2017: 128%) for the Company, representing the Own Funds as a ratio of the SCR.

Following the new tax rates proposed by the Dutch Government and the LACDT recoverability assessment performed in 2018, Blue Square Re has applied a LACDT factor of 90% as of December 31, 2018. The LACDT factor will be recalibrated on a quarterly basis using the agreed methodology.

Full details on Blue Square Re's Own Funds and SCR are provided in section E. Capital Management.

# A. Business and performance

## A.1. Business

### A.1.1 Overview

Blue Square Re N.V., incorporated and domiciled in the Netherlands, is a public limited company organized under Dutch law and recorded in the trade Register of the Chamber of Commerce under number 50745182 in The Hague under its registered address at Aegonplein 50, 2591 TV, The Hague, the Netherlands.

Blue Square Re N.V.'s share capital is 100% held by Aegon N.V., the ultimate parent company of the Aegon Group.

BSR's website address is [www.aegonbluesquare.com](http://www.aegonbluesquare.com).

BSR received its reinsurance license from De Nederlandsche Bank (DNB) on February 22, 2011 and with that it undertakes its principal activity of a reinsurer for specified life, health and non-life insurance risks.

### A.1.2 Regulators and auditor

The authority responsible for Solvency II supervision for both Blue Square Re N.V. and Aegon N.V. is:

De Nederlandsche Bank (DNB), the Dutch Central Bank;  
Westeinde 1  
1017 ZN, Amsterdam  
Telephone: +31 (0) 20 524 91 11

The external auditor of Blue Square Re N.V. is:

PricewaterhouseCoopers Accountants N.V.  
Thomas R. Malthusstraat 5  
1066 JR Amsterdam  
Postbus 90357  
1006 BJ Amsterdam  
The Netherlands

Telephone: + 31(0)88-7920020

The external auditor's mandate does not cover an audit on the information disclosed in this SFCR.

### A.1.3 Holders of qualifying holdings

Blue Square Re N.V.'s share capital is 100% held by Aegon N.V., the ultimate parent company of the Aegon Group. Aegon N.V. is a public limited company, and has its statutory seats in The Hague, the Netherlands. Solvency II group supervision, as well as supplementary supervision in accordance with EU Directive 2002/87/EC is exercised at the level of Aegon N.V.

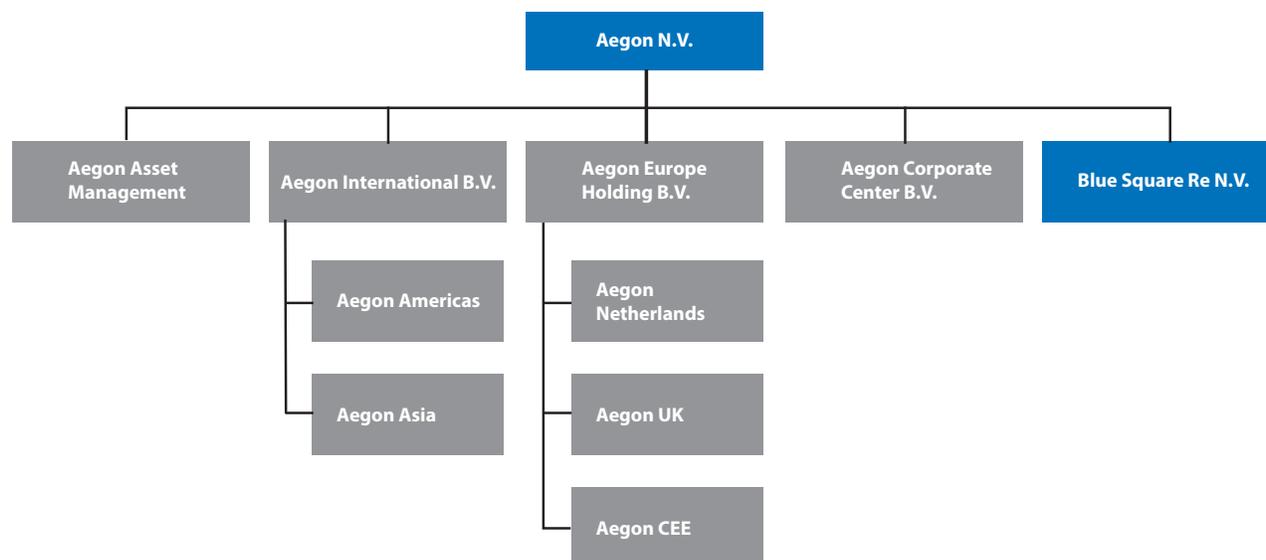
Aegon N.V., publishes consolidated financial statements that have been prepared in accordance with International Financial Reporting Standards as adopted by the European Union and with Part 9 of Book 2 of the Dutch Civil Code. Aegon N.V.'s consolidated financial statements are available on its website ([www.aegon.com](http://www.aegon.com)).

Vereniging Aegon is a Dutch association located in The Hague, the Netherlands, with a special purpose to protect the broader interests of Aegon N.V. and its stakeholders. On December 31, 2018, Vereniging Aegon, Aegon's largest shareholder, held a total of 279,236,609 common shares and 571,165,680 common shares B.

Under the terms of the 1983 Merger Agreement as amended in May 2013, Vereniging Aegon has the option to acquire additional common shares B. Vereniging Aegon may exercise its call option to keep or restore its total stake to 32.6% of the voting rights, irrespective of the circumstances that caused the total shareholding to be or become lower than 32.6%. In the absence of a 'Special Cause' Vereniging Aegon may cast one vote for every common share it holds and one vote only for every 40 common shares B it holds. As 'Special Cause' qualifies the acquisition of a 15% interest in Aegon N.V., a tender offer for Aegon N.V. shares or a proposed business combination by any person or group of persons, whether individually or as a group, other than in a transaction approved by the Executive Board and the Supervisory Board. If, in its sole discretion, Vereniging Aegon determines that a Special Cause has occurred, Vereniging Aegon will notify the General Meeting of Shareholders and retain its right to exercise the full voting power of one vote per common share B for a limited period of six months. Accordingly, at December 31, 2018, the voting power of Vereniging Aegon under normal circumstances amounted to approximately 14.33%, based on the number of outstanding and voting shares (excluding issued common shares held in treasury by Aegon N.V.). In the event of a Special Cause, Vereniging Aegon's voting rights will increase, currently to 32.6%, for up to six months.

The following picture illustrates the simplified structure of the Aegon group, to show the legal position of Blue Square Re in the Aegon Group.

#### Organizational structure of the significant entities of Aegon Group



#### A.1.4 List of principal subsidiaries, joint ventures and investments in associates

BSR does not have any subsidiaries nor any material related undertakings.

#### A.1.5 Material lines of business and material geographical areas.

The reinsurance contracts ceded to BSR can be grouped into three major lines of business:

1. Life
2. Health
3. Non-life

The Life line of business is the most material line, and within it, is currently highly skewed towards a single large longevity reinsurance contract (Dutch longevity reinsurance). As such, this contract will contribute more significantly to the performance and volatility of BSR's results in comparison to the other ceded business. The major risk underlying this segment is the risk of participants in the reinsured portfolio living longer than expected. The life line of business encompasses reinsured products offering protection against mortality (both the risk of people dying and the risk of people living longer) and morbidity (mainly critical illness and total and permanent disability).

The health similar-to-life business includes reinsured products offering protection against supplemental health, critical illness and cancer treatment, and accidental death and dismemberment.

Lastly, the non-life line of business includes household reinsurance and fire damage, as well as natural catastrophe reinsurance programs.

Given the current business model of BSR where business is ceded from all geographical segments over the world, but the underlying insurance risks are directly assumed on BSR's own balance sheet, which is domiciled in The Netherlands, BSR does not yet split the business into geographical areas based on ceding company's risk location.

## A.2 Underwriting performance

### A.2.1 Premium Income

The premium income is specified in the table below by material lines of business – life and non-life – as per the Financial Statements.

<i>Amounts shown in EUR '000s</i>	Gross	Reinsurance
<b>Total life</b>	<b>17,370</b>	<b>137</b>
Non-life		
Property & Casualty	8,115	-
Accident & Health	7,183	-
<b>Total Non-Life</b>	<b>15,299</b>	<b>-</b>
<b>Total Life &amp; Non-Life</b>	<b>32,668</b>	<b>137</b>
<i>Amounts shown in EUR '000s</i>	Gross	Reinsurance
<b>Total life</b>	<b>12,402</b>	<b>9</b>
Non-life		
Property & Casualty	12,448	428
Accident & Health	8,433	-
<b>Total Non-Life</b>	<b>20,881</b>	<b>428</b>
<b>Total Life &amp; Non-Life</b>	<b>33,283</b>	<b>437</b>

During the year 2018, three new contracts were on boarded in addition to maintaining or renewing existing contracts: a new Catastrophic cover with Aegon Santander Portugal, a new contract with Aegon Mongeral Brazil on Personalized Insurance and a second tranche of High Net Worth life insurance with Transamerica Life Insurance Bermuda ('TLIB').

The increase in life premium is mainly a result of the 2018 repricing of the Johannes transaction (2018: EUR 5.8 million and in 2017: EUR 2.7 million) and the new reinsurance treaty with Transamerica Life International (Bermuda, 2018: EUR 0.4 million and in 2017: 0). Additionally the income increased for the following treaties: Transamerica Life (Bermuda, 2018: EUR 3.5 million and in 2017: EUR 3.0 million), Aegon Santander Vida Seguros Y Reaseguros (2018: EUR 1.7 million and in 2017: EUR 1.1 million), Scottish Equitable (2018: EUR 3.2 million and in 2017: EUR 2.8 million).

The decrease in non-life premium is caused by the decline of the Property & Casualty portfolio of Aegon Santander (Spain) (2018: EUR 6.5 million and in 2017: EUR 10.9 million) and the Aegon Hungary non-life contract (2018: EUR 0.5 million and in 2017: EUR 1.0 million) partly offset by an increase in the income of the reinsurance treaty with Aegon Schadeverzekering (2018: EUR 0.8 million and in 2017: EUR 0.4 million).

The Accident & Health portfolio decreased due to the run-off-phase of the contract with Mitsui Sumitomo in Thailand (2018: EUR 0.3 million and in 2017: EUR 1.9 million) and offset by a higher premium of Mitsui Sumitomo Insurance in Japan (2018: EUR 6.9 million and in 2017: EUR 6.6 million).

The reinsurance premium of EUR 137k is the outwards premium that the company pays to the retrocessionaires.

### A.2.2 Policyholder claims and benefits

<i>Amounts shown in EUR '000s</i>	2018	2017
Claims and benefits paid to policyholders	14,536	13,073
Change in valuation of liabilities for reinsurance contracts	-/-1,734	11,185
<b>Total</b>	<b>12,802</b>	<b>24,258</b>

Policyholder claims and benefits decreased by EUR 11.5 million to EUR 12.8 million in 2018. The decrease was mainly driven by lower reserve strengthening in 2018.

The increase in the claims and benefits paid to policyholders of EUR 1.5 million is mainly the result of higher payments of claims on the UK Individual Protection, India and Spain Life contracts.

The change in valuation of liabilities for reinsurance contracts in 2018, reflects a small impact from the assumption updates.

## A.3 Investment performance

### A.3.1 Investment income and expenses

This section provides an overview of the investment performance. The investment performance is specified as income only as the investment income is shown net of investment management fees.

#### Investment income

<i>Amounts shown in EUR '000s</i>	2018	2017
Interest income	59	14
<b>Total</b>	<b>59</b>	<b>14</b>

Investment income fully consists of income related to general account investments. In 2017 the interest income mainly consists of the income on the cash and cash equivalents and the outstanding collateral.

The company general account investment portfolio is invested in asset management funds and an insurance linked investment fund. The results of the investment portfolio are reflected as unrealized fair value movements and reported under Results from financial transactions.

### A.3.2 Results from financial transactions

#### Results from financial transactions

<i>Amounts shown in EUR '000s</i>	2018	2017
Net fair value change of shares at fair value through profit or loss	2,089	3,506
Net fair value change of free standing derivatives	1,505	15,828
Net fair value change of financial liabilities	-	-/-811
Net foreign currency (gains) / losses	-/-1,282	1,598
<b>Total</b>	<b>2,313</b>	<b>20,122</b>

The net fair value change of shares relates to the unrealized fair value movements (minus transaction expenses) of the investments in Aegon Asset Management Investment Funds and the Leadenhall insurance linked investment funds, which showed a loss of EUR 2.1 million as a result of the typhoons in Asia, hurricanes in America and wildfires in California.

The net fair value change of free standing derivatives relates to the longevity index derivative the Company entered into in 2013. The loss of EUR 1.5 million relates to the release of the margin, reflecting the expiration of the market value risk margin in excess of the best estimate of the longevity index derivative,

The Company pays EUR 1.0 million per year to the counterparties of the longevity index derivative and will continue to do so for the coming years. In case of a default of the counterparties, the Company contractually has no obligation to pay any longer.

The net fair value change of financial liabilities for 2017 represents the gain on the interest rate derivatives during 2017. During 2017 the Company hedged the interest rate sensitivity of the longevity index derivative using interest rate swaps. The interest rate swaps were unwound at the end of 2017, as the interest rate risk of the longevity index derivative was no longer considered material.

The net foreign currency profit mainly relate to the foreign currency results on the Deferred Policy Acquisition Cost ('DPAC') for reinsurance contracts.

## A.4 Performance of other activities

### A.4.1 Other activities income and expenses

This section provides an overview of the performance of other activities – other than underwriting or investment income and expenses.

*Amounts shown in EUR '000s*

	<b>2018</b>	2017
Fee and commission income	898	568
<b>Total</b>	<b>898</b>	<b>568</b>

The commission and fee income for the year 2018 relates mainly to services rendered to other Aegon units and business partners.

## A.5 Any other information

In December the Company signed a letter of intent with Transamerica Life Insurance Company to novate the reinsurance contracts of Aegon Insights Asia business to Blue Square Re. The company is unaware of other post reporting date events that give further information on the situation pertaining on the reporting date.

All relevant material information is included in this report; the management of Blue Square Re is not aware of any other relevant information regarding the business, financials, and performance.

# B. System of governance

## B.1. General information on the system of governance

### B.1.1. Corporate governance

Blue Square Re N.V. is a public limited company incorporated and based in the Netherlands. As a company established in the Netherlands, Blue Square Re must comply with Dutch law and subscribes voluntarily to suitable parts of the Dutch Corporate Governance Code. The company is governed by three main corporate bodies: the Management Board, the Supervisory Board and the general Meeting of Shareholders. B.1.1.1 The Management Board

Blue Square Re's Management Board is responsible for the overall management of the Company and is therefore responsible for achieving Blue Square Re's business objectives, developing the strategy and its associated risk profile, taking into account the interests of all Blue Square Re stakeholders and the development of the Company's earnings. Each member has duties related to his or her specific area of expertise and for the management of the company as a whole.

Blue Square Re's Articles of Association determine that for certain decisions the Management Board must seek prior approval from the General Meeting of Shareholders. In addition, the approval policy of Blue Square Re determines that the Management Board must seek prior approval for certain decisions from the Supervisory Board, and for certain decisions approval from the Executive Board of Aegon N.V. prior to Management Board approval.

#### B.1.1.1 The Management Board

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#### Composition of the Management Board

The Management Board consists of a minimum of two Managing Directors, as described in the articles of association. Members of the Management Board are only appointed by the General Meeting of Shareholders after the Regulator has declared that it does not object to the intended appointment.

At the beginning of 2018, the Management Board of Blue Square Re consisted of:

- Chris Madsen (Chairman and Chief Executive Officer);
- Martine Ammerlaan (Chief Financial Officer);

On February 7th, 2018 Colin Selfridge was appointed as a member of the Management Board in the function of Chief Risk Officer and Actuarial Function Holder (AFH).

On December 17th, 2018 Brian O'Malley was appointed as a member of the Management Board in the function of Head of Business Development.

The Management Board currently consists of four members, Chris Madsen (Chairman and CEO), Martine Ammerlaan (CFO), Colin Selfridge (CRO) and Brian O'Malley.

The number of Management Board members and their terms of employment are determined by the General Meeting of Shareholders. The Supervisory Board prepares a profile for the size and composition of the Management Board, taking into account the requirements regarding suitability and reliability as required under the provisions of the Act on Financial Supervision (Wet financieel toezicht). Management Board members are appointed by the General Meeting of Shareholders, following nomination by the Supervisory Board.

### Role of the Management Board

The Management Board is entrusted with the overall management of the Company, which means that, among other things, the Management Board is responsible for the setting and achievement of the business objectives and the strategy, the risk strategy and the risk tolerance, delivery of results, adequate functioning of the internal control framework and compliance with all relevant laws and regulations.

Each individual Management Board member is accountable for the operation and management of the role for which the member is responsible, in line with the Company's policies, values and principles and compliance standards. Management Board members are collectively responsible for managing the company as a whole.

For a description of how the risk management and internal control systems and reporting procedures are implemented consistently, reference is made to section B.4 Internal Control system. Information on any material intra-group outsourcing arrangements is described in section B.7 Outsourcing.

#### B.1.1.2 The Supervisory Board

The Blue Square Re Supervisory Board oversees the Management Board and the general course of affairs of Blue Square Re in relation to the Company's business and corporate strategy. The Supervisory Board must take into account the interests of all Blue Square Re stakeholders. The Supervisory Board operates according to the principles of collective responsibility and accountability.

### Composition of the Supervisory Board

According to the articles of association the Supervisory Board should consist of at least three members. The Supervisory Board is composed of Independent Supervisory Directors and Aegon Supervisory Directors. The majority of the members of the Supervisory Board must qualify as independent. A Board member is independent when there is no employment relationship between the person and any company within the Aegon Group for the last five years. Members of the Supervisory Board are appointed by the General Meeting of Shareholders.

During 2018 the Supervisory Board consisted of four members:

- Wolf Becke, who is the Chairman and an independent board member;
- Annette Sadolin, who is the Vice-Chairman and is an independent board member;
- Patrick Peugeot, who is an independent board member;
- Michiel van Katwijk, who is an Aegon Supervisory Director.

BSR aims to ensure that the composition of the Company's Supervisory Board is well balanced in terms of professional background, geography and gender. A profile has been established that outlines the required qualifications of its members. The profile is tailored to the Company's nature, size and complexity and also incorporates the competencies of the DNB's Suitability Matrix for Supervisory Boards.

The Supervisory Board has drawn up a Succession Plan for the Blue Square Re Supervisory Board. The Succession Plan will be reviewed, and updated if necessary, annually. Remuneration of the Supervisory Board members is determined by the General Meeting of Shareholders.

The Supervisory Board does not have risk or audit sub-committees. Audit, risk and remuneration related topics are discussed by the Supervisory Board in full.

The main role and responsibilities of the Supervisory Board are to provide oversight regarding the business objectives and the strategy, the risk associated with the Company's activities, including the risk policy and risk appetite, the functioning of the internal control framework and compliance with all relevant laws and regulations.

The Supervisory Board advises on the activities of the Management Board, identifying any matters for which it considers action or improvements are needed, and making recommendations as to the steps to be taken. Furthermore, the Supervisory Board regularly reviews risk exposures as they relate to capital, earnings and compliance with risk policies. The Company's risk management is an important topic for the Supervisory Board.

#### **B.1.1.4 Key Functions**

Blue Square Re has implemented the following key functions: actuarial function, risk management, compliance and internal audit. A description of the main roles and responsibilities of the key functions is disclosed in section B.2 Fit and proper requirements. Section B.3, B.4, B.5 and B.6 give a description of the Company's key roles.

#### **B.1.2 Remuneration policy**

Blue Square Re has adopted the Aegon Group Global Remuneration Framework (AGGRF) as its own remuneration policy. The Management Board of Blue Square Re, are exposed to the Group remuneration framework. Blue Square Re N.V. does not employ personnel directly and the remuneration is set by Aegon Corporate Center B.V. The Compensation Committee of Aegon N.V.'s Supervisory Board has overall responsibility for the remuneration policy. Targets for the members of the Management Board of Blue Square Re N.V. are discussed during the Blue Square Re Supervisory Board meetings and approved by the Blue Square Re Supervisory Board. Furthermore, information on the remuneration of the Management Board of the Company (including information on variable pay) is shared with the Supervisory Board.

The remuneration framework is in line with the strategy, vision, core values and risk appetite of the Company and has due regard for developments in society. This means that the level of variable remuneration for employees is discussed in meetings of the Supervisory Board, as well as the financial performance criteria which are applied to variable remuneration. These are adjusted for the estimated risks and cost of capital, whereby the variable remuneration components are in line with the Company's long-term objectives. In line with the Law on Remuneration Policies for Financial Institutions ('Wet belongingsbeleid financiële ondernemingen', or 'Wbfo'), that has been in effect since February 28, 2015, the total variable remuneration of the members of the Management Board does not exceed 20% of fixed income for the whole of Blue Square Re. In line with the Wbfo, Blue Square Re wishes to disclose the total amount of variable compensation paid in relation to performance year 2018. The total amount of variable compensation earned in 2018 was EUR 196,641.

Regarding the form and timing of payments, the regulation requires a portion of the variable remuneration paid to the Management Board to be deferred and partially paid in shares.

Variable remuneration is based on performance relating to targets on the following three levels: (i) Aegon Corporate Center, (ii) Blue Square Re and (iii) personal. The targets are a mix of financial and non-financial performance criteria, which are as objective as possible. The financial criteria were adjusted for estimated risks and cost of capital upon assessment of the actual performance.

Under the governance provisions of Aegon Group's remuneration framework, the Aegon Supervisory Board is authorized, following the results of an ex-post assessment, to suspend or cancel all or a part of the variable remuneration granted conditionally to material risk takers ('malus clause'). This malus clause on variable remuneration granted conditionally to material risk takers was not applied in 2018.

The governance provisions in Aegon Group's remuneration framework state that the Supervisory Board is authorized to recover variable remuneration previously paid to members of the Management Board and material risk takers, if it was granted on the basis of inaccurate financial or other information ('claw back' clause). In 2018, there was no claw back of variable remuneration from members of the Management Board or other material risk takers.

#### **Governance**

The Supervisory Board is responsible for the implementation and evaluation of the Company's Management Board and Key Person Remuneration Policy. The Supervisory Board approves the remuneration policy for the Company's Management Board and the Key Personnel and oversees its implementation by the Management Board. The Company's Supervisory Board also approves the remuneration policy for other employees properly. The Company's remuneration policy includes the policy on awarding retention, exit and welcome packages. The Supervisory Board approves the identification of material risk takers within the companies.

The remuneration policy and its implementation was discussed in meetings held by the Aegon Supervisory Board on several occasions during 2018. The Supervisory Board also discussed the level of variable remuneration. The Supervisory Board approved the 2018 variable remuneration targets for the material risk takers within the framework set out in the AGGRF. It also approved payment of the variable remuneration to the material risk takers relating to prior years that vested in 2018, with due regard to the assessments required under the AGGRF. This remuneration was in line with Aegon Group's remuneration policy. No retention payments were made.

#### Remuneration of the Management Board

The remuneration for Management Board members charged to the Company in the financial year pursuant to Section 383:1 of Book 2 of the Dutch Civil Code is set out below (amounts in thousands of euros).

	2018	2017
Current Management Board Members		
Gross salary and social security contributions	597	449
Pension Premium	60	27
Other benefits	191	129
<b>Total</b>	<b>848</b>	<b>605</b>

#### Employment contracts

Members of the Management Board of Blue Square Re are not employed by the Company, they have a contract of employment with an Aegon group entity. For the year 2018, expenses for the members are included in employee expenses. No severance payments were paid to Management Board members during the year.

During 2018 four Management Board members received Long Term Incentive and Variable compensation.

In 2018, there were no dismissals from the Management Board. None of the members of the Management Board were entitled to a variable remuneration of more than 60% of their annual salary. On average, no more than 20% variable compensation was allocated.

#### Claw-back provision

Where required based on the regulations that apply from time to time, where variable compensation is based on incorrect data (including non-achievement of performance indicators in hindsight), or in the event of material financial restatements or individual gross misconduct, Blue Square Re's Supervisory Board is obliged to claim back variable compensation that has already been paid out or vested.

#### Pension scheme

Pension arrangements are offered in line with market practice. Members of Blue Square Re's Management Board are offered an Aegon group pension scheme. Benefits offered are consistent with the local Aegon pension agreements. There are no specific early retirement schemes.

#### Loans

Blue Square Re does not grant Management Board members and Supervisory Board members personal loans, guarantees or other such arrangements, unless in the normal course of business and on terms applicable to all Aegon employees.

#### Supervisory Board Remuneration

The internal members of the Supervisory Board do not receive remuneration from the Company. The external members of the Supervisory Board receive an annual remuneration of EUR 42k for the Chairman and EUR 26k for the other members. The fee is a fixed amount.

#### Material Transactions

Other than intragroup reinsurance transactions as part of the business model for BSR as an internal reinsurer (described in section A.1.7 Related party transactions) and the Aegon Corporate Center cost charges, there are no other material transactions with the shareholder Aegon NV, with persons who exercise a significant influence on the undertaking, and with members of the Management Board or Supervisory Board.

## B.2 Fit and proper requirements

### B.2.1 Requirements for skills, knowledge and expertise

#### Management board

The Management Board is charged with the management of the Company, which means, among other things, that the Management Board is responsible for the setting and achievement of the business objectives and the strategy, the risk strategy and the risk tolerance, delivery of results, an adequate functioning of the internal control framework and the compliance with all relevant laws and regulations.

To fulfil their task, the specific skills that members of the Management Board should have at their disposal include: Leadership (i.e. ideas, people and change); Strategic thinking and sound judgement; Financial and commercial expertise, particularly around complex and inorganic change activities; Influencing and relationship building; Communication; Delivery with clear focus on customers; Innovation, problem solving and customer-centricity.

Moreover, the members of the Management Board should possess knowledge and experience in the areas of:

- Having a strategic understanding of - and insight into - the (re)insurance industry, with particular emphasis on the challenges and opportunities for product innovation, different markets and digitization of platforms.
- Specifically, good understanding of the different regimes associated with insurance and investments, including capital management and regulatory frameworks.
- Extensive industry and executive management experience in a number of financial, operational and strategic roles – in addition to being - a leader respected by regulators, external stakeholders and other Aegon departments. In addition, proven ability to lead complex transactions across an organization, including inorganic activity.

All members of the Management Board (as day-to-day policymakers of Blue Square Re) have been tested by the Dutch supervisory authorities on fitness and propriety prior to their respective appointments and fulfil these requirements on an ongoing basis.

#### Supervisory Board

Blue Square Re's Supervisory Board oversees the management of the Management Board, in addition to the Company's business and corporate strategy. The Supervisory Board must take into account the interests of all of Blue Square Re's stakeholders. The Supervisory Board operates according to the principles of collective responsibility and accountability.

The Supervisory Board, as a collective, should have the following qualifications: An international composition; Experience with, and understanding of, administrative procedures and internal control systems; an affinity with and knowledge of the industry, its clients, its products and services, the (re)insurance market and Blue Square Re's businesses and strategy; Knowledge and experience in applications of information technology; Experience in the international business world; Expertise in financial, accounting and business economics, and the ability to judge issues in the areas of risk management, solvency, actuarial, currencies and investment and acquisition projects

All members of Blue Square Re's Supervisory Board have been tested by the Dutch supervisory authority (DNB) on fitness and propriety prior to their appointment and fulfil these requirements on an ongoing basis.

#### Other Key Functions

Furthermore, with regard to the Solvency II Delegated Regulation, Blue Square Re has implemented the following four key control functions: risk management, compliance, internal audit and the actuarial function.

#### Risk management

Blue Square Re's CRO is the function holder for risk management. The CRO is also a member of the Management Board, and chairs the Risk & Capital Committee. (Risk management is described in more detail in section B.3 Risk management system including the Own Risk and Solvency Assessment).

#### Compliance

The Aegon global head of Regulatory Compliance is the key function holder for Compliance at BSR. The role and independence of the BSR Compliance function are described in the BSR Compliance Charter and address the Solvency II independence requirements and responsibility for ensuring that the risk profile is managed in line with risk tolerance. Please refer to Section B.4.2 Compliance activities and policy.

### Internal Audit

The Aegon Global Head of Internal Audit is the function holder for internal audit at BSR. In line with the requirements, internal audit is fully objective and independent from all other functions, reporting directly into the CEO and Supervisory Board Audit Committee. (Section B.5 Internal audit function).

### Actuarial function

The Company has combined the role of the AFH with the CRO role in one person. The AFH role resides within the 2nd line of defense at BSR, with a dotted line to the Supervisory Board. (Section B.6 Actuarial function).

#### B.2.2 Process for assessment

In accordance with the Dutch Financial Supervision Act, Blue Square Re N.V., as a Reinsurance company, has identified, in addition to the members of the Management Board and Supervisory Board, those persons that fulfil “key functions” as referred to in articles 3:271 and 3:272, in connection with articles 3:8 and 3:9 of the Dutch Financial Supervision Act. This group of persons is broader than but includes all persons that fulfil key functions as referred to in art. 294 (2) of the Solvency II Delegated Regulation. These persons are subject to a pre-employment screening prior to their employment within Aegon, as well as a propriety assessment by the Dutch supervisory authorities prior to their appointment in a key function.

Fitness of the persons that effectively run the undertaking or have other key functions is determined as part of the recruitment process. For each function Blue Square Re has drawn up a specific job profile. Fitness of a specific person for a function is assessed against this job profile.

The ongoing compliance with propriety requirements of the persons that effectively run the undertaking or have other key functions is a joint responsibility of the respective person as well as Blue Square Re, and is monitored as part of the regular HR cycle within BSR.

## B.3 Risk management system including the Own Risk and Solvency Assessment

### B.3.1 Risk management system

#### B.3.1.1 Enterprise Risk Management Framework

BSR applies Aegon’s ERM framework, which is designed and applied to identify and manage potential risks that may affect the Company. This means identifying and managing individual and aggregate risks within BSR’s risk tolerance in order to provide reasonable assurance regarding the achievement of BSR’s objectives. The ERM framework is designed in line with the Committee of Sponsoring Organizations of the Treadway Commission (COSO) model.

#### General

As a reinsurer BSR manages risk for the benefit of its customers and other stakeholders. As a result, the Company is exposed to a range of underwriting, operational and financial risks. BSR’s risk management and control systems are designed to ensure that these risks are managed effectively and efficiently in a way that is aligned with the Company’s strategy.

#### Definition and tolerances

For BSR, ERM involves:

- Understanding the risks that BSR faces;
- Maintaining a framework through which risk return trade-offs can be assessed;
- Maintaining risk tolerances, and supporting policies to limit exposure to a particular risk or combination of risks; and
- Monitoring risk exposures and actively maintaining oversight of the Company’s overall risk and solvency positions.

By setting certain predefined tolerances and adhering to policies that limit the overall risk to which the Company is exposed, BSR is able to accept risk with the knowledge of potential returns and losses.

### ERM Building Blocks

BSR's ERM process can be broken down into multiple components. However, ERM is not strictly a sequential process, where one component affects only the next. It is a multidirectional, iterative process in which almost any component can and does influence another.

The principles and requirements of ERM apply on all organizational levels and concern both financial and operational risks. Risks are managed from multiple perspectives, including economic, regulatory and accounting. Relevant metrics in ERM include capital, earnings, liquidity and franchise value.

Figure: Building blocks of Enterprise Risk Management framework



#### Risk Strategy:

The purpose of BSR's risk strategy is to provide direction for the desired risk profile while supporting the Company's business strategy. An assessment is made whether BSR has the competence to manage the risk and if the Company's risk preferences are formulated. In other words: from a risk-return perspective, which risks BSR likes and which risks it wants to avoid. The assessment of risk preferences eventually leads to a targeted risk profile that reflects which risks BSR wants to keep on the balance sheet and which risks it would like to avoid by means of hedging, product design or other risk mitigation techniques/ management actions.

#### Risk Tolerance:

Risk Tolerance incorporates the risk appetite of BSR including qualitative and quantitative risk tolerances that are the basis to support the business in making decisions on whether risks are within appetite, acceptable or need to be mitigated or avoided. Tolerances are to be determined by management based on the values and principles of Aegon, and should be in line with the Company's purpose, values, objectives, Code of Conduct and Market Conduct Principles.

#### Risk Identification:

The risks that BSR faces are identified and presented in the risk universe, which captures all known material risks to which the Company is exposed. An emerging risk process ensures that the risk universe will capture the full spectrum of risks. In order to assess the risks, Aegon has developed a methodology for measuring the risks as defined in the risk universe.

**Risk Assessment:**

BSR's approach to evaluating risks is based on the quantitative and qualitative rating of those risks with regard to their potential impact and likelihood after consideration of the effectiveness of controls. Risk impact is assessed along the following three impact dimensions: financial loss, customer & reputation, and financial misstatement. The resulting ratings reflect the uncontrolled (residual) risk the business area is running.

**Risk Response:**

Once the risks have been identified, evaluated and prioritized, an appropriate risk response needs to be defined.

- When the risk exposure is within the defined risk tolerance, management can accept the risk.
- When exposure exceeds the risk tolerance, or cost-benefit analysis supports further action, management can decide to control, transfer or avoid the risk.

**Risk Reporting (& Monitoring) :**

Compliance with the risk tolerances and the risk policy requirements is monitored and reported on a periodic basis to operational management. Through a formal BSR Risk & Capital Committee ("BSR RCC"), senior management is informed about the forward looking risk profile on a quarterly basis, together with details of action plans that address key risks. In the quarterly report the CRO's opinion on the effectiveness of those plans is formalized.

BSR controls the risks it faces along various dimensions through its risk governance framework, risk monitoring, model validation, and embedding of risk management into functional areas, such as business planning, capital planning and management, remuneration, pricing and product development. Risk control is further supported by a strong risk culture and effective compliance risk management.

The execution of these building blocks is a continuous and iterative undertaking, including periodic or ad hoc adjustment of the strategy and risk tolerance based on new risk information or changes in the business (environment). The full enterprise risk management methodology is formalized in the ERM Manual, ERM Policy and underlying detailed policies and manuals.

**B.3.1.2 Risk governance framework**

The Company's risk management is based on clear, well-defined risk governance. The goals of risk governance are to:

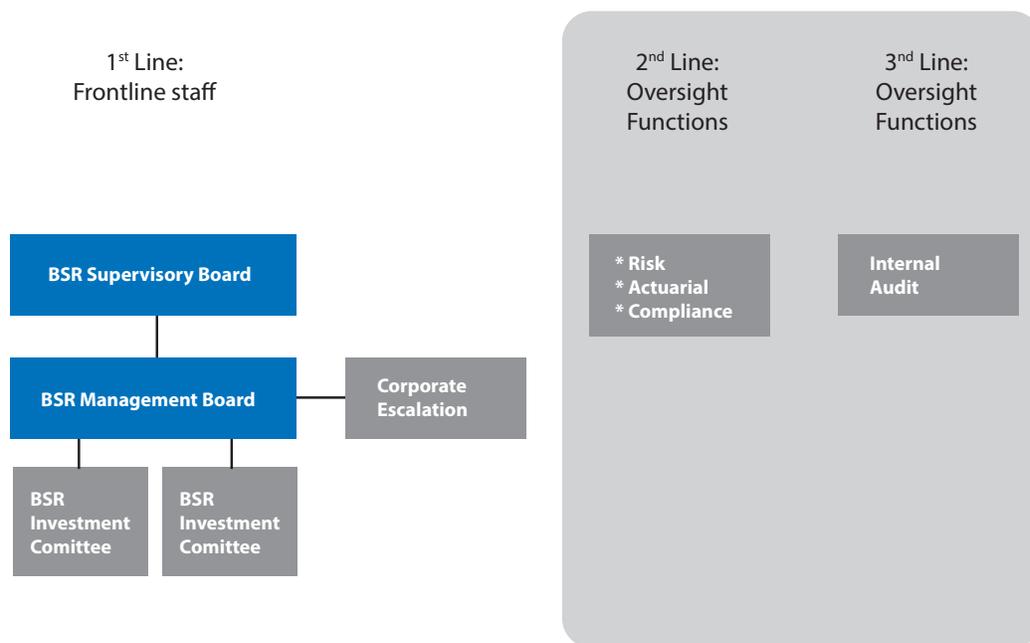
- Define roles and responsibilities and risk reporting procedures for decision makers;
- Institute a proper system of checks and balances;
- Provide a consistent framework for managing risk in line with the targeted risk profile; and
- Facilitate risk diversification.

**Governance structure**

BSR's risk management framework is represented across all levels of the organization. This ensures a coherent and integrated approach to risk management throughout the company. In this context, Blue Square Re has a range of risk policies that detail specific operating guidelines and limits. These policies include legal, regulatory and internally set requirements, and are designed to keep overall risk-specific exposures to a manageable level. Any breach of policy limits triggers remedial action or heightened monitoring.

Blue Square Re's risk management governance structure has four basic layers (as illustrated in the figure below):

- The Supervisory Board;
- The Management Board;
- The Risk & Capital Committee (RCC); and
- The Investment Committee.

*Blue Square Re's risk governance framework***Supervisory Board**

The Supervisory Board is responsible for overseeing Blue Square Re's ERM framework, including risk governance and measures taken to ensure risk management is integrated properly into the Company's broader strategy. The Supervisory Board oversees the Company's risk exposure as it relates to capital, earnings, Solvency II and compliance with risk policies.

**Management Board**

The BSR Management Board ("BSR MB") has overall responsibility for risk management. The BSR MB adopts the risk strategy, risk governance, risk tolerance and material changes in risk methodology and risk policies. It is the responsibility of the BSR Management Board to inform the Supervisory Board should any risks directly threaten the solvency, liquidity or operations of the company. The CRO can escalate issues directly to the Supervisory Board and to the CRO of Aegon Group. The CRO is a member of the BSR MB.

The BSR MB oversees a broad range of strategic and operational issues. The BSR MB discusses and sponsors ERM, in particular:

- Embedding of risk strategy into business strategy and enterprise risk management into business operations;
- Reviewing risk governance structures, risk tolerance statements and risk policy limits;
- The Pricing and Product Development Policy;
- The introduction of new risk policies; and
- Compliance with the ERM framework and policies.

The BSR MB is supported by the Risk & Capital Committee and the Investment Committee.

**Risk and Capital Committee (RCC)**

The Blue Square Re Risk & Capital Committee ("BSR RCC") oversees, actively monitors and investigates all BSR risk taking and risk management decisions, with the authority to recommend to the BSR MB on the risk strategy and the risk limits. The BSR RCC provides high level assurance to the BSR MB that BSR's risk taking is in compliance with the defined risk management frameworks, policies and guidelines.

The BSR RCC's responsibilities are to set overall risk policies and frameworks for BSR in line with BSR's defined risk strategy and risk tolerance statement. The BSR RCC is responsible for promoting the risk management culture of BSR. The committee fulfils this responsibility by ensuring adequate and appropriate staffing in the financial and operational risk functions as well as ensuring that the measurement and management of BSR's risk position is within the defined guidelines. As a general principle, BSR will adopt risk measurement and management methods that are aligned with those used by its shareholder (Aegon N.V.) and its regulator (DNB). This will ensure leverage of best-practices, effective support and ease of consolidation.

#### Investment Committee (IC)

The Blue Square Re Investment Committee ("BSR IC") assesses the compliance of investments with investment mandates set by the BSR MB. The BSR IC also provides advice with regard to the set-up of investment mandates.

The responsibilities of the BSR IC are to design the BSR Investment Strategy, select suitable investment products, monitor the investment mandates and investment policies, report on the liquidity position, monitor the management and performance of BSR's investment portfolio and ensure that the Asset & Liability Management (ALM) & Investment strategy meets the limits and requirements of the Investment & Counterparty Risk policy;

#### Lines of defense

Blue Square Re's risk management structure is organized along three 'lines of defense' to ensure conscious risk-return decisions, and to limit the magnitude of potential losses within defined levels of certainty. The objective of this structure is to avoid surprises due to the materialization of unidentified risks, or from losses that exceed predefined risk tolerance levels and related limit structures.

The Company's three lines of defense are its business and support functions, the risk management function, compliance function and the audit function. The Company's first line of defense, the business and support functions, has direct responsibility for managing and taking risk in accordance with defined risk strategy, risk tolerances and risk policies. The second line of defense - which includes the risk management department, including the operational and conduct risk management function, Actuarial Function Holder and the compliance function holder - facilitates and oversees the effectiveness and integrity of ERM across the Company. The third line of defense - the audit function - provides independent assurance opinions on the effectiveness of the internal control, risk management and governance systems.

#### Model validation process

BSR has requirements in place on model validation. The requirements are covered in the Model Validation Framework, including the Model Validation and Model Change policies. This is an Aegon Group framework that BSR has adopted in full. The Model Validation function is part of the Aegon Group Risk function, and is independent from model owners and business users.

The purpose of the model validation process is to assess the model's integrity, including the performance of the model and the ongoing appropriateness of its specifications. Before model validation by Aegon's second line of defense can take place, responsible management – the first line of defense – should have ensured that the model in scope of the validation meets the requirements as set out in the Model Validation Framework. Among other things, the Model Validation function assesses the appropriate use of test tools under the responsibility of local management and also performs its own independent testing. The findings of the model review are documented and result in a model opinion. Identified gaps need to be closed by the model owners according to a gap closure plan.

## B.3.2 Own Risk and Solvency Assessment

### B.3.2.1 ORSA process overview

The Own Risk and Solvency Assessment ('ORSA') Process has a primary purpose of providing a holistic, inter-connected view of a) BSR's business strategy, b) the risks to which the business is exposed and c) BSR's capital levels. It assesses the financial security of the business given the risks to which BSR is exposed. The ORSA captures the key elements of the risk management and capital management processes which support the Company in pursuit of fulfilling its business strategy. The ORSA process (as illustrated below) encapsulates the link between business strategy, risk and capital.

#### Own Risk and Solvency Assessment



The ORSA is integrated within the Company through BSR's annual Budget/Medium Term Plan (MTP) process and the ongoing Risk and Capital assessments.

The Budget/MTP contains the business plan over a three-year period. This includes business projections on a variety of bases. The business plan combines the business and financial strategy. Also included within the Budget/MTP are stress testing techniques and scenario analysis to provide details of how the Company would be impacted by particular changes in macro and micro economic factors, in addition to non-financial factors impeding the fulfilment of BSR's strategic objectives. The outcomes of the process inform management, enabling them to determine appropriate mitigating actions and define capital and solvency needs.

#### ORSA Frequency

The ORSA is performed annually or more often if deemed necessary, like in situations where the business, solvency or risk profile significantly changes. A non-regular ORSA does not necessarily require all sections to be re-produced. Management is responsible for the monitoring of the triggers that may initiate the execution of a non-regular ORSA. The Management Board is responsible for the execution of a non-regular BSR ORSA.

#### BSR's own solvency needs

An important element of BSR's ERM framework is establishing the organization's tolerance for risk in order to assist management in carrying out BSR's strategy within the limits of available resources. To achieve this, BSR has defined the following areas in which risk tolerance plays an important role, the financial strength, continuity, culture and risk balance.

## B.4 Internal control system

BSR has developed an internal control system that serves to facilitate its compliance with applicable laws and regulation. The internal control system measures the effectiveness and efficiency of the administrative processes in view of its objectives and customer expectations, as well as the availability and reliability of financial and non-financial information. The overall internal control system ensures appropriate control activities for key processes and the documentation and reporting of administrative and accounting information.

The internal control system is embedded through key policies and frameworks such as the ERM Framework, the Model Validation Framework and the OCRM Framework. The internal control system has been developed in accordance with Solvency II regulations. The objective is to provide assurance regarding the reliability, accuracy, completeness, timeliness and quality of internal and external (regulatory) reporting, the safeguarding of assets and compliance with internal and external requirements, in addition to ensuring that BSR delivers on its promise to customers.

As part of the internal control system, a financial reporting internal control framework has been established. Non-financial risks are identified, assessed, mitigated, monitored and reported in the overall risk control cycle. Risks are identified in the risk control self-assessments (RCSAs), model validations, audits, policy attestations and by scenario analyses. Plans and controls are implemented to mitigate these risks.

Furthermore, as required by Solvency II, BSR's internal control framework includes a compliance function, which is described in section B.4.1.

The internal audit function and actuarial function are described in section B.5 and B.6 respectively

### B.4.1 Compliance function

The objective of the compliance function is to support the Management Board in ensuring that Blue Square Re acts in line with relevant legal, regulatory requirements and risk tolerance. The compliance officer advises and assists the business in complying with applicable rules, regulations and internal standards, including reporting, as a first line activity. The second line responsibility of the function will promote and foster compliance with laws and regulations and internal policies. Delivered well, strong (regulatory) compliance will enable the organisation to act with integrity and enable optimal service delivery to our clients.

#### Compliance risk

Compliance risk at BSR is defined as the risk of impairment to the organization's business model, reputation, integrity and financial condition, resulting from failure to comply with laws, regulations and internal company rules and policies. This includes the risk of failure to comply with established good business practices and failing to balance the expectations of key stakeholders such as customers, employees and society as a whole.

The Blue Square Re compliance officer has a formal status, which is stated and communicated through the Blue Square Re Compliance Charter. The compliance officer reports to the Blue Square Re Management Board and the Supervisory Board and is directly accountable to the Aegon Global Head of Regulatory Compliance, who also serves as the key function holder for compliance in BSR.

## B.5 Internal audit function

The internal audit function "Internal Audit" assists the Management Board, the Supervisory Board and Aegon Group in protecting Blue Square Re's assets, reputation, and sustainability by independently and objectively evaluating the effectiveness of internal controls, risk management and governance processes. The internal audit function is the third line of defense.

Aegon Group's internal audit function fulfills the internal audit role for Blue Square Re, with the Aegon Group Chief Audit Executive as the key function holder. She assigns the planning, execution and reporting tasks to a designated internal auditor within Aegon Group Internal Audit.

The internal audit function holder reports functionally and administratively to the CEO of the Company and to the Supervisory Board.

Internal Audit's main tasks and responsibilities are:

- Prepare and execute a risk-based audit plan that is approved by the Management Board and the Supervisory Board;
- Identify, and agree with management, opportunities to improve the internal control framework, risk management and governance processes, and verify that such improvements are implemented effectively within a predetermined period of time;
- Occasionally assist with the following activities: investigating significant suspected fraudulent activities, performing special reviews and providing consulting services;
- Periodically issue reports to the Management Board and the Supervisory Board, summarizing the progress and results with respect to the annual audit plan; and
- Perform audits on the functioning of the first and second line of defense.

### **B.5.2 Independence and objectivity of the internal audit function**

Internal Audit executes its duties in accordance with the International Internal Auditing Standards (IIAs) as well as with BSR's policies and procedures.

Internal Audit avoids any conflict of interest and accesses the knowledge necessary to perform audit activities in specific areas of expertise. If required, temporary resourcing constraints can be alleviated by outsourcing of internal audit activities.

The Aegon Group Chief Audit Executive verifies whether any resource not employed by the internal audit department possesses the necessary knowledge, skills and other competencies to execute the duties of Internal Audit. These resources are appropriately assigned to the audit team or to otherwise assist the internal auditors and comply with the principles of the BSR Internal Audit Charter.

Resources employed within the internal audit function do not execute any operational duties for BSR and will not review a business area or function in which they have had recent management or operational responsibility or are otherwise conflicted. To ensure the independence of the auditors and effective governance, Internal Audit have a reporting line to the Supervisory Board and the Company's Chief Executive Officer.

Any possible conflict of interest is reported to the BSR Management Board and Supervisory Board in an immediate manner, in accordance with the Institute of Internal Auditors.

## **B.6 Actuarial function**

BSR's actuarial function is responsible for the appropriate and on-going assessment of insurance liabilities and related items, including oversight of pricing and valuation of insurance liabilities and mechanisms to manage these insurance liabilities. The BSR actuarial function is split across the Valuation & Capital Team (first line of defense) and the AFH (second line of defense).

The actuarial function is an independent and hybrid function which operates in part as direct support to frontline business operations and in part to keep oversight on behalf of the BSR Management Board and the Supervisory Board regarding reserving, underwriting, reinsurance, pricing, and expense allocations. The work of the actuarial function constitutes to a large extent assessing and challenging the appropriateness and sufficiency of various inputs to and outputs from the actuarial and risk capital processes. This activity is part of the regular review processes within business operations.

Calculation of the technical provisions and required capital, assumption setting and modeling (development, testing, implementation, and methodology) occur within BSR Valuation & Capital Team, with review and challenge by the AFH. The Head of Valuation & Capital reports to the Chief Financial Officer. The AFH operates independently from the first line, and reports to the Management Board and the Supervisory Board.

One of the objectives of the actuarial function is to align the assessment and management of actuarial risks (also referred to as underwriting risks) with Blue Square Re's broader corporate and risk management strategies. The risk tolerance for each actuarial risk is derived from the risk tolerance framework of BSR. The AFH works with the first line of defense to effectively manage actuarial risks in line with Blue Square Re's risk tolerances.

## Objectives of the function

The objectives of the actuarial function consist of end-to-end accountability for the adequacy and reliability of reported technical provisions, including risk margins, by ensuring a proper control framework, accurate reporting and appropriate data, modeling, methodology and assumptions. A further objective that it has is to provide the Management Board with actuarial analysis on: quarterly changes in technical provisions, product pricing, actual and expected assumption experience including expert judgments, and in general the impact of strategic or management decisions on liabilities and actuarial risks. In addition, the actuarial function's objectives contain framework/policy setting, monitoring compliance with respect to actuarial risks and supporting the Management Board in the execution of an effective underwriting policy, also covering the pricing and product development, by providing expert opinions. Finally, the actuarial function aims to ensure compliance with regulatory actuarial (reporting) requirements, including the actuarial sign-off on the adequacy and reliability of technical provisions. The AFH reports periodically about the adequacy and reliability of the technical provisions, actuarial assumption Assumed/Expected results and analysis, analysis of annual actuarial financials (source of earnings), pricing developments, reinsurance use, underwriting practices, actuarial content in regulatory reports (e.g. SFCR and ORSA), and required capital methodology for actuarial risks. The AFH is responsible for signing off the Solvency II Actuarial Function report.

## B.7 Outsourcing

### B.7.1 External outsourcing arrangements

External outsourcing arrangements are arrangements of any form between BSR and a supplier, by which the supplier performs a function or an activity, whether directly or by sub-outsourcing, which could otherwise be performed by the organization itself. BSR has outsourcing arrangements in place for the storage of data in a cloud environment, with jurisdiction in the UK.

An external outsourcing arrangement is considered to be a material risk under Solvency II and by the Company when it covers a critical or important function or activity that is essential to the operation of the undertaking, so that it would be unable to deliver its services to policyholders without the function or activity. The Company defines material external outsourcing arrangements based on a vendor classification matrix, which is included in the 'Outsourcing & Supplier Risk Policy'.

Material outsourcing arrangements and material suppliers have an impact on operational risk as a result of potential material changes to and reduced control over the related people, processes and systems. To manage material outsourcing arrangements and material suppliers, BSR has adopted the Aegon Outsourcing & Supplier Risk Policy. The aim of this policy and other procurement related documentation is to ensure that all arrangements entered into by Aegon are subject to appropriate assessment and approval. Where arrangements are identified as material outsourcing arrangements (i.e. risk classification severe and significant), due diligence, approval and on-going monitoring is performed in line with the policy. All material risks arising from external material outsourcing arrangements and material suppliers are appropriately managed to ensure that BSR is able to meet both its financial and service obligations.

### B.7.2 Intra-group outsourcing arrangements

Blue Square Re has material intra-group outsourcing agreements. BSR makes use of several ancillary service companies which perform a range of services for BSR. These ancillary service companies are fully owned by the Aegon Group. BSR has outsourced the asset management function to Aegon Asset Management and an external asset manager, who manage the investments based on investment mandates.

The Outsourcing & Supplier Risk Policy also covers intra-group outsourcing. For intra-group outsourcing (i.e. where the supplier is a legal entity fully owned by Aegon) the examination of the vendor may be less detailed as BSR has greater familiarity with the vendor. However, both BSR and Aegon Group require for intra-group outsourcing agreements a written agreement including a service level agreement (SLA) (if applicable), stipulating duties and responsibilities of both parties.

Given the size of Blue Square Re, the company has outsourced part of its functions to Aegon Corporate Center, to Aegon Global Technology and to Aegon Asset Management ("AAM"). The company has a Service Level Agreement with Corporate Center and AAM in place. The SLAs contain descriptions of the roles, responsibilities, monitoring of the outsourced activities and the Dutch jurisdiction. On a regular basis, at least yearly, the responsible Blue Square Re Management Board member evaluates the performance of the outsourced activity.

## B.8 Any other information

### B.8.1 Assessment of adequacy

The Corporate Governance at Blue Square Re is determined by the Management Board and the Supervisory Board and the shareholder, Aegon N.V. Regulations and (inter)national guidelines are taken into account and the roles and responsibilities of the Management and Supervisory Board are reflected in management charters. Those management charters are reviewed on a regular basis and revisions will follow required approval processes.

In addition, all employees of Blue Square Re are committed to the Code of Conduct which consists of our Purpose, Core Values, Business Principles and Rules of Conduct of Aegon Group, which Blue Square Re endorses. The Code of Conduct also addresses Governance aspects and reflects on the internal guidelines and policies, the compliance with laws and regulations, information sharing and the identification and management of risks in a prudent way.

### B.8.2 Other material information

Blue Square Re is not aware of any other material information regarding the system of governance.

# C. Risk profile

## Introduction to BSR's risk profile

As an internal reinsurer, BSR accepts and manages risk, sourced from other Aegon units, for the benefit of its customers and other stakeholders. The pre-tax, pre-diversified capital requirements, categorized as prescribed by EIOPA, are as follows:

### SFCR Section

Amounts in € million	Components description from QRT S.25.01	2018	2017
C.3.2 Market risk	Market risk (SF)	13	13
C.3.3 Credit risk*	Counterparty default risk (SF)	2	2
C.3.1 Underwriting risk	Life underwriting risk (SF)	50	50
	Health underwriting risk (SF)	10	10
	Non-life underwriting risk (SF)	10	11
C.3.5 Operational risk	Operational risk (SF)	1	1
E.2.1 Solvency Capital Requirement	LAC-DT	-/-14	-/-15
	Diversification**	-/-25	-/-25
	Other capital requirements	-	-
<b>Standard Formula SCR</b>		<b>48</b>	<b>46</b>
<b>Solvency II ratio</b>		<b>135%</b>	<b>128%</b>

\* To align with the SCR in QRT s.25.01 and section E, we will only discuss Counterparty Default Risk (as defined in the Delegated Regulation) in section C3.3. More generally, we consider the term 'credit risk' to also include spread risk, migration risk and default (market risk concentration) risk relating to financial investments. To keep this alignment with QRT s.25.01 consistent throughout the SFCR, these other components of credit risk are discussed instead in section C3.2 Market risk.

\*\* Diversification reflects diversification between risk modules/components

Thus the Company is exposed to a range of underwriting, market, credit, liquidity and operational risks. Since its founding, BSR has been focused on underwriting risk transfer solutions for Aegon businesses, and this is reflected in the fact that the majority risk exposure is underwriting.

BSR operates within its risk management and control systems, which are designed to ensure that these risks are managed effectively and efficiently in a way that is aligned with the Company's strategy.

BSR's risk strategy provides direction for the targeted BSR risk profile while supporting BSR's business strategy. The targeted risk profile is determined by reinsurance customer needs, BSR's competence to manage the risk, the preference of BSR and Aegon for the risk, and whether there is sufficient capacity to take the risk. BSR currently targets a balance of underwriting risks that provides a good level of risk capital diversification. BSR's investment strategy aims to ensure adequate liquidity is available, rather than focussing on investment return, so the aim is not to take on high levels of financial market and credit risks.

To manage its risk exposure, the Company has risk policies in place. BSR has adopted Aegon Group risk policies, and in some cases BSR-specific policies that have been adapted to BSR's situation as a reinsurer. As mentioned in B.3.1.2 Risk governance framework, risk policies limit the Aegon Group and BSR's exposure to major risks such as equity, interest rates, credit, and currency.

Factors influencing BSR's risk preferences include: expected returns, alignment between BSR and reinsurance counterparty interests, the existing risk exposures, other existing risk characteristics such as diversification, the severity of the risk in an extreme market event and the speed at which risk can materialize in BSR's capital position, liquidity position and net income.

In addition to the targeted risk profile, risk tolerances and limits are established to ensure that BSR maintains, at all times, a solvency and liquidity position such that no plausible scenario would cause the Company to default on its obligations to policyholders. BSR has established a number of risk criteria and tolerances as part of its risk strategy, including financial strength, continuity, culture and risk balance.

The sections C.1 Underwriting risk; C.2 Market risk; C.3 Credit risk; C.4 Liquidity risk; C.5 Operational risk and C.6 Other material risk include qualitative and quantitative information with respect to specific risks.

Applicable risk mitigation techniques are described in each section. Furthermore, the aforementioned sections include a description of the methods used, the assumptions made and the outcome of stress testing and sensitivity analysis. The sensitivities do not, in general, reflect what the solvency ratio for the period would have been if risk variables had been different. This is because the analysis is based on the existing exposures on the reporting date, rather than on those that actually occurred during the year. The results of the sensitivities are also not intended to be an accurate prediction of BSR's solvency ratio.

In addition, the sensitivities do not consider all methods available to management to respond to changes in the financial environment, such as changing investment portfolio allocations or adjusting premiums and crediting rates. Furthermore, the results of the analyses cannot be extrapolated for wider variations because effects do not tend to be linear. No risk management process can clearly predict future results.

### Prudent Person Principle

The prudent person principle has been embedded into BSR's system of governance, and is applicable for Underwriting risk, Market risk and Credit risk.

In accordance with the Investment and Counterparty Risk policy, BSR is required to explain how the Solvency II prudent person principle requirements are met.

The investment mandates section of the Standard of Practice paper makes sure that the prudent person principles are satisfied. The risks on the investment side are reported through the Investment Committee with the look-through data provided by Aegon Asset Management. There are numerous risk policies in place to ensure that the assets held are appropriate to the nature of the liabilities without taking on excessive risks:

- The Investment and Counterparty Risk Policy establishes the exposure limit for Investment and Counterparty Risk and prudent person principle requirements.
- The Currency Risk Policy limits the amount of currency risk allowed.
- Concentration in exposures is avoided by testing extreme scenarios in the Budget/MTP process and by setting single counterparty limits in the Aegon Credit Name Limit Policy.
- The requirements related to use of derivatives can be found in the Derivative Use Policy. This policy ensures that a consistent standard of responsible derivative usage is in place across the Aegon Group. In addition, the consolidated reporting of derivative positions provides transparency to derivative usage as well as a demonstration of controls.
- The Reinsurance Use Policy (RUP) establishes the process with which reinsurance is conducted in Aegon in order to ensure a consistent high standard of reinsurance use across the Group, to ensure proper internal controls are in place around risks arising from reinsurance wherever material (e.g. counterparty risk and basis risk), and to ensure globally consistent information on Aegon's reinsurance treaties is available.

### Off-balance positions and Special Purpose Vehicles

BSR has no exposure to special purpose vehicles.

The initial margin for the synthetic longevity hedge is held off balance sheet. Each counterparty has posted initial margin in their home currency, amounting to EUR 11.2m in total. These amounts are held in government bonds in a segregated custodian account with a reputable, highly-rated bank.

Payables due under letter of credit agreements provided by Blue Square Re to the U.S. Internal Revenue Service at December 31, 2018 amounted to EUR 75k (2017: EUR 75k). As of that date no amounts had been drawn, or were due under letter of credit facility.

## C.1 Underwriting risk

### C.1.1 Underwriting risk description

Underwriting risk, sometimes referred to as “insurance risk”, arises from deviations in product pricing assumptions. These are typically actuarial assumptions that cover policyholder behaviour and claims. Underwriting risk is the result of both the inaccuracies in projecting liability cash flows over several future time periods, as well as fluctuations in the incidence of claims.

Underwriting risk can be broken down into five distinct risk types: mortality risk, morbidity risk, policyholder behaviour risk, property & casualty risk and expense risk. These five risk types are detailed below.

#### Mortality/longevity risk

Mortality/longevity risk arises from economic losses due to mortality levels deviating from expectation. Policyholders are typically grouped into different classes in which each class is expected to have the same mortality. Best estimate assumptions are then developed for each policyholder class. BSR is exposed to the risk that the best estimate assumptions are inaccurate.

From BSR’s perspective, mortality risk translates into increased claims by counterparties to reinsurance transactions.

- In BSR’s life reinsurance contracts (i.e. term assurance and other death protection products), mortality risk is the risk that mortality is higher than expected; and
- In the Dutch longevity reinsurance contract, BSR has exposure to immediate annuity business, so mortality risk is the risk that mortality is lower than expected. This is referred to as longevity risk, as BSR is exposed to an increase in life expectancy.

#### Morbidity risk

Morbidity risk arises from economic losses due to morbidity levels deviating from expectation. These variations can be driven by changes in policyholder illness, disability and disease rates. Similar to mortality risk, policyholders are typically grouped into different classes that are expected to have the same morbidity. Assumptions are then developed for each class.

Morbidity risk is inherent to income protection plans (disability insurance), health insurance, and critical illness protection products. For these products, increased incidence of illness increases the likelihood of policyholder claims. For many products, such as disability insurance, both the increased frequency and severity of claims are significant sources of exposure.

#### Policyholder behaviour risk

Policyholder behaviour risk arises from economic losses due to policyholder behaviour deviating from expectation. Insurance contracts typically provide policyholders with a variety of options that they may or may not exercise. Policyholder behaviour risk is the risk that actual policyholder behaviour varies from the assumptions built into the reserve calculations. This includes assumptions about lapses, withdrawals, premium payment levels, allocation of funds, and the utilization of possible options in the products.

BSR’s main exposure to policyholder behaviour risk is via its reinsurance of the mortality benefit on universal life contracts.

#### Property & Casualty risk

Property & Casualty risk (P&C) covers the risk that the parameters used in setting reserves or premiums for property and casualty business are inaccurate. Due to the different nature of setting reserves for property & casualty business it has its own risk type.

BSR has exposure to this risk via catastrophe reinsurance of property damage, e.g. due to windstorms, floods or earthquakes. BSR’s investment in insurance linked securities (ILS) provides a further exposure to P&C catastrophe risk, spread across North American and other property insurance markets.

ILS were added to BSR’s investment portfolio during 2015, and the investment scaled up midway through 2016. The underlying risk exposure represents different risk perils from various geographical regions, counterparties, and maturities ensuring broad diversification. BSR receives model detail on each underlying risk from the asset manager and uses this in its risk analysis. ILS do not contribute to investment risk, but instead to property and casualty risk, which provides a good balance to the main underwriting risks (mortality and longevity).

## Expense risk

Expense risk is the risk that the expenses arising from servicing reinsurance contracts may develop differently than expected. There are various types of expense risk:

- Expense inflation risk: this is the risk that expenses inflate at a higher rate than that assumed in the calculation of the technical provisions. This does not cover the risk of general price inflation increases, which would be covered by mismatch risk; and
- Expense level risk: this is the risk that there will be unexpected changes in maintenance expenses for in-force business (assuming that the volumes of business are unchanged from best estimate assumptions). This risk therefore corresponds to an increase in the total expenses spread among the same number of policies – i.e., the per policy expenses increase. It is effectively the change in the best estimate expense assumption given a 1-in-200 year expense event.

Most expenses arising in BSR will be subject to expense risk if not contractually defined. These types of expenses include, for example, salaries, office space and software licenses.

### C.1.2 Underwriting risk assessment

BSR monitors and manages its underwriting risk by underwriting risk type. Attribution analysis is performed on earnings and reserve movements in order to understand the source of any material variation in actual results in comparison to expectations. BSR also performs experience studies for underwriting risk assumptions, comparing its experience with industry experience as well as combining BSR's experience and industry experience based on the relevance and depth of history of each source to BSR's underwriting assumptions. BSR has the ability to reduce expense levels over time, thus mitigating unfavorable expense variation.

BSR reviews its actuarial and economic assumptions periodically. In addition, as part of an ongoing commitment to deliver operational excellence, the company reviews and refines its models where necessary.

In summary, BSR manages underwriting risks by regularly reviewing experience, holding capital to cover extreme events, monitoring the risk exposures against risk limits (which are set in accordance to the Risk Strategy) and actively looking for risk mitigation opportunities.

### C.1.3 Underwriting risk concentration

Besides the risk tolerance limits as measured by SCR in BSR, it is common practice to address 'concentration' of risk on insured lives or, for property and casualty business, on insured objects, using a risk limit per single life (or joint lives) and per insured object. The exposures on a few lives (or objects) with a much higher risk than the average in the portfolio can create too high a volatility in the results. Limiting such exposures reduces the impact of process risk and also increases the stability of the underwriting results. These risk limits per single life (or joint lives) and per insured object will be further referred to as 'retention limits'.

The retention limits are typically chosen in such a way that the remaining exposure is acceptable, relative to the size of the earnings and the size of the balance sheet of the Company. Risk mitigation and compliance with the retention limits can be achieved by onward reinsurance or by the contract design.

In BSR, risk tolerance limits based on the Solvency II required capital are also used to target a balanced mix of risks which ensures a high level of risk capital diversification. Management actions are taken when a risk is too high or low compared to the agreed risk limits.

At Q4 2018 longevity risk was the most concentrated risk in BSR, due to the large longevity reinsurance transaction in The Netherlands. BSR's business plan continues to be focussed on taking on further mortality and non-life risk through additional reinsurance contracts, and thus achieving a balance of risks with a high level of risk capital diversification.

### C.1.4 Underwriting risk mitigation

The Company's risk management and control systems are designed to ensure that risks are managed effectively and efficiently in a way that is aligned with the Company's strategy. Risk management involves, among other things, the monitoring of risk exposures and actively maintaining oversight of the Company's overall risk and solvency positions. Underwriting risk is mitigated through various processes:

#### Underwriting process

BSR reinsures business sourced by other Aegon units. Therefore the underwriting carried out in the ceding units serves as a key risk management tool to manage the underwriting risk, by selecting or controlling individual applications. The underwriting process determines whether a cover should be provided to a prospective policyholder, whether exclusions or amendments to cover are required, and whether additional rates or standard terms are appropriate. The underwriting process also collects data to be used in the risk management cycle. The underwriting process is conducted by following an Underwriting Manual, which includes the underwriting classes; procedures to ensure the appropriateness, completeness and accuracy of data for use in the underwriting process; and controls to prevent anti-selection.

#### Claim process

Claims are the outcome of the risks on an individual case-by-case basis. When a claim is made on a policy, an assessment needs to be made as to whether the terms of the insurance policy have been met such that a claim payment is due. Where this is the case, claims are paid out. Where evidence shows potential non-disclosure of relevant information or fraudulent claims, further investigation is undertaken. Cedants must have a Claims Manual in place that includes, among other things, how claims are assessed and paid, how relevant regulation is being adhered to, and procedures to follow to identify fraudulent claims and the handling of claim disputes.

BSR only pays reinsurance claims to a ceding unit when the unit has followed its claim process and the claim has been paid out. BSR reserves the right to challenge claims where required, and in particular seeks additional information from the ceding unit for larger claims.

#### Best estimate assumption review process

BSR has made an assessment of the materiality of underwriting assumptions in terms of impact on the financials of the company. Each assumption is reviewed periodically, and the frequency is based on materiality. Material assumptions must be reviewed at least annually.

#### Underwriting risk limits

BSR Risk Strategy sets out risk tolerance limits for each risk type including underwriting risks. These limits define the maximum risk to which BSR is willing to be exposed. BSR actively monitors its actual risk exposure (measured by gross required capital) and management takes action when these limits are breached.

#### Using derivatives and reinsurance to hedge existing risk

Furthermore, BSR also mitigates existing underwriting risk by entering into reinsurance arrangements and longevity index derivatives with external parties. Reinsurance arrangements allow BSR to fix part of the uncertainty in the mortality dependent payments and serve to mitigate the mortality risk. Derivative contracts will pay out when mortality rates have decreased more than initially expected, and therefore serve to hedge BSR's longevity risk.

BSR hedges its exposure to mortality risk using external reinsurance by:

- Having a mortality catastrophe reinsurance cover in place to limit the potential claims payout due to a single large event on a contract with Aegon Turkey.
- Retroceding the risk above a per life retention limit for a contract covering mortality of high net worth individuals in Asia.

The effectiveness of the reinsurance in mitigating mortality risk is assessed quarterly by quantifying the payout under a 1-in-200 mortality stress.

BSR uses a derivative contract called the Synthetic Longevity Hedge as a means of Dutch longevity risk mitigation and thus capital reduction. The hedge protects BSR against Dutch longevity worsening. At least once a year, in conjunction with the annual mortality assumption update (as new mortality data point is only published once a year), the hedge effectiveness of the hedge is reassessed using an internal stochastic mortality model. The effectiveness of the hedge as a risk mitigation and capital protection tool is monitored and assessed using a stochastic mortality model that jointly models the underlying risk distribution alongside the hedge payout, and various plausible scenarios are tested against this outcome to obtain an overview of the hedge effectiveness. The outcome of this study is used to form an opinion about the level of capital relief provided by this hedge.

### C.1.5 Underwriting risk sensitivity

BSR carries out sensitivity testing on its current portfolio, by stress testing key risks to assess the financial impact. The table below shows the sensitivity results of BSR, and the impact on the BSR S-II ratio as of FY 2018.

<i>Sensitivities (in EUR 000s)</i>	Own Funds gain/(loss)	Net SCR increase/(decrease)	Solvency Ratio
Base	65,373	48,496	135%
Mortality +10%	16,815	11,957	136%
Mortality +5%	8,047	5,975	135%
Mortality -/-5%	-/-6,555	-/-4,093	132%
Mortality -/-10%	-/-11,231	-/-5,926	127%
Morbidity +10%	-/-1,843	-/-100	131%
Morbidity -/-10%	1,766	230	138%
Lapse +20%	-/-2,508	-/-1,121	133%
Lapse +10%	-/-1,303	-/-598	134%
Lapse -/-10%	1,396	699	136%
Lapse -/-20%	2,907	1,507	137%

BSR solvency ratio is predominantly sensitive to changes in mortality risk (with longevity risk representing the largest risk on the BSR balance sheet). The Dutch Longevity Reinsurance contract represents the largest proportion of the current risk profile of BSR, which drives the adverse sensitivity towards lower mortality rate and lower interest rate.

The losses under -10% and -5% mortality are almost entirely driven by the Dutch Longevity Reinsurance, and this has to do with it being a pure longevity reinsurance contract at which BSR assumes risk when the underlying insured pensioners live longer. The size of the obligation, valued at around EUR 1.1 billion, dominates the risk exposure of any other contract that BSR currently has on its balance sheet. A lower mortality rate also has a secondary effect on the SCR, since it would increase the amount and duration of remaining annuity payments, although the SCR impact is significantly smaller in magnitude than those of the Own Funds impact. The impact from the Dutch Longevity Reinsurance is partially offset by the Synthetic Longevity Hedge in two ways: in terms of Own Funds, the hedge value increases when the mortality rates decrease (increasing Own Funds) and in terms of SCR, the longevity capital relief increases as well in such an environment (decreasing SCR). The asymmetric nature of the mortality sensitivities of both Own Funds and SCR is caused by the non-linearity of Synthetic Longevity Hedge risk profile.

In the case of lapse up and morbidity up shocks, it is observed that the losses in Own Funds (BSR profits are expected to realize over time and are still locked in future projections of cash flows) are partially offset by the release of capital. The opposite is true in case of down shocks. Given current composition of BSR portfolio, the company's solvency is not threatened by relatively huge volatility in morbidity or lapse risk.

The proportion of non-life risks in BSR remains small and not sensitivity-tested. The nonlife catastrophe risk is described qualitatively in the later sub-section on non-life shock, as the occurrence of catastrophe risk is more binary in nature.

## C.2 Market risk

### C.2.1 Market risk description

As a reinsurer, BSR is exposed to a variety of risks. As described previously, the objective of the Company is to first and foremost successfully manage underwriting risk. As a result, BSR has a mostly conservative investment stance which is focused on maintaining adequate liquidity ahead of achieving high investment returns.

Nonetheless, while underwriting risks are dominant, BSR does have exposure to changes in financial markets (e.g. bond markets, interest rate and currency exchange rate risks, as described below). When market prices fall, the value of BSR's investments is reduced. The cost of reinsurance liabilities is also determined with reference to interest rates and the liabilities associated with long term benefits (such as annuities) increase and decrease as interest rates fall and rise.

#### Credit Risk

Credit risk consists of the following two components:

- Spread risk; the risk that the value of the bond reduces due to a general widening of credit spreads;
- Migration risk; the risk that the rating of the bond falls due to an increased risk of default and as a consequence its value falls.

BSR is exposed to a small amount of credit risk through its investment portfolio, which contains, among other investments, high quality sovereign bonds and corporate bond investments.

#### Equity market risk and other investments risk

BSR does not hold any equities in its asset portfolio, so it does not have exposure to equity risk. ILS could be classified as an 'other investment', but its exposure is to non-life underwriting risk, so it is covered in Section C.1.

#### Interest rate risk

Sustained low interest rate levels may adversely affect BSR's profitability and shareholders' equity. BSR is exposed to interest rate risk through the mismatch in the sensitivity of its assets and liabilities to movements in long- and short-term interest rates.

#### Currency risk

Fluctuations in currency exchange rates may affect BSR's financial results. As a reinsurer with contracts in several geographical regions, foreign currency exposure exists when policies are denominated in currencies other than BSR's functional currency of the Euro. Currency risk in the investment portfolios backing reinsurance liabilities is managed using asset liability matching principles.

Exposure to concentration risk has been assessed as immaterial, and liquidity risk is managed through regular monitoring of the balance of cash and cash-equivalent assets.

BSR maintains an adequately diversified portfolio of assets to mitigate concentration, credit and other risks including the risks that arises from excessive reliance on any one asset, issuer or group of undertakings. This is achieved by investing in fixed income funds as opposed to direct holding of fixed income securities. BSR's asset portfolio is split across ILS, cash in bank, and assets managed by Aegon Asset Management.

BSR does not have direct exposure nor write any embedded financial options and guarantees. This means BSR does not have material financial risk embedded within the reinsurance contracts.

### C.2.2 Market risk assessment

The Standard Formula is used to assess BSR's market risk exposure and to determine an appropriate level of capital buffer to target. This assessment includes a full attribution analysis that explains any variance to expectations for these risks. A quarterly assessment of the risk against stated risk tolerances is performed through the Risk & Capital Committee.

BSR's investment strategy has been established based on assessment of assets and liabilities. Its main objective is to ensure adequate liquidity to pay reinsurance claims as they fall due. Investments are made through fund providers, for example, sovereign and corporate bond exposure are achieved through investment in funds managed by Aegon Asset Management.

Exposure to Credit Risk is monitored in two main ways:

- At portfolio level; and
- At the level of individual names

At the portfolio level, credit risk is measured using the Standard Formula. In accordance with the relevant risk policies, absolute and early warning limits are set by BSR management. Limits for credit risk for the Aegon Group as a whole have also been set, measured under the Economic Framework (EF) that is designed using market consistent principles. The following credit risks are assessed:

- Credit spread risk; and
- Migration risk

These limits are updated once a year and every quarter actual exposure is compared to the limits. Compliance with the limits is a key aspect of BSR's ERM framework.

It is important to ensure that there is no concentration of risk to a particular name. The Aegon Credit Name Limit Policy (CNLP) covers this important aspect. All forms of exposure are covered by this policy, which is therefore not limited to credit. For example exposure through reinsurance contracts or derivative positions are included as well as asset holdings.

Aegon runs an additional process to monitor and assess credit risk, known as the Focus List. Even when individual counterparties are within the CNLP limit it may be deemed necessary to restrict further investment if news regarding the credit quality of a particular company comes to light.

For currency risk, as well as monitoring its exposure against risk tolerance limits, BSR sensitivity tests the impact of a currency shock on its IFRS equity in line with the internal currency risk policy.

### **C.2.3 Market risk concentration**

BSR minimizes concentration risks by maintaining a well-diversified portfolio across and within investment categories such as asset class, geographical region and industry sector. Investing in a larger number of separate market risks can also introduce concentration risks; separate exposures could all generate losses at the same time, perhaps due to a shared exposure to another risk factor.

#### **Credit risk**

The general account portfolio of BSR is well-diversified with high credit quality exposures spread across a range of industry sectors. In order to avoid concentrations of exposure to particular entities, BSR operates under the global Aegon CNLP, under which limits are placed on the aggregate exposure to any one counterparty. Limits are placed on the exposure at both group level and for individual entities like BSR. The limits also vary by a rating system, which is informed by the ratings of the main rating agencies, S&P, Moody's and Fitch. Any exposure in excess of the stated limit will be identified and must be addressed as soon as possible.

Aegon Group also maintains a central list of any significant exposures and credit names that are subject to close monitoring. This process is used to coordinate risk management and de-risking activity, and to reduce Aegon's exposure to a potential deterioration in credit quality.

At December 31, 2018 BSR's largest credit exposure was to Mitsui Sumitomo Insurance Company Ltd, via a life reinsurance transaction. This exposure breaches the BSR CNLP limit, but not the Aegon Group limit. There is a plan in place to reduce this exposure during 2019.

For BSR, the long-term counterparty exposure limits as at December 31, 2018, are as follows:

#### BSR limits per credit rating

<i>Amounts in € million</i>	<b>2018</b>	2017
AAA	8.0	8.0
AA	8.0	8.0
A	6.0	6.0
BBB	4.0	4.0
BB	2.0	2.0
B	1.0	1.0
CCC-C	1.0	1.0
D	1.0	1.0
Not Rated	1.0	1.0

#### Currency risk

As a reinsurer with counterparties in many countries, BSR is subject to foreign currency risk due to mismatch in the exchange rate sensitivity of assets and liabilities. At this time BSR does not have any significant exposure of this type to any particular currency.

#### Managing risk concentration

A key part of BSR's ERM framework is setting risk limits for each risk. Each quarter BSR calculates actual exposures and compares them to the risk limits. Compliance with the limits is expected and any breaches must be dealt with as described in the ERM manual. The use of risk limits and the quarterly monitoring process are intended to ensure that BSR limits its exposure to a single risk type.

The risk of concentration to an individual counterparty is covered by the CNLP, described earlier in this section. The CNLP covers all asset classes such as credit, cash and derivatives. The Prudent Person Principle applies in this context as well. This principle is built into the Investment & Counterparty Risk Policy, and all Country Units are expected to comply with this principle or explain the reason for being non-compliant.

#### C.2.4 Market risk mitigation

BSR employs sophisticated interest rate measurement techniques with the support of the Aegon Group centralized market risk team. Fixed interest assets, along with interest rate swap and swaption derivatives where required, are used extensively to manage the interest rate risk exposure. All derivative use is governed by BSR's Derivative Use Policy. The effectiveness of derivatives at mitigating fixed interest risk mitigation is monitored by periodically assessing the impact of interest rate shock scenarios.

BSR sets limits on market risks based on the Solvency II Standard Formula.

BSR does not engage in direct currency speculation or program trading. Where currency matching of assets and liabilities is not possible or practical, the remaining currency exposure is controlled by limits on total exposure at both group and local level.

The Company manages credit risk exposure by individual counterparty, sector and asset class, including cash positions through its ERM framework as described in section B.3 Risk management system. Different exposures are mitigated in a variety of ways as described below.

## Derivatives

BSR does not have significant derivative holdings, but in general it mitigates credit risk in derivative contracts by entering into a credit support agreement, where practical, and into ISDA master netting agreements along with other Aegon legal entities. The counterparties to these transactions are investment banks that are typically rated 'A' or higher. The credit support agreement generally dictates the threshold over which collateral needs to be pledged by BSR or its counterparty.

Transactions requiring BSR or its counterparty to post collateral are the Synthetic Longevity Hedge or derivative trades, typically interest rate swaps. Collateral received is cash or government bonds. The credit support agreements that outline the acceptable collateral require high quality instruments to be posted.

## Reinsurance

BSR may mitigate credit risk in reinsurance contracts by including downgrade clauses that allow the recapture of business, retaining ownership of assets required to support liabilities ceded or by requiring the reinsurer to hold assets in trust. BSR assess the resulting net credit risk exposure as part of the Standard Formula SCR calculation.

To maintain compliance with the CNLP limits, BSR may use Credit Default Swaps to manage credit risk, but this is not necessary for the current exposures.

### C.2.5 Market risk sensitivity

Results of BSR's sensitivity analyses are presented in this section to show the estimated sensitivity of various scenarios. For each sensitivity test, the impact on the Solvency II ratio of a reasonably possible change in a single factor is shown. Potential management actions that would require a change in policies and procedures are not taken into account.

BSR calculates sensitivities of its Solvency II ratio as part of its risk management framework. The tables on sensitivities describe the shocks to parameters used to assess the sensitivities, and their estimated impact on the Solvency II ratio on December 31, 2018.

#### Interest rate risk

The sensitivities to interest rates at Q4 2018 show that BSR's solvency ratio will fall when interest rates fall and will increase when interest rates rise.

<i>Sensitivities (in EUR 000s)</i>	Own Funds gain/(loss)	Net SCR increase/(decrease)	Solvency Ratio
Base	65,373	48,496	135%
Interest rates +200bps	4,096	-/-7,515	170%
Interest rates +100bps	2,676	-/-4,255	154%
Interest rates +50bps	1,523	-/-2,245	145%
Interest rates -/-50bps	-/-2,048	2,548	124%
Interest rates -/-100bps	-/-4,659	5,406	113%
Interest rates -/-200bps	-/-12,182	12,223	88%

The losses from downward shifts in interest rate sensitivities are driven by the risk margins of the majority of the contracts. In terms of best estimate liability projection, the dollar duration of the premium cash flows is higher than the dollar duration of the benefit and expense cash flows, i.e. a gain on the best estimate portion of the technical provision when interest rates decline. However, the increase in risk margin causes a loss to Own Funds which more than offsets the gain in best estimate. The increase in risk margin is due to an even larger payout and longer duration under the worst-case scenario, resulting in an increase in current and projected capital requirements. This in turn affects the risk margin which is the cost of holding the higher capital under the interest rate down scenario.

### Currency risk

The sensitivities to currency exchange rates at Q4 2018 show that BSR's solvency ratio will fall when the EUR appreciates against other currencies (particular USD, GBP and JPY), and rise when the EUR depreciates.

<i>Sensitivities (in EUR 000s)</i>	Own Funds gain/(loss)	Net SCR increase/(decrease)	Solvency Ratio
Base	65,373	48,496	135%
Euro strengthening 15%	-/-4,450	-/-2,151	131%
Euro weakening 15%	4,370	2,334	137%

Foreign currency sensitivities are mostly driven by changes in best estimate portions of technical provisions not denominated in EUR. The impacts on Own Funds and SCR are partially offsetting, whereby if EUR strengthens by 15% it causes a loss in Own Funds and a release of SCR that is half as large, and vice versa for the opposite FX sensitivity.

## C.3 Credit risk

### C.3.1 Credit risk description

This section considers credit default risk (counterparty default risk) specifically. Other types of credit risk considered in the SCR (spread risk and market concentration risk) are discussed in the Market Risk section C.2. The reason for this allocation in the SFCR is to align with the EIOPA prescribed Annual QRT format for SCR disclosure.

Default risk is the risk that the counterparty fails to meet the agreed obligations.

### C.3.2 Credit risk assessment

Exposure to Counterparty Default Risk is monitored at the level of individual names.

The exposure to individual names is measured and reported on a quarterly basis. Limits are defined based upon the rating of the name, with higher ratings receiving more capacity. Compliance with these limits is expected and breaches must be reported to the Risk & Capital Committee.

### C.3.3 Credit risk concentration

Reference is made to section C.2.3 under Market Risk.

### C.3.4 Credit risk mitigation

Reference is made to section C.2.4 under Market Risk.

### C.3.5 Credit risk sensitivity

BSR has a low exposure to counterparty default risk, as evidenced by the SCR for this risk. Therefore, due to lack of materiality, sensitivity testing has not been carried out for default risk.

## C.4 Liquidity risk

### C.4.1 Liquidity risk description

Liquidity risk is inherent in reinsurance business. Different assets and liabilities incurred can have distinct liquidity characteristics. For example, some policyholders have the option to cash in their policy in return for a surrender benefit, while some assets, such as privately placed loans and mortgage loans, have low liquidity. If BSR held such assets, and it were to require significant amounts of cash at short notice in excess of normal cash requirements, it would have difficulty in selling its investments at attractive prices or in a timely manner.

BSR has a number of collateralised arrangements, including the Dutch longevity reinsurance transaction and the Synthetic Longevity Hedge. The collateral requirements on these arrangements can increase liquidity risk in the event of sudden changes in interest rates or expectations for Dutch longevity.

BSR's liquidity risk is not addressed by holding additional required capital, but by assessing whether sufficient cash will be available, even under extreme circumstances.

#### **C.4.2 Liquidity risk assessment**

Illiquidity of certain investment assets may prevent BSR from selling investments at fair prices in a timely manner. BSR needs to maintain sufficient liquidity to meet short-term cash demands under normal circumstances, as well as in crisis situations. The availability of sufficient liquidity ensures that BSR can fulfil its obligations towards reinsurance counterparties and other stakeholders for an extended period of time without becoming a forced seller. This prevents compounding losses and a loss of confidence.

Liquidity management is a fundamental building block of BSR's overall financial planning and capital allocation processes. BSR complies with the Aegon Liquidity Risk Policy, which sets guidelines to achieve a prudent liquidity profile and to meet cash demands even under extreme conditions.

BSR's liquidity management is based on expected claims and benefit payments. The projected cash benefit payments are based on management's best estimates of the expected benefits and expenses, offset by the expected reinsurance premiums, relating to the existing business in force. Estimated cash benefit payments are based on mortality, morbidity and lapse assumptions based on historical experience, modified for recently observed trends. Actual payment obligations may differ if experience varies from these assumptions.

On a quarterly basis, stress testing is carried out in order to assess the ability of BSR to continue to manage liquidity risk in the event of two extreme scenarios:

- The first is a financial market stress incorporating a rapid increase in interest rates combined with spread widening and a period of impaired markets.
- The second is an underwriting stress where claims and collateral calls far exceed expectations.

BSR's liquidity risk profile remained strong in 2018. The ILS funds have some notice restrictions around liquidation, so it would take several months to fully liquidate these assets if required. Nonetheless the remainder (over 75%) of BSR's investment portfolio could be liquidated at very short notice.

The following table shows available and required liquidity at the end of 2018 (the current position, prior to the occurrence of any stress scenario), as well as the position at the end of 2019 and 2020 in the most onerous liquidity stress scenario.

<i>EUR thousands</i>	31 December 2018	<b>31 December 2019 Stress Scenario</b>	<b>31 December 2020 Stress Scenario</b>
Available Liquidity	79,644	73,718	79,669
Required Liquidity	21,828	34,828	51,428
Excess Liquidity	57,816	38,890	28,241

There have been no material changes to how BSR assesses its liquidity risk during 2018.

#### **C.4.3 Liquidity risk concentration**

Liquidity risk originating directly from reinsurance business is well-diversified with no material concentrations of risk.

Liquidity required to fund collateral calls depends on a number of factors and some of these could be considered material risk concentrations. A combination of extended Dutch longevity and falling interest rates could result in increased collateral requirements for the Dutch longevity reinsurance transaction.

BSR's property and casualty risk is spread across several countries through the Hungary, Netherlands and Portugal contracts, and investment in ILS. However for mortality risk under the TLB contract there is some concentration since a mass mortality event such as an epidemic affecting certain cities, e.g. Hong Kong, could cause the deaths of several policyholders at the same time.

To ensure that the above risk concentrations are tested, the second scenario within the liquidity stress tests described in section C.4.2 includes increased collateral demands, as well as increased claims for life and non-life transactions.

#### **C.4.4 Liquidity risk mitigation**

BSR operates under a Liquidity Risk policy where it is obliged to maintain sufficient levels of highly liquid assets to meet cash demands by policyholders and account holders over the next two years. Potential cash demands are assessed under a stress scenario that includes spikes in disintermediation risk due to rising interest rates and concerns over the Company's financial strength due to multiple credit rating downgrades. At the same time, the liquidity of assets other than cash and government bonds is assumed to be severely impaired for an extended period of time. BSR must maintain enough liquidity in order to meet all cash needs under this extreme scenario.

Similarly, BSR assesses available and required liquidity under another stress scenario including higher than expected mortality claims, a large property catastrophe claim and significantly increased collateral calls.

BSR expects to meet its obligations, even in a stressed liquidity event, from operating cash flows and the proceeds of maturing assets as well as these highly liquid assets.

#### **C.4.5 Liquidity risk sensitivity**

BSR has adopted the Aegon Liquidity Policy, which sets out a very prudent stress test that all Aegon units must perform at least quarterly. In addition to this Group test, units are required to create a local test that is specific to their own liquidity risks, which BSR has done. Results of the stress tests are reported to BSR RCC every quarter.

#### **C.4.6 Expected profit included in future premiums**

The reported solvency position of BSR includes the value attributable to profits that are expected to be made on future premiums - i.e. that are expected, but have not yet been earned. The value of these future profits cannot easily be realized to generate cash as required to meet obligations that may arise today.

The value placed on these future (after-tax) profits on December 31, 2018 was EUR 62.4 million (2017: EUR 57.8 million).

## **C.5 Operational risk**

### **C.5.1 Operational risk description**

BSR faces operational risk resulting from operational failures or external events. Aegon defines operational and conduct risk as a potential event that may result in (complete or partial) non-achievement of the Company's business objectives. Operational and conduct risks are further defined as follows:

- Operational risk: Risk of losses resulting from inadequate or failed internal processes and controls, people and systems or from external events; and
- Conduct risk: Risk of losses resulting from a company's products, services, people and actions failing to deliver the reasonable expectations of its customers and other stakeholders, and resulting in poor outcomes.

These definitions highlight the four causes of operational risk events: (1) external events; (2) inadequate or failing processes and controls; (3) people; and (4) systems.

BSR makes use of Aegon's centrally-managed systems that are designed to support complex transactions and to avoid such issues as system failures, business disruption, financial crime and breaches of information security. Both BSR and Aegon conduct analyses on a continuous basis by studying such operational risks and regularly develop contingency plans accordingly.

### C.5.2 Operational risk assessment

BSR's approach to evaluating operational risks is based on the quantitative and qualitative rating of those risks with regard to their potential impact and likelihood after consideration of the effectiveness of controls. Risk impact is assessed along the following three impact dimensions: financial loss, customer & reputation, and financial misstatement. The resulting ratings reflect the (residual) risk the Company is running. The BSR CRO reports a forward looking risk profile on a quarterly basis to both BSR RCC and Aegon Group Risk, together with details of action plans that address key risks and, where appropriate, the CRO's opinion on the effectiveness of those plans.

BSR has identified eight risk event categories that support the preparation of operational risk reporting and analysis. The eight categories are detailed below:

#### Business risk

The risk of losses due to failed or inadequate strategy execution, marketing and sales practices, distribution channels, pricing, investment returns, handling of customer complaints or late reaction to changes in the business environment.

#### Legal, regulatory, conduct & compliance risk

The risk that losses occur resulting from non-compliance with laws and regulation, inadequate legal documentation; or products, services, people and actions failing to deliver the reasonable expectations of customers and other stakeholders; or failure to comply with laws, regulations and internal company rules and policies, as well as late identification of significant and potential legal and regulatory developments.

#### Tax risk

Tax risk is the risk of losses due to fiscal authorities challenging BSR's tax treatment of transactions on technical grounds or as a result of inconsistent argumentation, imperfections in the tax planning, concentration risk and late identification of significant tax developments in relevant jurisdictions, possibly resulting in an inability to influence the final outcome.

#### Financial crime risk

A wrongful act (including money laundering), omission, breach of duty or trust, intentionally performed by an employee, intermediary or external party, which potentially could, or does, result in disadvantage to BSR or another.

#### Processing risk

The risk of losses due to inadequate or failing administrative processes and related internal controls, inadequate capturing of source data, reporting errors, modelling errors and failing outsourcing and supplier arrangements.

#### Systems & business disruption risk

The risk of losses due to inadequate or failed business continuity planning, back-up and recovery, fall back arrangements, information security, IT maintenance and change management, identification of relevant technological developments and other technical causes for systems related failures and errors.

#### People risk

The risk of losses due to acts inconsistent with employment, health or safety laws or agreements, from payment of personal injury claims or from diversity/discrimination incidents or losses resulting from an insufficient number of, or appropriately trained, personnel.

#### Facility risk

The risk of losses due to inadequate or failing physical asset management (including physical security incidents and inefficient procurement) and events causing damage to physical assets (e.g. vandalism, water damage, fire, explosions).

There were no material changes during 2018 to the measures used to assess BSR's operational risk profile, nor in the risk profile itself.

Processing risks are generally considered to be most material for BSR, although this has reduced over recent years due to improvements across the general control environment resulting from various control enhancement initiatives. While systems and processes are designed to support complex transactions and avoid systems failure, fraud, information security failures, processing errors and breaches of regulation, any failure may lead to a materially adverse effect on BSR's results of operations and corporate reputation. If BSR were to fail to keep its information systems up-to-date, it is possible that the Company would not be able to rely on information for product pricing, risk management and underwriting decisions.

In addition, although back-up and recovery systems and contingency plans are in place, BSR cannot assure its stakeholders that interruptions, failures or breaches in security of these processes and systems will not occur, or if they do occur, that they can be adequately addressed. The occurrence of any of these events may have a materially adverse effect on BSR's businesses, reputation, results of operations and financial condition.

BSR retains confidential information on its computer systems, including customer information and proprietary business information. Any compromise to the security of BSR's computer systems that results in the disclosure of personally identifiable customer information may damage the Company's reputation, expose BSR to litigation, increase regulatory scrutiny, and require BSR to incur significant technical, legal and other expenses.

Inaccuracies in (financial) models could have a significant adverse effect on BSR's business, results of operations and financial condition. Reliance on various (financial) models to measure risk, price products and establish key results, is critical to BSR's operations. If these models or the underlying assumptions prove to be inaccurate, this could have a significant adverse effect on BSR's business or performance. This risk is controlled by having robust internal controls and governance over the models, including adhering to the Aegon Group Model Change Policy which is part of the Model Validation Framework.

### **C.5.3 Operational risk concentration**

Operational risk concentration can occur where specific risk exposures are in excess of operational risk appetite. BSR's management maintains a well-controlled environment and sound (conduct) policies and practices to control these risks and keep operational risk at appropriate levels. Operational risk capital (ORC) is held on the basis of the Solvency II Standard Formula model and is determined quarterly.

Based on a qualitative assessment the main concentrations of operational risk for BSR are:

- Business risk;
- Legal, regulatory, conduct & compliance risk; and
- Processing risk.

#### **Business risk**

BSR sources its reinsurance business from other Aegon business units. Therefore there is a risk that competing priorities within the group may result in units failing to use internal reinsurance in the optimal manner.

#### **Legal, regulatory, conduct & compliance risk**

ORC is held on the basis of potential but unlikely extreme loss events such as punitive damages issued by a court resulting from accusations of corporate misconduct, substantial changed legislation due to regulatory regime change, or inability to enforce policy terms.

#### **Processing risk**

Processing risk has been reduced in BSR with improvements in modelling, reporting and operational processes. However there remains some risk of unlikely loss events such as a material financial misstatement or modelling errors, if process controls are not applied properly.

### **C.5.4 Operational risk mitigation**

Operational risks at BSR are mitigated by maintaining a strong risk control framework and culture. Please refer to section B.4 Internal Control

system for a description of the operational risk framework. All operational risks that are assessed as exceeding the set risk tolerance levels require management to determine a risk response. Risk response is the decision-making process to accept, control, transfer or avoid risks. Allowances for risk mitigation (e.g. insurance, third party indemnification) are made where appropriate.

### C.5.5 Operational risk sensitivity

BSR's operational risk capital that is included in the BSR SCR is calculated using Standard Formula.

Internally BSR manages operational risk on a qualitative basis, making assessments quarterly, subject to the professional judgment of the relevant subject matter experts.

As the output of Operational Risk reporting is largely qualitative, sensitivity testing is not applied.

## C.6 Other material risk

Another material risk is a change in the loss-absorbing capacity of deferred taxes (LACDT).

The level of loss-absorbing capacity of deferred taxes (LACDT) within BSR is currently set at a worst case tax benefit factor (WCTB) of 90%. The sensitivity in the table below shows the impact of lowering that factor to 75%. It is an immediate change in the amount of LACDT relief (from 90% of LA-CDT to 75% of LACDT) included in the calculation of the SCR.

<i>Sensitivities (in EUR 000s)</i>	Own Funds gain/(loss)	Net SCR increase/(decrease)	Solvency Ratio
Base	65,373	48,496	135%
WCTB factor 75%	-	2,347	129%

# D. Valuation for Solvency Purposes

In this section the IFRS balance sheet is reconciled to the Solvency II balance sheet. First, the approach used for the reconciliation of the IFRS balance sheet to the Solvency II balance sheet is discussed. Subsequently a reconciliation overview of the IFRS balance sheet to the Solvency II balance sheet is provided. This is followed by a reconciliation of balance sheet items between IFRS and Solvency II, including an explanation of the differences in measurement and presentation between IFRS and Solvency II, and the resulting reconciliation differences.

## Approach towards IFRS to Solvency II balance sheet reconciliation

In this section of the report we discuss the approach towards the reconciliation of the balance sheet based on the International Financial Reporting Standards and the reporting requirements under the Solvency II regime.

At a high-level, there are only two major reconciliation steps required for BSR:

- **Reclassification.** This is mainly applicable for accrued interest and deferred taxes, where the reported IFRS values are presented differently under Solvency II.
- **Revaluation.** This is predominantly driven by the revaluation of IFRS technical provisions to Solvency II technical provisions. Apart from that, the revaluation step is also applied to accrual accounting items such as deferred acquisition costs (DAC) and prepaid commission, as these will be implicitly valued through the revaluation of technical provisions. The deferred tax line is adjusted alongside each revaluation adjustment.

## Balance sheet reconciliation overview

The table below shows the IFRS to Solvency II balance sheet reconciliation for each material asset and material liability.

### IFRS to SII Reconciliation FY 2018

Amounts in EUR

Assets	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
Deferred acquisition costs	15,005,630		-/-15,005,630	
Deferred tax assets	5,524,135	-/-5,524,135		
<b>Investments (other than assets held for index-linked and unit-linked contracts)</b>	<b>76,260,114</b>	-	-	<b>76,260,114</b>
Collective Investments Undertakings	76,260,114			76,260,114
<b>Loans and mortgages</b>	-	-	-	-
<b>Reinsurance recoverables from:</b>	<b>475,375</b>	-	-	<b>475,375</b>
Non-life and health similar to non-life	475,375	-	-	475,375
Non-life excluding health	475,375			475,375
Insurance and intermediaries receivables	3,212,027			3,212,027
Receivables (trade, not insurance)	7,829,860	-/-4,104	-/-1,474,825	6,350,931
Cash and cash equivalents	8,372,863	-/-1,649		8,371,214
<b>Total assets</b>	<b>116,680,003</b>	<b>-/-5,529,888</b>	<b>-/-16,480,455</b>	<b>94,669,661</b>

<i>Liabilities</i>	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
Technical provisions - non-life	<b>2,733,527</b>		<b>233,320</b>	<b>2,966,847</b>
Technical provisions - non-life (excluding health)	2,733,527		233,320	2,966,847
Best estimate	2,733,527		-/-539,358	2,194,168
Risk margin			772,678	772,678
<b>Technical provisions - life (excluding index-linked and unit-linked)</b>	<b>35,715,124</b>		<b>-/-47,352,811</b>	<b>-/-11,637,687</b>
<b>Technical provisions - health (similar to life)</b>	<b>560,264</b>		<b>-/-14,690,070</b>	<b>-/-14,129,806</b>
Best estimate	560,264		-/-19,258,317	-/-18,698,053
Risk margin			4,568,247	4,568,247
<b>Technical provisions - index-linked and unit-linked</b>	<b>35,154,860</b>		<b>-/-32,662,741</b>	<b>2,492,118</b>
Best estimate	35,154,860		-/-95,110,286	-/-59,955,426
Risk margin			62,447,545	62,447,545
Deferred tax liabilities		-/-5,524,135	8,028,465	2,504,330
Derivatives liability	5,177,133			5,177,133
Financial liabilities other than debts owed to credit institutions	22,000,000	-/-4,104		21,995,896
Insurance & intermediaries payables	6,736,191			6,736,191
Reinsurance payables	85,616			85,616
Payables (trade, not insurance)	1,467,908		-	1,467,908
Any other liabilities, not elsewhere shown	1,649	-/1,649		
<b>Total liabilities</b>	<b>73,917,147</b>	<b>-/-5,529,888</b>	<b>-/-39,091,026</b>	<b>29,296,234</b>
<b>Excess of assets over liabilities</b>	<b>42,762,856</b>	<b>-</b>	<b>22,610,571</b>	<b>65,373,427</b>

In the sections that follow, the reconciliation for each balance sheet item is discussed in more detail.

## D.1 Assets

The Fair Value approach is prescribed for the majority of assets groups. All assets without specific valuation rules are valued in accordance with IFRS, provided that this is consistent with an economic valuation. When applying an economic valuation of assets, BSR uses the following hierarchy for measuring and disclosing the fair value of assets:

- Level I: quoted prices (unadjusted) in active markets for identical assets that the Company can access at the measurement date;
- Level II: inputs other than quoted prices included within Level I that are observable for the asset, either directly (i.e. prices) or indirectly (i.e. derived from prices of identical or similar assets) using valuation techniques for which all significant inputs are based on observable market data; and
- Level III: inputs for the asset that are not based on observable market data (i.e. unobservable inputs) using valuation techniques for which any significant input is not based on observable market data.

### D.1.1 Goodwill

This is not applicable for BSR, as BSR does not hold any goodwill assets under IFRS and S-II does not recognize this asset category.

### D.1.2 Deferred acquisition costs

#### IFRS to SII Reconciliation December 31, 2018

Amounts in EUR

Assets	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
Deferred acquisition costs	15,005,630		-/-15,005,630	-

#### IFRS Treatment:

Deferred acquisition costs (DAC) are related to the acquisition of insurance contracts under two BSR reinsurance treaties. The DAC represents directly attributable acquisition costs with regard to the upfront payment of ceding commissions to Aegon Insights for the marketing and sales activities of BSR's reinsurance treaty with Mitsui Sumitomo Insurance Co. Ltd., Japan (MSI) and Mitsui Sumitomo Insurance Group, Thailand (MSIG). The DAC is allocated to future reporting periods and is amortized over time.

#### Solvency II Treatment:

Solvency II regulations do not recognize deferred acquisition costs. Under Solvency II, these are captured under insurance liabilities, which for Solvency II captures all the acquisition costs and servicing costs within the defined contract boundaries. For the valuation of the insurance liabilities, the principles of accrual based accounting and the matching principle are not applied.

#### Reconciliation difference: Revaluation Adjustments

Deferred acquisition costs are not recognized under Solvency II and for this reason they are eliminated (i.e. revalued to nil with corresponding adjustment of reducing equity/Own Funds) as one of the reconciliation steps.

Therefore, the entire DAC under IFRS of EUR 15.0 million is eliminated. This amount fully pertains to the MSI and MSIG reinsurance treaties that cover health-related policies in Japan and Thailand respectively.

### D.1.3 Intangible assets

This is not applicable for BSR, as BSR does not hold any intangible assets under IFRS and that S-II does not recognize this asset category.

### D.1.4 Deferred tax asset

#### IFRS to SII Reconciliation December 31, 2018

Amounts in EUR

Assets	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
Deferred tax assets	5,524,135	-/-5,524,135		
<i>Liabilities</i>				
Deferred tax liabilities		-/-5,524,135	8,028,465	2,504,330

#### IFRS Treatment:

Deferred tax assets (DTA) are recognized for the estimated future tax effects of temporary differences between the carrying value of an item and its tax value, with the exception of differences arising from the initial recognition of goodwill, and of assets and liabilities that do not impact taxable or accounting profits. International Accounting Standard (IAS) 12 prescribes the accounting treatment for Income Taxes, including IAS 12.5 and IAS 12.46 for (deferred) tax. A tax asset is recognized for tax losses carried forward, to the extent that it is probable at the reporting date that future taxable profits will be available against which the unused tax losses and unused tax credits can be utilized (IAS 12.5). Current tax liabilities or assets for the current and prior periods shall be measured at the amount expected to be paid to, or recovered from, the taxation authorities, using the tax rates that have been enacted or substantively enacted by the end of the reporting period (IAS 12.46).

Deferred tax assets and liabilities are reviewed at the balance sheet date and are measured at tax rates that are expected to apply when the asset is realized or the liability is settled. The effect of the domestic tax rate change in the Netherlands as of 2020 is included in the deferred tax asset. Since there is no absolute assurance that these assets will ultimately be realized, management reviews BSR's deferred tax position periodically to determine if it is probable that the assets will be realized.

Periodic reviews include, among other things, the nature and amount of the taxable income and deductible expenses, the expected timing when certain assets will be used or liabilities will be required to be reported and the reliability of the historical profitability of the business expected to provide future earnings. Furthermore, management considers tax-planning strategies it can utilize to increase the likelihood that the tax assets can be realized. These strategies are also considered in the periodic reviews. The carrying amount is not discounted and reflects the expectations of BSR concerning the manner of recovery or settlement. The deferred tax assets related to temporary differences do not have an expiry date, as the Fiscal Entity Aegon, of which BSR is part, makes sufficient profits to counteract possible future losses linked to the deferred tax assets.

#### Solvency II Treatment:

The Solvency II methodology for the calculation of deferred tax follows the provisions of IAS 12 Income Taxes. Deferred tax assets and liabilities are recognized for Solvency II purposes on the basis of the temporary differences between the carrying amounts of the assets and liabilities in the Solvency II balance sheet and the tax balance sheet values according to the local tax regulations of the insurance company. Deferred tax accruals are calculated at the corporate tax rate. Tax losses carried forward are recognized as deferred tax assets if their future benefit is plausible.

In line with the IFRS approach, Solvency II does not require discounting of deferred tax assets and liabilities

#### IFRS to Solvency II reconciliation adjustments:

Considering the requirements outlined above, IFRS to Solvency II balance sheet reconciliation adjustments of deferred tax items should be comprised of Deferred Tax Assets (DTA) and Deferred Tax Liabilities (DTL), reflecting the tax impact of all the individual revaluations processed for all other components of the balance sheet. In the event that the sum of all the adjustments made for the revaluation of the IFRS balance sheet to the Solvency II balance sheet results in the DTA or DTL changing their sign to negative - effectively becoming DTL and DTA respectively – an additional reclassification adjustment is required to move the DTA or DTL to the opposite side of the balance sheet.

#### Reconciliation difference: Reclassification Adjustments

To reconcile the IFRS deferred tax position with the Solvency II deferred tax position on the balance sheet, a EUR 5.5m reclassification is performed on the revalued net negative DTA balances from assets to liabilities under Solvency II.

#### Reconciliation difference: Revaluation Adjustments

The difference between the balance sheet valuations of the deferred tax assets according to IFRS or Solvency II is purely driven by the difference in the valuation of the other balance sheet elements between the IFRS balance sheet and Solvency II balance sheet. A significant portion of this difference is due to the valuation of technical provisions under IFRS and Solvency II. Where tax bases do not change, revaluation adjustments related to DTA balances must then be equal to the revaluation adjustments for other balance sheet elements multiplied by applicable tax rates.

The revaluation adjustments of DTA amount to a total of EUR -8.0m, consisting of the following:

- EUR -11.8m to DTA for the total differences in the valuation of technical provisions
- EUR +3.8m to DTA for the de-recognition of DAC

#### D.1.5 Pension benefit surplus

This is not applicable for BSR.

#### D.1.6 Property, plant & equipment held for own use

This is not applicable for BSR.

**D.1.7 Investments (other than assets held for index- and unit-linked funds)**

## IFRS to SII Reconciliation December 31, 2018

Amounts in EUR Assets	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
<b>Investments (other than assets held for index-linked and unit-linked contracts)</b>	<b>76,260,114</b>	-	-	<b>76,260,114</b>
Collective Investments Undertakings	76,260,114			76,260,114

The EUR 76.3m of investments is made up of collective investment undertakings:

- EUR 60.6m of investment in funds managed by Aegon Asset Management (AAM). The funds encompass government and corporate fixed income securities and money market instruments.
- EUR 15.6m of investment in ILS. The fund invests in short duration catastrophe insurance-linked fixed income securities.

## IFRS Treatment:

IAS 39 Financial Instruments: Recognition and Measurement defines the following categories of financial instruments excluding derivatives:

1. Fair Value through Profit or Loss (FVTPL);
2. Held-to-maturity (HTM);
3. Available for sale assets (AFS).

HTM category is measured at amortized cost, while FVTPL and AFS are measured at Fair Value on the IFRS balance sheet. BSR classifies all its general account investments as Fair Value through Profit or Loss.

The investments in funds are reported at the closing net asset value (NAV) of the fund, which is the market tradable value (or redemption value, excluding redemption penalty) of such funds at the closing date of the reporting period.

## Solvency II Treatment:

Irrespective of whether investments in financial instruments are FVTPL, HTM or AFS, Solvency II requires Fair Value to be applied for value measurement.

## IFRS to Solvency II reconciliation adjustments:

No adjustment is needed, as all of BSR's investments are measured at Fair Value on the IFRS balance sheet.

**D.1.8 Assets held for index- and unit-linked funds**

BSR does not write any insurance or investment contracts for the account of policyholders, so this asset category is not applicable for BSR.

**D.1.9 Loans and mortgages**

This is not applicable for BSR.

**D.1.10 Reinsurance recoverables**

## IFRS to SII Reconciliation December 31, 2018

Amounts in EUR Assets	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
<b>Reinsurance recoverables from:</b>	<b>475,375</b>	-	-	<b>475,375</b>
Non-life and health similar to non-life	475,375	-	-	475,375

**IFRS Treatment:**

Retrocession contracts are outward reinsurance contracts signed by BSR to receive compensation for losses on inward reinsurance contracts written by BSR, in order to reduce the risk exposure to certain underwriting risks. For contracts transferring sufficient insurance risk, a reinsurance asset is recognized for the expected future benefits, less expected future retrocession premiums. Retrocession contracts with insufficient insurance risk transfer are accounted for as investment or service contracts, depending on the nature of the agreement.

Reinsurance premiums, commissions and claim settlements are accounted for in the same way as the original contracts for which the reinsurance was concluded. The insurance premiums for the original contracts are presented gross of reinsurance premiums paid.

A reinsurance recoverable of EUR 0.5m is reported on the balance sheet. This recoverable relates to a particular claim recovery under an inactive retrocession program for Hungary motor third-party liability (MTPL) reinsurance, dating back several years. The recoverable of EUR 0.5m mirrors exactly the corresponding value of EUR 0.5m for the claim in the technical provisions. This set of reinsurance treaties fully protects BSR against any default or non-payment of retroceded obligation to BSR, as well as any future adverse development of claims against BSR. This is achieved through contractual clauses in this specific set of reinsurance treaties.

Currently, BSR has two active retrocession contracts, a mortality catastrophe reinsurance cover, to limit the potential claims pay-out due to a single large event, on a contract with Aegon Turkey and an outward reinsurance contract for an excess of loss mortality risk transfer covering the incoming reinsured life portfolio from Transamerica Life Insurance Bermuda (TLIB) Ltd. As the overall portfolio from TLIB is considered small on the BSR balance sheet, the valuation of the retrocession contract is currently not segregated from the valuation of the reinsurance contract, and consequently, both contracts are reported on a net basis on the technical provision line of the balance sheet.

**Solvency II Treatment:**

For Solvency II value measurement, a Fair Value approach is used for the reinsurance recoverables.

**IFRS to Solvency II reconciliation adjustments:**

No reclassification nor revaluation adjustments are performed for the reason that the retrocession contract on the Hungary MTPL portfolio is deemed fully effective as a total offset against the technical provision. The bases, methods and assumptions covering the technical provisions are described in section D.2.1 Technical provisions – non-life, but it suffices to mention that the inactive reinsurance and retrocession contracts on the Hungary MTPL portfolio are immaterial to BSR.

**D.1.11 Deposits to cedants**

This is not applicable to BSR.

**D.1.12 Insurance and intermediaries receivables****IFRS to SII Reconciliation December 31, 2018**

Amounts in EUR

Assets	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
Insurance and intermediaries receivables	3,212,027			3,212,027

The insurance and intermediaries receivables are receivables as at the close of the accounting period on December 31, 2018 from either internal or external counterparties. The operational aspect of reinsurance reporting typically lags the risk period by 1-3 months (or in some cases even 6 months) as stipulated in the respective treaties, causing a natural delay in the settlement of cash flows.

The receivable of EUR 3.2m consists of receivables from the BSR cedants.

**IFRS Treatment:**

Insurance and intermediaries receivables are valued at amortized cost, at the estimates provided by the cedants. Generally, BSR reaches out to cedants after the close of the quarterly accounting period to obtain the latest estimate of receivables (or payables) due for the performance of the business over the last reporting period. The information is therefore more up-to-date, but nonetheless an early estimate of the upcoming reinsurance statement of account. No further adjustments are made to these estimates obtained from the cedants, as past experience indicates stability in the early estimates. For contracts with pre-set or known cash flows, the receivables will be based on the respective contractual agreement. As BSR writes business in multiple currencies, the receivables in local currencies are translated to EUR using the closing currency exchange rates.

**Solvency II Treatment:**

Solvency II requires that receivables are held at Fair Value.

**IFRS to Solvency II reconciliation adjustments:**

Given the short term nature of these receivables, there should exist no material measurement differences between amortized cost for IFRS and Fair Value for Solvency II.

**Reconciliation difference: Revaluation Adjustments**

The insurance and intermediaries receivables on BSR's balance sheet are predominantly short term balance sheet items. Therefore, the difference between the amortized cost under IFRS and Fair Value under Solvency II is not material. As such, no revaluation is performed between IFRS and Solvency II.

**D.1.13 Reinsurance receivables**

This is not applicable to BSR as there are no pending receivables from reinsurers as at year-end 2018.

**D.1.14 Receivables (trade, not insurance)****IFRS to SII Reconciliation December 31, 2018**

Amounts in EUR

Assets	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
Receivables (trade, not insurance)	7,829,860	-/-4,104	-/-1,474,825	6,350,931

The Receivables (trade, not insurance) asset category consists of four items on the IFRS balance sheet:

1. A receivable for the collateral posted by BSR for variation margin on the Synthetic Longevity Hedge instrument of EUR 6.2m.
2. Current Income Tax receivable of EUR 1.6m for tax losses occurring in past years (2015-2018), which will be settled with the fiscal entity of Aegon NV, of which BSR is part.

**IFRS Treatment:**

Trade and other receivables are initially recognized at amortized cost.

**Solvency II Treatment:**

Solvency II requires that receivables are held at Fair Value. As all receivables are predominantly short term balance sheet items, the difference between the amortized cost under IFRS and Fair Value under Solvency II is not material. As such, no revaluation is performed between IFRS and Solvency II. Both item 1, the EUR 6.2m associated with the collateral posted for the variation margin of the Synthetic Longevity Hedge and item 2, the tax receivable value of EUR 1.6m, are reported on the Solvency II balance sheet.

**Reconciliation difference: Reclassification Adjustments**

To reconcile the IFRS collateral position with the Solvency II collateral position on the balance sheet, a EUR 4k reclassification is performed for the accrued interest on the collateral position, from receivables (trade not insurance) to section D3.8 Financial liabilities other than debts owed to credit institutions under Solvency II.

### Reconciliation difference: Revaluation Adjustments

The revaluation of EUR -1.5m is a result of a correction made in the current tax position on the IFRS balance sheet for fiscal year 2015 which has not been corrected in the Solvency II balance sheet. For Solvency II this correction is immaterial, and it will be corrected in 2019Q1 reporting.

#### D.1.15 Own shares

This is not applicable to BSR.

#### D.1.16 Cash and cash equivalents

##### IFRS to SII Reconciliation December 31, 2018

Amounts in EUR

Assets	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
Cash and cash equivalents	8,372,863	-/-1,649		8,371,214

##### IFRS Treatment:

Cash comprises of cash at banks, totaling EUR 8.4m as at year end 2018. Cash equivalents are short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known cash amounts, are subject to insignificant risk of change in value and are held for the purpose of meeting short-term cash requirements. Money market investments that are held for investment purposes (backing insurance liabilities, investment liabilities or equity based on asset liability management considerations) are not included in cash and cash equivalents, but are presented as investment or investment for account of policyholders.

##### Solvency II Treatment:

The Fair Value approach is prescribed, with no revaluation being necessary.

##### Reconciliation difference: Reclassification Adjustments

The reclassification adjustment of EUR -1.6k is performed for the accrued interest related to the cash placed in Citibank from Cash and cash equivalents to section D3.13 any other liabilities under Solvency II. IFRS values the investments at the clean price excluding the accrued interest, whereas the valuation for Solvency II includes the accrued interest for the market value.

#### D.1.17 Any other assets

There are no other assets reported in this category, nor does Blue Square Re have any material leasing arrangements. The entirety of the BSR asset balances has been explained in section D.1 Assets.

## D.2 Technical provisions

This section provides the value of technical provisions including the amount of the best estimate and the risk margin, as well as a description of the bases, methods and main assumptions used. The value of the technical provisions is specified in the tables of sections: D.2.1 Technical provisions – non-life; D.2.2 Technical provisions – life (excluding index-linked and unit-linked) and health; and D.2.3 Technical provisions – index-linked and unit-linked.

The technical provisions classified by line of business as at December 31st, 2018 and December 31st, 2017 are shown as follows. The life segment forms the most material segment for BSR, in which the size of both the best estimate and risk margin are the largest, albeit they offset each other for the most part.

**Technical Provisions by lines of business***Amounts in EUR millions*

December 31, 2018

Line of business	Technical Provision	Best Estimate	Risk Margin
Life	2.5	-/-60.0	62.4
Health	-/-14.1	-/-18.7	4.6
Non-life	3.0	2.2	0.8
<b>Total</b>	<b>-/-8.7</b>	<b>-/-76.5</b>	<b>67.8</b>

**Technical Provisions by lines of business***Amounts in EUR millions*

December 31, 2017

Line of business	Technical Provision	Best Estimate	Risk Margin
Life	12.9	-53.0	66.0
Health	-/-15.2	-/-19.7	4.5
Non-life	5.6	4.9	0.7
<b>Total</b>	<b>3.3</b>	<b>-/-67.9</b>	<b>71.2</b>

**Bases (different reporting regimes)**

Being a Solvency II regulated entity located within the EEA, BSR's Solvency II technical provisions are calculated taking into account the requirements of the Solvency II directive, implementing measures and guidance, and the Aegon Market Consistent Reporting Manual (AMCRM).

**Key models and methodologies**

The technical provisions are calculated using projection models, and the liabilities are generally calculated deterministically because BSR does not write any embedded options and guarantees in the reinsurance treaties. Nonetheless, BSR entered into an out-of-the-money longevity hedge (Synthetic Longevity Hedge) hedging the Dutch longevity reinsurance contract which requires stochastic mortality model for the valuation of this hedge.

The technical provisions consist of the Best Estimate Liability and the Risk Margin. Non-hedgeable Solvency Capital Requirements (SCRs) form the basis of the calculation of the Risk Margin. The Risk Margin calculation is based on a cost-of-capital method applied to a projection of non-hedgeable SCRs based on a 99.5% confidence level and aggregation is performed by applying diversification benefits factors to each risk type that is applicable under the Standard Formula. The risk margin aggregation method follows the reference undertaking concept under Solvency II.

Ongoing validation and review processes are in place to ensure that models being used remain appropriate and can be relied upon, including model validations, process reviews carried out by the internal audit function and review of results performed by external auditors.

The AFH provides at least once a year an independent opinion on the adequacy and reliability of the technical provisions. This is documented by the AFH in an annual Actuarial Function Report.

**Assumptions – Best estimate non-economic assumptions**

Non-economic assumptions are proposed by the 1st line actuarial function and then reviewed by the 2nd line risk and actuarial function while approved by the management board. This governance also includes seeking the independent opinion and recommendation of the AFH, as the BSR AFH also serves as a risk officer to BSR.

The review of key non-economic assumptions (defined as material risks of material contracts) is conducted at least once a year, and the review of other assumptions will be conducted at least once every 3 years. Each year in Q1, a plan is made to select the assumptions which will be reviewed during the calendar year. A review entails performing an experience study, where data is available, or otherwise assessing the appropriateness of current assumption sets, e.g. by benchmarking. The conclusion, whether or not an assumption update is recommended, is presented by the 1st line actuarial function to the AFH, RCC and MB. In the event of an assumption update proposal, the impact is quantified in the accompanying recommendation report. Ultimately, the MB has to approve the use of assumptions, taking the opinions of the actuarial and risk functions into consideration.

The assumptions used for the key contracts are viewed to be appropriate for the valuation of technical provisions for FY 2018.

#### Assumptions – Economic assumptions

The key economic assumption is the EIOPA swap curve for discounting. BSR currently does not make further adjustments to the EIOPA base swap curve for credit risk, volatility adjustments nor matching adjustments. Where applicable, risk-neutral economic scenarios are generated that are applied for the valuation of the options and guarantees included in the liabilities, but this is currently not necessary as BSR does not write any embedded options and guarantees.

The governance process for economic assumption setting is centralized to Aegon Group on behalf of all Aegon entities. BSR currently uses the yield curves generated by the Group for the calculation of technical provisions. Locally, the yield curve is then checked against the EIOPA published yield curves to ensure consistency at the annual time points. BSR relies on the Group for appropriate interpolation between annual time points. BSR can rely on the Group for this since the economic assumption setting process of Aegon Group is subject to internal governance processes and also subject to external audit procedures.

#### Level of uncertainty associated with the value of the technical provisions

The risk margins relate to normal uncertainty around the best estimate assumptions and are included in the technical provisions as an addition to the best estimate liabilities. The IFRS sensitivities are presented in the Annual Report, and the Solvency II sensitivities are presented in this document, in the sensitivities sub-sections of section C. Risk Profile.

#### Significant simplified methods used to calculate the technical provisions

All methods used in the calculation of the technical provisions are to be proportionate to the nature, scale and complexity of the risks underlying the related companies' insurance obligations.

The calculation of technical provisions for the non-life contracts is based on limited data. As such, the calculation is performed based on the initial business assessment on the potential volume of business and the historical loss ratio. Ultimately, the materiality of the non-life contracts on the balance sheet is deemed to be small, as these contracts are structured as 1-year reinsurance contracts.

#### Data Quality

The significant data leading to the calculation of technical provisions is the policyholder data (anonymized), as well as treaty and reinsured product information that defines the nature of risk transfer.

In terms of managing policyholder data, BSR divides its exposures into life, health, and non-life classifications. In the case of life and health similar-to-life, which are the most significant portion of the BSR balance sheet, the calculation of technical provision is determined at individual policyholder level. Collectively, the individual policies form a cohort of reinsured policies under a reinsurance treaty, whereby the required capital and risk margin are calculated at the treaty level. Currently, each treaty is treated as a homogenous risk group of its own, whereby the insurance cash flows underlying the policyholders are projected on a per-policy basis, but aggregated to the treaty level. The risk capital and margin calculation are determined at the level of the homogeneous risk group, with some dependency on the overall entity-level diversification.

BSR data management has improved over the last two years with the implementation of a data management system. Policyholder data used in modelling for almost all contracts are produced in this data management system. This allows improved validation of the data received from cedants, and data quality reports are produced by the system for each contract. Good progress has been made in developing and documenting checks on data, although this has been focused on the most material contracts. Data dictionaries have been developed for a number of contracts to ensure a good level of understanding of the information received from cedants.

BSR has identified, designed and implemented key control points in order to improve the robustness of reporting activities. These efforts are documented in the Risk Control and Self-Assessment (RCSA) and have been sampled-tested by the risk and actuarial functions.

### Model governance

BSR has an integrated modelling platform for TLB High Net Worth, UK Individual Protection, RGA India, Turkey Life, Dutch Longevity Reinsurance (Johannes), Synthetic Longevity Hedge and aggregation models. Collectively, there are three primary models – (1) a deterministic life model for the aforementioned models, (2) a capital projection model used to calculate the future SCR for the most material contracts for the Risk Margin calculation, and (3) an aggregation model used to value all cash flow scenarios projected for all contracts of BSR, which resulted in the valuation of technical provisions and capital. For any model developments, model test plans are conceived and the models are tested against these test plans before a recommendation for approval is given to BSR MB. When the models are approved for use, the model change impact is quantified and reported as part of the quarterly movement analysis of technical provisions (and hence S-II Own Funds & IFRS Equity) and capital requirements.

The model development and model change process is managed through a versioning system (subversion). The system allows for the automated and controlled logging of historical changes made to a given model, where past models are never deleted but stored on the network server. This is an auditable system as one can always retrieve past information and obtain information as to who made changes, when they were made and their nature.

### D.2.1 Technical provisions – non-life

#### IFRS to SII Reconciliation December 31, 2018

Amounts in EUR

Liabilities	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
Technical provisions - non-life	<b>2,733,527</b>		<b>233,320</b>	<b>2,966,847</b>
Technical provisions - non-life (excluding health)	2,733,527		233,320	2,966,847
<b>Best estimate</b>	2,733,527		-/-539,358	2,194,168
<b>Risk margin</b>			772,678	772,678

The non-life technical provision comprises of the following reinsurance contracts, consisting of proportional coinsurance and non-proportional excess-of-loss (XOL) structures:

- Portugal property catastrophe program (XOL) – Status: active
- Portugal property per risk program (XOL) – Status: active
- Netherlands property catastrophe program (XOL) – Status: active
- Hungary property catastrophe program (XOL) – Status: active
- Aegon Spain JV household reinsurance program (Quota Share) – Status: inactive
- Portugal property reinsurance program (Quota Share) – Status: inactive
- Netherlands property per risk program (XOL) – Status: inactive
- Hungary motor third party liability (XOL) – Status: inactive

Active contracts refer to programs for which BSR is still at risk for future claim events, and therefore future premium income is still to be earned. Inactive contracts refer to past reinsurance programs that BSR participated in which claims are still pending final settlement, and BSR earns no future premium income. Of the listed contracts, the Hungary motor third party liability (MTPL) contract is fully retroceded to the external market with special terms that fully negate counterparty risk. Therefore, an equal amount of the reserve is reported as a reinsurance recoverable on the balance sheet as described in section D.1.10 Reinsurance recoverables.

This section describes the material differences between the bases, methods and main assumptions used for the valuation for solvency purposes and the financial statements.

**IFRS Treatment:**

Non-life insurance contracts are insurance contracts where the insured event is not life-contingent. For non-life products, the insurance liability generally includes reserves for unearned premiums, unexpired risk, inadequate premium levels, and outstanding claims and benefits. No catastrophe or equalization reserves are included in the measurement of the insurance liability, unless the nature of the reinsurance contract itself is a transfer of catastrophe risk only.

The reserve for unearned premiums includes premiums relating to risk coverage for periods beyond the balance sheet date. Generally, the reserve is released over the remaining coverage period of the premium and is recognized as premium income.

The liability for outstanding claims and benefits is established for claims that have not been settled and any related cash flows, such as claims handling costs. It includes claims that have been incurred, but have not been reported to BSR. The liability is calculated at the reporting date using statistical methods based on empirical data and current assumptions that may include a margin for adverse deviation.

At current state, as the non-life contracts contribute to only a small proportion of BSR's balance sheet, the unearned premium reserves and the claims liability, including IBNR and outstanding claims reserves are modeled by the cedants.

The non-life reinsurance contracts are structured as a 1-year reinsurance, upon which future terms and conditions and reinsurance programs of the cedant may change. As such, the recognition of the future profit is up to the maturity of the reinsurance treaty.

**Solvency II Treatment:**

For Solvency II, a Fair Value approach is used that requires discounting of all the expected future cash flows by current discount rates and the addition of a risk margin based on the cost of capital ('CoC') for the non hedgeable risks.

Under Solvency II, the contract boundary that is applicable is also 1-year, consistent with the current IFRS treatment.

Regarding the discount rate, the Solvency II discount rate is based on the swap rate at the reporting date (BSR does not make any further spread adjustment). While the Solvency II discount rates differ in their extrapolation of the curve and the last liquid point assumptions compared to IFRS, these extrapolation assumptions make almost no difference due to the short-term nature of non-life contracts.

**Reconciliation difference: Reclassification Adjustments**

There are no reclassification adjustments necessary.

**Reconciliation difference: Revaluation Adjustments**

The total revaluation adjustments of EUR 0.2m is due to the higher provisioning of liabilities on account of risk margins under SII.

**D.2.2 Technical provisions – life (excluding index-linked and unit-linked) and health****IFRS to SII Reconciliation December 31, 2018**

Amounts in EUR

Liabilities	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
<b>Technical provisions - life (excluding index-linked and unit-linked)</b>	<b>35,715,124</b>		<b>-/-47,352,811</b>	<b>-/-11,637,687</b>
<b>Technical provisions - health (similar to life)</b>	<b>560,264</b>		<b>-/-14,690,070</b>	<b>-/-14,129,806</b>
Best estimate	560,264		-/-19,258,317)	-/-18,698,053
Risk margin			4,568,247	4,568,247
<b>Technical provisions - index-linked and unit-linked</b>	<b>35,154,860</b>		<b>-/-32,662,741</b>	<b>2,492,118</b>
Best estimate	35,154,860		-/-95,110,286	-/-59,955,426
Risk margin			62,447,545	62,447,545

The life technical provisions are comprised of the following reinsurance contracts:

- Dutch Longevity Reinsurance (longevity swap) - Status: active
- TLB High Net Worth Mortality Reinsurance (YRT mortality risk transfer) - Status: active
- Transamerica Life Insurance Bermuda High Net Worth Mortality Reinsurance (YRT mortality risk transfer) - Status: active
- UK Income Protection (Quota Share) - Status: active
- India Mortality Reinsurance (coinsurance) - Status: active
- Turkey Life Reinsurance (mortality risk transfer) - Status: active
- Brazil Life Reinsurance (2-year coinsurance) - Status: active
- Direct Marketing Australia Life (consists of two small coinsurance contracts) - Status: active
- Spain Life Reinsurance (1-year coinsurance) - Status: inactive

The health technical provision consists of two contracts:

- Direct Marketing Products with Mitsui Sumitomo, Japan (MSI) (coinsurance) - Status: active
- Direct Marketing Products with Mitsui Sumitomo, Thailand (MSI) (coinsurance) - Status: active

Despite being an internal reinsurer, the direct marketing contracts in Australia, Thailand and Japan are directly written by external parties to the Aegon Group and reinsured to BSR. This is because the products are designed and sold in partnership with Aegon Insights, which is a subsidiary of the Aegon Group that specializes in the direct marketing space in the Asia-Pacific region. They are effectively products designed under significant involvement by Aegon, and subsequently directly written on the balance sheet of third party insurers.

This section describes the material differences between the bases, methods and main assumptions used for the valuation for solvency purposes and the financial statements.

#### IFRS Treatment:

Life insurance contracts are insurance contracts with life-contingent benefits. The measurement of the liability for a life insurance contract varies and depends on the nature of the product.

Liabilities arising from traditional life insurance products, particularly those with fixed and guaranteed account terms, use the gross premium valuation method. Under this method, the liability is determined as the sum of the discounted value of the expected benefits and future administration expenses directly related to the contract, less the discounted value of the expected future premiums. The liability is calculated based on current non-economic assumptions (e.g., mortality, morbidity, lapse, etc.). The discount rate is locked at the time of inception of the contracts. To the extent a profit is calculated at the time of inception, the profit is deferred for future recognition by the inclusion of a deferred revenue liability (DRL) in the technical provision. The calculation frequency of the DRL is quarterly during each reporting period. The amortization of the DRL is determined based on the present value of future profits at the time of inception, and is not revalued going forward as experience unfolds. The discount rate for IFRS technical provisions is the risk-free term structure of the underlying currency of BSR's reinsurance contracts, and is locked at inception.

Life insurance contracts under which the policyholder bears the risks associated with the underlying investments are classified as insurance contracts for account of policyholders. As at year end 2018, BSR does not directly reinsure any insurance contracts for account of policyholders. Indirect risk exposure towards such contracts by means of yearly renewable term reinsurance treaties that transfer only mortality risk is treated just like a traditional life insurance product.

Generally, at each reporting date, the adequacy of the life insurance liabilities net of DAC, are assessed using a liability adequacy test (LAT). The liability adequacy test is performed also using a gross premium method and the same non-economic assumptions are used, as they are already current best estimates. On the other hand, the discount rate is unlocked to current market risk-free rates to revalue the liabilities for LAT purposes. The DRL is derecognized for LAT, and in lieu of that, an explicit risk margin is added to the best estimate liabilities. The risk margin is calculated using the cost of capital approach for non-hedgeable risks, allowing for diversification between the risks. In summary, BSR is using the Solvency II valuation principle as the basis for the Liability Adequacy Test of IFRS reserves.

The LAT for year end 2018 shows a current surplus of approximately EUR 32 million over the reported IFRS technical provision, net of DAC.

**Solvency II Treatment:**

For Solvency II, a Fair Value approach is used. Additionally, Solvency II requires discounting of all the expected future cash flows by current discount rates and the addition of a risk margin based on the present value of the cost of capital ('CoC') for the non-hedgeable risks.

Currently, BSR's valuation of life technical provision is not affected by contract boundaries, so the boundaries of all contracts are the same under IFRS and Solvency II.

Regarding the discount rate, the Solvency II discount rate is based on the swap rate at the reporting date. BSR does not use any additional spread measure on top of the risk free rate. The Solvency II discount rate used differs in the extrapolation of the curve compared to IFRS, and the last liquid point assumptions are different than applied for IFRS.

**Reconciliation difference: Reclassification Adjustments**

There are no reclassifications of life and health technical provisions from IFRS to Solvency II.

**Reconciliation difference: Revaluation Adjustments**

An overall revaluation amount of EUR -47.4 million has been processed, consisting of EUR -14.7m for health technical provisions and EUR -32.7m for life technical provisions. This overall revaluation is mainly due to two reasons, (1) difference in the discounting of liability cash flows arising due to locked interest rate curve in IFRS and market swap curve in SII, and (2) higher DRL provisioning under IFRS compared to risk margin component under SII framework.

**D.2.3 Technical provisions – index-linked and unit-linked**

This is not applicable for BSR.

**D.2.4 Matching adjustment**

The matching adjustment is not currently applicable to BSR.

**D.2.5 Volatility adjustment**

The volatility adjustment is not currently applicable to BSR.

**D.2.6 Transitional risk-free interest rate-term structure**

BSR does not apply the transitional risk-free interest rate-term structure – as described in Article 308c of Directive 2009/138/EC.

**D.2.7 Transitional deduction**

BSR does not apply the transitional deduction – as described in Article 308d of Directive 2009/138/EC.

**D.2.8 Recoverables from reinsurance contracts and Special Purpose Vehicles**

A reinsurance recoverable of EUR 0.5m is reported on both the IFRS and S-II balance sheets. This recoverable relates to the claims recovery under an inactive retrocession program for the Hungary third-party liability reinsurance.

A Solvency II economic valuation of the retroceded liabilities is applied. While the value of the reinsured liabilities should typically allow for a best estimate default provision, this is deemed unnecessary for this contract, as the inward reinsurance where BSR has an obligation to the insurer specifically contains clauses specifying that the obligation of BSR to the cedant is fully contingent upon the recovery from retrocession counterparties. In other words, the cedant assumes the counterparty risk of the retrocessionaires. The amounts recoverable are reliable and are expected to be recovered to fully offset the gross technical provision set aside for this contract.

BSR also makes use of a retrocession program for the TLIB Reinsurance contract. As this contract is not currently a material contract in terms of the size of obligation to BSR, the inward and outward reinsurance contracts are presented as netted within the technical provisions. The allowance for default is not taken into consideration as this is immaterial at the moment.

### D.2.9 Material changes in assumptions made in calculations of technical provisions

During 2018, BSR updated a number of assumptions, including – mortality trend and experience for the Dutch Longevity Reinsurance contract (Johannes) and mortality trend of the Synthetic Longevity Hedge, mortality and lapse assumptions for the India contract, lapse, morbidity and mortality for the UK contract as well as the company-wide maintenance expense assumption – for a total impact equating to an increase in Own Funds of EUR 0.8m, the largest components being the Johannes mortality assumption update (EUR -1.5m) and the India mortality update (EUR +2.2m).

## D.3 Other liabilities

### D.3.1 Contingent liabilities

This is not applicable to BSR.

### D.3.2 Provisions other than technical provisions

This is not applicable to BSR.

### D.3.3 Pension benefit obligations

This is not applicable to BSR.

### D.3.4 Deposits from reinsurers

This is not applicable to BSR.

### D.3.5 Deferred tax liabilities

#### IFRS to SII Reconciliation December 31, 2018

Amounts in EUR

Assets	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
<b>Deferred tax assets</b>	5,524,135	-/-5,524,135		
<i>Liabilities</i>				
<b>Deferred tax liabilities</b>		-/-5,524,135	8,028,465	2,504,330

For an explanation of the deferred tax liabilities, please refer to the explanations already provided in section D.1.4 Deferred tax assets. The same explanation in relation to the origin and amount of DRL holds as described earlier because the reported DTL on the Solvency II balance sheet is a result of the differences in valuation between the IFRS and Solvency II balance sheets, whereas the tax basis remains unchanged.

### D.3.6 Derivatives

#### IFRS to SII Reconciliation December 31, 2018

Amounts in EUR

Liabilities	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
<b>Derivatives liability</b>	5,177,133			5,177,133

The derivative liability on the BSR balance sheet reflects only one derivative position, i.e. the Synthetic Longevity Hedge.

BSR does not directly assume risk from any embedded options and guarantees, nor any contractual features that resemble embedded derivatives through the insurance policies underlying the reinsurance treaties. For instance, TLB universal life policies that otherwise may have embedded derivatives are reinsured to BSR only for the mortality risk and this is achieved via a YRT mortality reinsurance treaty.

**IFRS Treatment:**

Life insurance contracts typically include derivative-like terms and conditions. With the exception of policyholder options to surrender the contract at a fixed amount, contractual features that are not closely related to an insurance contract and that do not themselves meet the definition of an insurance contract are accounted for as derivatives.

IFRS requires embedded derivatives to be bifurcated and presented separately as derivatives (liabilities) when they are not 'closely related' to the host contract. In that case they must be valued at Fair Value in the IFRS balance sheet. These embedded derivatives are however not applicable for BSR.

The EUR 5.2m relates to only the Synthetic Longevity Hedge. This hedge is based on a mark-to-model valuation as a deep and liquid market does not exist for such instruments. The hedge consists of two legs – a floating leg for the potential payoff to BSR if the hedge attaches and a fixed leg for the premium payment to the risk takers. The fixed leg is a series of fixed contractual cash flows, so this leg is valued as the present value of these cash flows using market swap rates.

Inputs to the floating leg payoff valuation are market swap rates and projected Dutch mortality rates taking into account expected mortality improvements (including the uncertainty around the expectation). The uncertainty around the mortality expectation provides a view on the distribution of future mortality paths, and consequently, the distribution of payoffs from this instrument. The valuation of the payoff distribution employs a methodology similar to the valuation of technical provisions, whereby a best estimate (probability-weighted present value) and risk margin are determined. It is important also to note that, as it is structured as an out-of-the-money hedge, it is not unusual to expect the payoff value of this instrument to eventually taper off to nil, leaving only the fixed leg payment from BSR to the risk takers that carries a non-zero value because the contractual obligation to pay remains throughout the term of the hedge contract.

**Solvency II Treatment:**

Similarly to IFRS, a Fair Value approach is prescribed for Solvency II.

**Reconciliation difference: Reclassification Adjustments**

There are no reclassification adjustment.

**Reconciliation difference: Revaluation Adjustments**

No revaluation adjustment is needed, as all of BSR's investments are measured at Fair Value on the IFRS balance sheet.

**D.3.7 Debts owed to credit institutions**

This does not apply to BSR for the year 2018.

**D.3.8 Financial liabilities other than debts owed to credit institutions****IFRS to SII Reconciliation December 31, 2018**

Amounts in EUR

Liabilities	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
Financial liabilities other than debts owed to credit institutions	22,000,000	-/-4,104		21,995,896

**IFRS Treatment:**

This liability category represents the collateral received from Aegon Levensverzekering N.V. under the Dutch Longevity Reinsurance transaction. The entirety of the collateral is posted in cash and, consequently, valued at fair value.

**Solvency II Treatment:**

Solvency II requires measurement at fair value, which is already the case for this component under IFRS. Solvency II treatment includes a reclassification related to the collateral posted for Dutch Longevity Reinsurance contract in this category.

**Reconciliation difference: Reclassification Adjustments**

The reclassification adjustment of EUR -4.1k is for the accrued interest related to the collateral posted by Aegon NL for the Dutch Longevity Reinsurance Contract. IFRS values the collateral placed with counterparties at the clean price excluding the accrued interest, whereas the SII value includes the accrued interest for the market value.

**IFRS to Solvency II reconciliation adjustments:**

No revaluation adjustment is necessary as these liabilities are cash posted under the Credit Support Annex as collateral. They are expected to either be returned to the cedant as experience emerges differently over time or to diminish gradually as the marked-to-model value of the reinsurance treaty converges to the realized value over time as it runs off.

**D.3.9 Insurance & intermediaries payables****IFRS to SII Reconciliation December 31, 2018**

Amounts in EUR

Liabilities	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
<b>Insurance &amp; intermediaries payables</b>	6,736,191			6,736,191

The insurance and intermediaries payables for BSR are payables from BSR as at the close of the accounting period on December 31, 2018 to either cedants or the intermediaries of BSR. The operational aspect of insurance and intermediaries reporting typically lags the risk period by 1-3 months (or in some cases even 6 months) as stipulated in the respective treaties, causing a natural delay in the settlement of cash flows with counterparties.

BSR aims to settle payables as soon as possible. The balance consists of various small amounts payables to the cedants.

**IFRS Treatment:**

Insurance and intermediaries payables are valued at amortized cost, based on the estimates or statements provided by the cedants. Generally, BSR reaches out to cedants right after the close of the quarterly accounting period to obtain the latest estimate of payables (or receivables) due for the performance of the business over the last reporting period. The information is therefore more up-to-date, but nonetheless an early estimate of the upcoming reinsurance statement of account. No further adjustments are made to these estimates obtained from the cedants, as past experience indicates stability in the early estimates. For contracts with pre-set or known cash flows, the payables will be based on the respective contractual agreement. As BSR writes business in multiple currencies, the payables in local currencies are translated to EUR using the closing currency exchange rates.

**Solvency II Treatment:**

Solvency II requires that payables are held at Fair Value.

**IFRS to Solvency II reconciliation adjustments:**

Given the short term nature of these payables, there should exist no material measurement differences between amortized cost for IFRS and Fair Value for Solvency II.

**Reconciliation difference: Reclassification Adjustments**

No reclassification adjustment is needed for this category.

**Reconciliation difference: Revaluation Adjustments**

Reinsurance payables on BSR's balance sheet are predominantly short-term balance sheet items. Therefore, the difference between the amortized cost under IFRS and Fair Value under Solvency II is not material. As such, no revaluation is performed between IFRS and Solvency II.

### D.3.10 Reinsurance payables

#### IFRS to SII Reconciliation December 31, 2018

Amounts in EUR

<i>Liabilities</i>	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
<b>Reinsurance payables</b>	85,616			85,616

The reinsurance payables for BSR are payables from BSR as at year-end 2018 to retrocessionnaires. The operational aspect of reinsurance payable reporting typically lags the risk period by 1-3 months (or in some cases even 6 months) as stipulated in the respective treaties, causing a natural delay in the settlement of cash flows with counterparties.

BSR aims to settle payables as soon as possible. The balance consists of a small amount payable to a retrocessionnaire.

#### IFRS Treatment:

Reinsurance payables are valued at amortized cost, at the estimates or statements provided by the retrocessionnaires. Generally, BSR reaches out to retrocessionnaires right after the close of the quarterly accounting period to obtain the latest estimate of payables (or receivables) due for the performance of the business over the last reporting period. The information is therefore more up-to-date, but nonetheless an early estimate of the upcoming reinsurance statement of account. No further adjustments are made to these estimates obtained from the retrocessionnaires, as past experience indicates stability in the early estimates. For contracts with pre-set or known cash flows, the payables will be based on the respective contractual agreement. As BSR writes business in multiple currencies, the payables in local currencies are translated to EUR using the closing currency exchange rates.

#### Solvency II Treatment:

Solvency II requires that payables are held at Fair Value.

#### IFRS to Solvency II reconciliation adjustments:

Given the short term nature of these payables, there should exist no material measurement differences between amortized cost for IFRS and Fair Value for Solvency II.

#### Reconciliation difference: Reclassification Adjustments

No reclassification adjustment is needed for this category.

#### Reconciliation difference: Revaluation Adjustments

Reinsurance payables on BSR's balance sheet are predominantly short-term balance sheet items. Therefore, the difference between the amortized cost under IFRS and Fair Value under Solvency II is not material. As such, no revaluation is performed between IFRS and Solvency II.

### D.3.11 Payables (trade, not insurance)

#### IFRS to SII Reconciliation December 31, 2018

Amounts in EUR

<i>Liabilities</i>	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
<b>Payables (trade, not insurance)</b>	1,467,908		-	1,467,908

The payables (trade, not insurance) category consists mainly of cost charges to Aegon Group (corporate center) for group services and to a smaller extent, general expense payables.

**IFRS Treatment:**

Payables (trade, not insurance) are considered to be financial liabilities and are to be valued at amortized cost or Fair Value.

**Solvency II Treatment:**

For Solvency II, a Fair Value approach is prescribed.

**Reconciliation difference: Reclassification Adjustments**

No reclassification adjustments are required for this category.

**IFRS to Solvency II reconciliation adjustments:**

Payables (trade not insurance) on BSR's balance sheet are predominantly short-term balance sheet items. Therefore, the difference between the amortized cost under IFRS and Fair Value under Solvency II is not material. As such, no revaluation is performed between IFRS and Solvency II.

**D.3.12 Subordinated liabilities**

This is not applicable for BSR.

**D.3.13 Any other liabilities****IFRS to SII Reconciliation December 31, 2018**

Amounts in EUR

<i>Liabilities</i>	Statutory accounts value	Reclassifications	Revaluation	Solvency II value
<b>Any other liabilities, not elsewhere shown</b>	1,649	-/-1,649		

As at December 31, 2018, the IFRS classification of any other liabilities consists of the accrued interest on the cash held at bank.

**IFRS Treatment:**

Considered 'financial liabilities' like any other liabilities are to be valued at amortized cost or Fair Value.

**Solvency II Treatment:**

For Solvency II, a Fair Value approach is prescribed.

**Reconciliation difference: Reclassification Adjustments**

The accrued interest of EUR 1.6k related to the cash investments is reclassified to the cash at bank as described in section D.1.16 Cash and cash equivalents.

**D.4 Alternative methods for valuation**

BSR does not use alternative methods for valuation.

## D.5 Any other information

This section describes additional information about the assumptions regarding management actions and policyholder behaviour. Other than these, there is nothing additional to disclose other than the information already described throughout this section.

### Management actions

BSR does not make any assumptions for future management actions in the calculation of technical provisions nor for any components on the balance sheet.

As a reinsurer, there are limited management actions written into the reinsurance treaties and reinsured policies that BSR can perform on a standalone basis as a direct risk mitigation to the reinsured in-force policies. For instance, BSR does not write any products with discretionary participating features. Typically, in the case of reviewable rates, BSR is able to increase the reinsurance premium rates if the cedant also increases the premium rates on existing policyholders.

Nonetheless, it is also prudent to point out that a reinsurance treaty is after all a customized bilateral agreement in which BSR is able to initiate discussion with the cedant, taking into account the business relationship and business proposition as a whole, to mutually agree to change certain aspects surrounding the existing treaty. This is however not expected to be the case under normal business circumstances. An example of this was performed on the Synthetic Longevity Hedge contract, whereby the novation of a US mortality contract left a one-sided exposure in the hedge and BSR was able to reach out to counterparties to mutually agree to restructure the hedge contract.

Besides that, the management actions that BSR can realistically employ are geared towards expense management, financial hedging, and retrocession.

### Policyholder behaviour

The assumptions for policyholder behaviour are the base surrender and lapse rates that are historically observed within the reinsured portfolio. Most of the reinsured policies to BSR are pure protection policies with little or no cash values or investment features, leaving BSR quite immune to dynamic policyholder behaviour.

Of particular interest is the TLB YRT mortality reinsurance of the universal life plans. BSR only reinsures the mortality benefit and collects the mortality risk premium for the UL policies, so from a risk perspective, BSR is not exposed to the financial options and guarantees embedded in the UL policies. However, the reinsured benefit is defined as the net amount at risk, i.e. the difference between face amount and account value, and the latter is a function of investment return and policyholder behaviour, especially over the long-term. This issue will emerge in the future volume of in-force reinsured business, as opposed to the current direct risk sharing, so is currently simplified in the modelling.

# E. Capital Management

## General

The financial strategy supports the execution of our business strategy. Once a year in Q3, BSR updates the business strategy that concludes with a medium term plan that spans across a 3-year horizon.

The key financial strategy themes can be broadly classified into business and operational objectives:

- Business objectives
- Continue to implement Aegon's reinsurance strategy and contribute to optimizing Aegon's S-II capital position by achieving diversification under S-II regime through reinsurance solutions;
- Contribute to Aegon's bottom line results by retaining risks that fall within Aegon's overall risk appetite;
- Focus on the top business opportunities, to grow the balance sheet and optimize the scale of BSR
- Operational objectives
- Ensure that BSR's actuarial, finance and operational areas' processes have the appropriate infrastructure to meet relevant internal and external requirements as the book of business grows.

The capital management strategy supports the execution of the financial strategy. The main capital management themes are described in this section.

## Capital Management policy

BSR Capital Management policy aims to enhance transparency and accountability around capital management in the entity. The policy is an adaptation of the Aegon Group capital management policy to ensure alignment towards the realization of Group capital strategy across all business entities. There were no updates to the Capital Management Policy during 2018. The policy was updated in 2017 to reflect the updated Aegon group policy and the regulatory guidelines.

The capitalization of BSR is based on local regulatory requirements, i.e. the Solvency II capital ratio. BSR has an AA- financial strength rating from Standard & Poor's (S&P) due to being core to the realization of Aegon Group strategy.

In managing the capital adequacy, the Company's capital management framework is built on, among other things, managing capitalizations towards the target capital management zone. Under the Company's capital management framework the following target capitalization is most relevant:

<i>Capitalization Target Range (Solvency II)</i>	<b>December 31, 2018</b>	December 31, 2017
150% - 200%	<b>135%</b>	128%

The frequent monitoring of actual and forecasted capitalization levels is an important element in the Company's capital framework in order to actively steer and manage towards maintaining adequate capitalization levels. BSR's capital framework is based on several capital management zones in which escalating management actions are called for in a timely manner to ensure there is always adequate capitalization.

The capital management zones and the management interventions connected to these zones as soon as the capital ratio falls or is projected to fall within a particular capitalization zone are illustrated in the table below.

<i>Capital management Zones</i>	<b>Company's Economic Area</b>	Local capital management actions
Opportunity	<b>&gt;200% SCR</b>	Drive acceleration of growth and/or additional remittances to the group.
Target	<b>150% - 200% SCR</b>	Execute capital deployment and remittances according to capital plan.
Retention	<b>125% - 150% SCR</b>	Re-assess capital plan and risk positions to strengthened capitalization back to target zone.
Recovery	<b>100% - 125% SCR</b>	Re-asses capital plan and risk positions. Reduce or suspend remittances.
Regulatory plan	<b>&lt;100% SCR</b>	Suspension of dividends. Regulatory plan required.

The Capital Management policy provides guidance for financial strength and continuity which, together with culture and risk balance, make up the Risk Tolerance statements set in Blue Square Re's ERM Framework. For additional detail on the Risk Tolerance statements, please refer to section B.3.1.1 Enterprise Risk Management Framework.

#### Capital quality

Capital quality is a reflection of the Company's stability and ability to absorb future financial losses. BSR's total Own Funds is comprised of only Unrestricted Tier 1 capital.

This is in light of Solvency II regulation that makes a distinction between available and eligible Own Funds, in which both are split into tiers as shown in section E.1.2 Tiering of Own Funds.

#### Available Own Funds

Unrestricted Tier 1 capital consists of BSR's share capital, share premium and the reconciliation reserve.

#### Eligible Own Funds

Under Solvency II regulation, restrictions apply to the eligibility of Tier 2 and Tier 3 capital, as well as the eligibility of restricted Tier 1. These restrictions are noted in the section, E.1.2 Tiering of Own Funds.

BSR's total Own Funds is comprised of only Unrestricted Tier 1 capital and consequently is not subject to tiering restrictions. All of BSR's available Own Funds are eligible Own Funds, and amounted to EUR 65.4m on December 31, 2018.

#### Managing our leverage

This is currently not applicable as BSR does not make use of financial leverage.

## E.1 Own Funds

### E.1.1 Aggregation methods

All Own Funds of BSR sits within the legal entity, not requiring further aggregation and consolidation.

### E.1.2 Tiering of Own Funds

The Own Funds are divided into three Tiers. An overview of the general characteristics of the three Tiers of Own Funds is visualized in the figure below.

## Tier 1

## Tier 2

## Tier 3

Tier 1	Tier 2	Tier 3
<b>Unrestricted Tier 1</b> <ul style="list-style-type: none"> <li>Equity (Share capital and share premium)</li> </ul>	<ul style="list-style-type: none"> <li>Dated or perpetual</li> <li>Subordinated capital instruments               <ul style="list-style-type: none"> <li>With an original maturity of at least 10 years</li> <li>Limited loss absorption</li> <li>With suspension of payments and deferral of interest</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Dated or perpetual</li> <li>Subordinated capital instruments               <ul style="list-style-type: none"> <li>With an original maturity of at least 5 years</li> <li>Limited loss absorption</li> <li>With suspension of payments and deferral of interest</li> </ul> </li> <li>Net deferred tax assets</li> </ul>
<b>Restricted Tier 1</b> <ul style="list-style-type: none"> <li>Perpetual subordinated capital instruments with loss absorption</li> </ul>		

Restrictions apply to the eligibility of Restricted Tier 1, as well as the eligibility of Tier 2 and Tier 3 capital. Restricted Tier 1 may not exceed 20% of Tier 1 Own Funds and the total of Tier 2 and Tier 3 Own Funds may not exceed 50% of the SCR, whilst Tier 3 Own Funds is limited to 15% of SCR.

BSR does not have or make use of:

- Minority interests in specific subsidiaries exceeding the contribution of that subsidiary to the SCR;
- Minority interests in ancillary services undertakings;
- Restricted own fund items in ring-fenced or matching adjustment portfolios;
- Ancillary Own Funds;
- Subordinated debt;
- Grandfathering of (hybrid) equity/debt components.

Given the absence of possible Own Funds components as mentioned above, the tiering of Own Funds is a straightforward exercise and all of the Own Funds are classified as unrestricted Tier 1. BSR does not have a net deferred tax assets under Solvency II balance sheet.

The tables on the next page set out the Solvency II Own Funds per tier for the end of the reporting period (31 December 2018) and the start of the reporting period (31 December 2017).

## BSR Own Funds Tiering as at 31 December 2018

Amounts in EUR millions	Total	Tier 1 unrestricted	Tier 1 restricted	Tier 2	Tier 3
Ordinary share capital	0.0	0.0			
Share premium account	81.8	81.8			
Reconciliation reserve	-/-16.5	-/-16.5			
Available Own Funds	65.4	65.4			
Eligible Own Funds SCR	65.4	65.4			
Solvency Capital Requirement (SCR)	48.5				
Minimum Capital Requirement (MCR)	12.1				
Solvency II Ratio	135%				

## BSR Own Funds Tiering as at 31 December 2017

<i>Amounts in EUR millions</i>	<b>Total</b>	Tier 1 unrestricted	Tier 1 restricted	Tier 2	Tier 3
Ordinary share capital	<b>0.0</b>	0.0			
Share premium account	<b>81.8</b>	81.8			
Reconciliation reserve	<b>-/-22.4</b>	-/-22.4			
Available Own Funds	<b>59.5</b>	59.5			
Eligible Own Funds SCR	<b>59.5</b>	59.5			
Solvency Capital Requirement (SCR)	<b>46.3</b>				
Minimum Capital Requirement (MCR)	<b>11.6</b>				
Solvency II Ratio	<b>128%</b>				

In the section below, the Own Funds items in each tier are discussed in more detail. As BSR only has Tier 1 items over the reporting period, only Tier 1 items will be discussed.

#### Ordinary share capital

Ordinary share capital (gross of own shares) is comprised of 45 common shares (out of 225 authorized shares). Each share has par value per share of EUR 1,000. The amount (EUR 45,000) presented here in Tier 1 unrestricted aligns with the data published in the Annual Report. The ordinary share capital is unchanged over the reporting period.

#### Share premium account

Share premium account related to ordinary share capital is comprised of EUR 81.8m for common shares. The share premium account reflects the total additional paid-in amounts above the par value of the common shares. The amount presented here in Tier 1 unrestricted aligns with the data published in the Annual Report. The ordinary share capital is unchanged over the reporting period.

#### Reconciliation reserve

The reconciliation reserve is calculated as follows:

<i>Amounts in EUR millions</i>	<b>December 31, 2018</b>	December 31, 2017
Excess of Assets over Liabilities	<b>65.4</b>	59.5
-/- Share Capital and Share Premium	<b>-/-81.9</b>	-/-81.9
Reconciliation reserve	<b>-/-16.5</b>	-/-22.4

#### Reconciliation reserve

Compared to the IFRS values, the following market value adjustments are made:

- Deferred acquisition costs are not recognized under Solvency II and for this reason they are eliminated EUR -15.0m.
- Revaluation of the Technical Provisions under Solvency II (described in more detail in section D.2 Technical provisions.
- Non-life EUR -0.2m
- Life EUR 32.7m
- Health EUR 14.7m

- The revaluation adjustments of the Deferred Tax Liabilities amounts to a total of EUR -8.0m, turning the DTA into a DTL, following the revaluation of the explained components.
- An asset of EUR 1.5m related to the correction made in the current tax position on the IFRS balance sheet for the fiscal year 2015, has not been corrected in the Solvency II balance sheet for immateriality reasons. This will be corrected in the Solvency II balance sheet in Q1 2019 reporting.

These market value changes are reflected in the reconciliation reserve, which consists of Solvency II market value adjustments compared to IFRS.

### Market Value Adjustments

<i>Amounts in EUR millions</i>	<b>December 31, 2018</b>	December 31, 2017
Deferred Acquisition Costs	<b>-/-15,0</b>	-/-15,7
Receivables (pre-paid comission)	<b>0,0</b>	3,0
Revaluation of technical provision		
Non Life	<b>-/-0,2</b>	-/-2,8
Life	<b>32,7</b>	24,6
Health	<b>14,7</b>	15,0
Any other assets	<b>-/-1,5</b>	0,0
Defferd Tax Liabilities	<b>-/-8,0</b>	-/-6,0
<b>Market Value Adjustments</b>	<b>22,6</b>	<b>18,1</b>

The IFRS equity added to the reconciliation equals the Solvency II Own Funds, as shown in the table below.

### Reconciliation IFRS to Solvency II

<i>Amounts in EUR millions</i>	<b>December 31, 2018</b>	December 31, 2017
Ordinary share capital	<b>0,0</b>	0,0
Share premium account	<b>81,8</b>	81,8
IFRS Retained Earnings	<b>-/-39,1</b>	-/-40,5
Market Value adjustments to SII	<b>22,6</b>	18,1
Reconciliation reserve	<b>16,5</b>	-/-22,4
<b>Solvency II Own Funds</b>	<b>65,4</b>	<b>59,5</b>

#### E.1.3 Difference between Solvency Own Funds and IFRS Shareholders Equity

For a quantitative explanation of the material differences between equity as shown in the financial statements and the excess of assets over liabilities as calculated for solvency purposes, refer to section D. Valuation for Solvency Purposes (balance sheet reconciliation overview) and the table disclosed as part of the reconciliation reserve in section E.1.2 Tiering of Own Funds.

The main difference between the Solvency II Own Funds and IFRS Shareholders Equity as reported in the Annual Report is caused by the differences in the valuation of the insurance liabilities. The insurance liabilities are based on locked-in discount rates and deferred margins for IFRS accounting purposes. On the other hand, Solvency II requires these to be based on market discount rates and for the cost of capital approach to be used for the risk margin valuation. The excess of the valuation of technical provisions under Solvency II is described in more detail in section D.2 Technical provisions.

Another difference relates to the de-recognition of Deferred Policy Acquisition Cost under Solvency II, as explained in section D.1.2 Deferred acquisition costs.

#### **E.1.4 Transitional arrangements**

BSR does not make use of any transitional arrangements.

#### **E.1.5 Ancillary Own Funds**

The year end 2018 Solvency position of BSR did not include any ancillary Own Funds as defined by article 89(1) of Directive 2009/138/EC.

#### **E.1.6 Description of items deducted from Own Funds**

BSR does not make any deductions from the Own Funds.

#### **E.1.7 Significant changes to Own Funds over the reporting period**

As of year-end 2017, BSR's Own Funds (OF) amounted to EUR 59.5m and increased at the end of year 2018 to EUR 65.4m. The OF movements are a function of many components.

In Q1 2018, BSR re-negotiated the Dutch Longevity Reinsurance contract (Johannes) with Aegon NL and re-priced the fixed leg with higher margins which resulted in an Own Funds gain of EUR 6.7m.

The company released EUR 4.9m of profits from the normal roll forward of risk margins i.e. the expected return on the inforce portfolio.

During Q4 2018, BSR updated a number of assumptions, including – mortality trend and experience for the Dutch Longevity Reinsurance contract and mortality trend of the Synthetic Longevity Hedge, mortality and lapse assumptions for the India contract, lapse, morbidity and mortality for the UK contract as well as the company-wide maintenance expense assumption – for a total impact equaling to an increase in Own Funds of EUR 0.8m, the largest components being the Johannes mortality assumption update (EUR -1.5m) and the India mortality update (EUR +2.2m).

The annual experience variance coming from underwriting risks (including expense) decreased the OF over the year by EUR 1.3m. The life portfolio experienced mortality gains of EUR 3.1m mainly due to higher than expected mortality on the Dutch Longevity Reinsurance contract. The improved risk margin diversification also contributed EUR 2.0m gain largely on account of reducing longevity exposure (largest risk within the life segment) and growing mortality exposure due to new business. These gains were partly offset by the non-life underwriting losses of EUR 3.7m mainly due to claims from the Spain Household portfolio, the losses on the ILS investments and the January storm Frederieke in the Netherlands. Expense variance resulted in a loss of EUR 2.7m as actual expenses were higher than the release from the actual portfolio.

The changes in the economic environment (interest rates and foreign exchange rates) increased the OF by EUR 0.6m. Finally, the tax charges and annual changes in the deferred taxes on the market value adjustment contributed a EUR 5.1m loss to Own Funds.

## **E.2 Solvency Capital Requirement and Minimum Capital Requirement**

### **E.2.1 Solvency Capital Requirement**

A solvency capital requirement is the amount of funds that insurance and reinsurance undertakings are required to hold in the European Union. The solvency capital requirement is a formula-based figure calibrated to ensure that all quantifiable risks are taken into account, including non-life underwriting, life underwriting, health underwriting, market, credit, operational and counterparty risks.

The Solvency Capital Requirement (SCR) should reflect a level of eligible Own Funds that enables insurance and reinsurance undertakings to absorb significant losses and that gives reasonable assurance to policyholders and beneficiaries that payments will be made as they fall due. The solvency position is calculated as a ratio, by dividing Own Funds by the Capital Requirement. There are two capital requirements: a Solvency Capital Requirement (SCR) and a Minimum Capital Requirement (MCR). The MCR is an absolute minimum requirement. The SCR, on the other hand, is a target level that, in general, all going-concern insurance companies should always exceed. The solvency ratio uses the SCR as the denominator.

Solvency II allows for the SCR to be calculated either as Standard Formula, which refers to the standard methods and factors prescribed by the Solvency II regulation; or as Internal Model, which is based on an undertaking-specific internal assessment of the risk and requires regulatory approval for the use of such models. BSR applies the Standard Formula calculation for the SCR. The SCR is calculated for each risk sub-module applicable to BSR as per the Delegated Acts. The sub-modules are aggregated to the entity-level basic SCR using the correlation matrices prescribed under the Standard Formula.

This section outlines the year-end 2018 Solvency Capital Requirement (SCR) and Minimum Capital Requirement (MCR). Note that the SCR and MCR are still subject to supervisory assessment.

### Solvency II key figures

<i>Amounts in EUR millions</i>	<b>December 31, 2018</b>	December 31, 2017	%
Own Funds	<b>65.4</b>	59.5	10%
SCR	<b>48.5</b>	46.3	5%
Solvency II ratio	<b>135%</b>	128%	
MCR	<b>12.1</b>	11.6	5%

The table shows the comparative year-end positions for 2018 against year-end 2017. The changes in Own Funds have been explained in section E.1.7 Significant changes to Own Funds over the reporting period.

The SCR, after diversification and loss absorbing capacity of deferred taxes (LACDT), increased by EUR 2.2m over the year to close year-end 2018 at EUR 48.5m. The increase is driven primarily by the new business capital strain (EUR +4.3m), model and assumption updates (EUR +3.8m) and market impact (EUR +1.9m). This increase is largely offset by the expected run-off of the portfolio (EUR -7.3m) mainly contributed by Dutch Longevity Reinsurance contract.

Capital strain due to new business written in 2018 increased SCR by EUR 4.3m. Most of the SCR increase is attributable to Q4 new business, driven by the renewal of NL and Hungary Catastrophe treaties along with renewal of the Brazil Mongeral contract with higher volumes and new risk exposures.

One of the main contributors to the model and assumptions update (EUR +1.5m) is the update of LACDT from 100% in 2017 to 90% in 2018 to reflect new tax rates proposed by the Dutch Government. The residual impacts of EUR 2.3m are from various assumptions and model updates, which also includes the impact of reducing the haircut for basis risk associated with the Synthetic Longevity Hedge.

The market impact is mainly contributed by the currency exposure variances which increased SCR by EUR 1.2m due to weakening of the EUR with respect to most of the currencies. The change in interest rates, especially the fall in EUR term structure of interest rates, also contributed to an increase in SCR of EUR 0.7m due to the long duration of some liability cash flows.

A more detailed movement analysis is presented in following section E.2.2 SCR split by risk module.

## E.2.2 SCR split by risk module

### Solvency II SCR

Amounts in EUR millions

	December 31, 2018	December 31, 2017
Market	13.2	12.8
Counterparty	2.2	2.1
Life	50.4	49.8
Health	10.5	10.2
Non-life	10.1	10.9
<b>Gross SCR (pre-tax and pre-diversification)</b>	<b>133.4</b>	<b>131.2</b>
Basic SCR	61.4	60.6
Operational	1.2	1.2
Tax adjustment	-/-14.1	-/-15.4
Diversification %	53.6%	53.4%
<b>Net SCR</b>	<b>48.5</b>	<b>46.3</b>

The table above shows the breakdown of the SCR components by risk module for BSR. The Net SCR, after diversification and loss absorbing capacity of deferred taxes, is EUR 48.5m as at year-end 2018. The breakdown by risk module shows that BSR is mainly concentrated in life, i.e. longevity risk, as the largest-sized reinsurance treaty is the Dutch Longevity Reinsurance contract. The interest rate risk associated with this contract is significant from a solvency perspective because of the contract's long term nature, which magnifies the interest rate risk under a longevity shock scenario.

Market risk remained stable over the year with a minor increase in currency risk SCR due to a weakening EUR relative to JPY increasing the mismatch between assets and liabilities by currency. The counterparty risk also remained stable over the year.

The increase of the life SCR is mainly driven by the new business related to mortality risks, partly offset by capital generation from the longevity business.

Health risk increased, primarily driven by the new business written under the contracts with India and Brazil. Non-life risk reduced mainly due to the termination of the Spain Household contract.

The SCR split shows that BSR is dominant in underwriting/insurance risks, which is the core strategy of BSR. Financial risks remain a small portion of BSR's risk profile. Lastly, BSR changed the loss absorbing capacity of deferred taxes in 2018 to 90% from its previous level 100%, as noted earlier.

### E.2.3 Simplified calculations

BSR does not apply simplified calculations when calculating the Standard Formula SCR.

### E.2.4 Undertaking- specific parameters (Article 104(7) of Directive 2009/138/EC)

BSR does not apply undertaking-specific parameters as defined in article 104(7) of the Directive 2009/138/EC when calculating the Standard Formula SCR.

### E.2.5 Article 51(2) of Directive 2009/138/EC

In the implementation of the Directive 2009/138/EC in the Dutch Financial Supervision Act, the Netherlands has made use of the Member State option provided for in article 51(2) of the Directive 2009/138/EC.

**E.2.6 Minimum Capital Requirement**

The MCR for reinsurers is calculated by aggregating a prescribed percentage of total capital at risk with the sum, across all lines of business, of a defined percentage of net technical provisions, excluding the risk margin for that line of business.

December 31, 2018

MCR components

		Non-life activities	Life activities
		<b>C0010</b>	<b>C0040</b>
MCRNL Result	R0010	491,198.66	
MCRL Result	R0200		7,868,113.39
<b>Overall MCR calculation</b>			<b>C0070</b>
Linear MCR	R0300		8,359,312.05
SCR	R0310		48,496,448.66
MCR cap	R0320		21,823,401.90
MCR floor	R0330		12,124,112.16
Combined MCR	R0340		12,124,112.16
Absolute floor of the MCR	R0350		3,600,000.00
			<b>C0070</b>
<b>Minimum Capital Requirement</b>	<b>R0400</b>		<b>12,124,112.16</b>

December 31, 2017

MCR components

		Non-life activities	Life activities
		C0010	C0040
MCRNL Result	R0010	1,422,099.57	
MCRL Result	R0200		8,007,790.41
<b>Overall MCR calculation</b>			<b>C0070</b>
Linear MCR	R0300		9,429,889.98
SCR	R0310		46,343,253.09
MCR cap	R0320		20,854,463.89
MCR floor	R0330		11,585,813.27
Combined MCR	R0340		11,585,813.27
Absolute floor of the MCR	R0350		3,600,000.00
			<b>C0070</b>
<b>Minimum Capital Requirement</b>	<b>R0400</b>		<b>11,585,813.27</b>

In the case of BSR, the resulting calculation, known as the linear MCR, turns out to be EUR 8.4m which is lower than the floor level of 25% of SCR. As a result, the year-end 2018 MCR of BSR is set to the floor level of EUR 12.1m. The linear MCR reduced over the year mainly due to the termination of the Spain Household and Portugal Quota Share contracts within the non-life segment.

MCR increased from EUR 11.6m in 2017 to EUR 12.1m in 2018 due to the increase in SCR as explained in section E.2.2 SCR split by risk module.

### E.3 Use of the duration-based equity risk sub-module

BSR does not make use of the duration-based equity risk sub-module set out in article 304 of Directive 2009/138/EC for the calculation of the Standard Formula SCR.

### E.4 Differences between standard formula and partially internal model used

This is not applicable to BSR as BSR fully uses the Standard Formula for the calculation and aggregation of all applicable risk modules.

The appropriateness of Standard Formula is described in the annual ORSA.

## .5 Non-compliance with capital requirements

There has not been any instance during 2018 when the BSR Own Funds were below the SCR, nor the MCR level. To ensure that BSR maintains adequate solvency levels, actual and expected capital positions are monitored against capitalization zones that are defined in BSR's Capital Management Policy. Several activities are performed to monitor and assess the future development of BSR's solvency position, such as the annual budgeting and Medium Term Planning (MTP) process and periodic management reporting, including analysis on the movements in Own Funds and SCR on a quarterly basis.

Decisions to return capital to shareholders are based on Solvency assessments that look into the impact of the decisions on the current and future projected Solvency position.

Any Solvency position is subject to risks and BSR therefore constantly monitors such risks. These are quantified to determine the impact of such risks on the current and the projected Solvency position. The Capital Management Policy provides actions that need to be performed as soon as the identified risks could cause the projected solvency ratio to fall within a particular capitalization zone.

## E.6 Any other information

### G-SII designation

On November 3, 2015, Aegon Group was first designated by the Financial Stability Board (FSB) as a Global Systemically Important Insurer (G-SII), based on an assessment methodology developed by the International Association of Insurance Supervisors (IAIS). The FSB reviews the G-SII designation annually. However, the FSB, in consultation with the IAIS and national authorities, has decided not to publish a new list of G-SIIs for 2017 and for 2018 and that the measures will continue to apply to the G-SIIs that were on the 2016 list. Consequently, Aegon Group continues to be designated at the time of publication of this Solvency and Financial Condition Report.

As a result of the G-SII designation, Aegon is subject to an additional layer of direct supervision at group level. Blue Square Re N.V. provides data to support its Global Parent Aegon N.V. and therefore it is subject to enhanced group supervision. Aegon Group has put a specific G-SII governance structure in place to ensure the G-SII requirements are met. Within 12 months of a G-SII designation, G-SIIs were required to develop a liquidity risk management plan, a systemic risk management plan, and an ex ante recovery plan. In accordance with these requirements, Aegon Group submitted plans to DNB, and to the G-SII crisis management group (CMG) that was established for Aegon Group and is updating these plans on an annual basis. The CMG is required to: enter into a cross-border cooperation agreement; develop a resolution plan based on a resolution strategy (within 18 months); and undertake a resolvability assessment (within 24 months).

On November 2, 2017, the IAIS has announced its members have reached an agreement on a unified path to convergence on the development of International Capital Standards (ICS) for Internationally Active Insurance Groups (IAIGs). Aegon Group will qualify as such. After an extended field testing period of ICS version 1.0 that ended in 2017, the IAIS will proceed with the development of ICS version 2.0 informed by field tests in 2018 and a final test in 2019, with the aim of adopting ICS version 2.0 at the Annual general Meeting of the IAIS in November 2019. The implementation of ICS version 2.0 will be conducted in two phases – a five year monitoring phase, where all IAIGs will submit mandatory reference ICS, followed by an implementation phase where the ICS is envisaged to become a required capital standard. Following the announcement by IAIS members from the United States of development of an aggregation-based group capital calculation, the IAIS has further agreed to collect data during the monitoring period to assess whether the aggregation approach can be considered as outcome-equivalent for implementation of ICS in the US.

