

AEGON NV  
Form 6-K  
August 31, 2017  
Table of Contents

**Securities and Exchange Commission**

**Washington, D.C. 20549**

**Form 6-K**

**Report of Foreign Issuer**

**Pursuant to Rule 13a-16 or 15d/16**

**of the Securities Exchange Act of 1934**

**August 2017**

**AEGON N.V.**

**Aegonplein 50**

**2591 TV THE HAGUE**

**The Netherlands**



**Table of Contents**

Aegon's 2016 Solvency and Financial Condition Report based on IFRS as issued by the IASB, dated June 30, 2017, are included as appendix and incorporated herein by reference. This Solvency and Financial Condition Report is based on Aegon's 2016 Solvency and Financial Condition Report dated June 30, 2017 and has been adjusted to reverse the EU carve out version of IAS 39 and comply with IFRS as issued by the IASB.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AEGON N.V.  
(Registrant)

Date: August 31, 2017

By /s/ J.H.P.M. van Rossum  
J.H.P.M. van Rossum  
Head of Corporate Financial Center

**Table of Contents**

**Table of Contents**

**Table of contents**

**Introduction**

<u>Scope of the report</u>	2
<u>Summary</u>	3

**A. Business and performance**

<u>A.1 Business</u>	7
<u>A.2 Underwriting performance</u>	17
<u>A.3 Investment performance</u>	18
<u>A.4 Performance of other activities</u>	22

**B. System of governance**

<u>B.1 General information on the system of governance</u>	24
<u>B.2 Fit and proper requirements</u>	30
<u>B.3 Risk management system including the Own Risk and Solvency Assessment</u>	33
<u>B.4 Internal control system</u>	39
<u>B.5 Internal Audit function</u>	43
<u>B.6 Actuarial function</u>	43
<u>B.7 Outsourcing</u>	44
<u>B.8 Any other information</u>	45

**C. Risk profile**

<u>General</u>	46
<u>Prudent person principle</u>	47
<u>Off-balance positions and special purpose vehicles</u>	48
<u>C.1 Underwriting risk</u>	49
<u>C.2 Market risk</u>	52
<u>C.3 Credit risk</u>	55
<u>C.4 Liquidity risk</u>	58
<u>C.5 Operational risk</u>	60
<u>C.6 Other material risks</u>	62
<u>C.7 Any other information</u>	63

**D. Valuation for solvency purposes**

<u>Solvency II valuation principles</u>	64
<u>Approach balance sheet reconciliation</u>	66
<u>D.1 Assets</u>	69
<u>D.2 Technical provisions</u>	74
<u>D.3 Other liabilities</u>	80
<u>D.4 Alternative methods for valuation</u>	85

**E. Capital management**

<u>Maintaining adequate solvency capital</u>	89
<u>Capital quality</u>	91
<u>Use of leverage</u>	92
<u>G-SII designation</u>	92
<u>E.1 Own funds</u>	93
<u>E.2 Solvency Capital Requirement and Minimum Capital Requirement</u>	99
<u>E.3 Use of the duration-based equity risk sum-module</u>	103
<u>E.4 Differences between standard formula and partial internal model used</u>	103
<u>E.5 Non-compliance with capital requirements</u>	104
<b><u>Additional information</u></b>	
<u>Glossary</u>	105
<u>Cautionary notes</u>	109
<u>Contact</u>	110

### **Presentation of certain information**

This document reflects Aegon's 2016 Solvency and Financial Condition Report in which references to International Financial Reporting Standards are based on IFRS as issued by the IASB (IFRS). This document is filed with the United States Securities and Exchange Commission (SEC). Other than for SEC reporting, Aegon prepares its Solvency and Financial Condition Report based on International Financial Reporting Standards as adopted by the European Union, including the decisions Aegon made with regard to the options available under International Financial Reporting Standards as adopted by the European Union (IFRS-EU). This report is prepared by reversing the hedge accounting impacts that are applied under the EU carve out version of IAS 39. For a quantitative disclosure of the impact refer to Chapter D Valuation for solvency purposes, section Approach balance sheet reconciliation .

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### **2 Introduction Scope of the report**

#### **Scope of the report**

This report is Aegon N.V.'s Group Solvency and Financial Condition Report (SFCR) for the year ending December 31, 2016. This report informs Aegon N.V.'s stakeholders about Aegon N.V.'s:

Business and performance;

System of governance;

Risk profile;

Valuation for solvency purposes; and

Capital management.

The material differences between the scope of Aegon Group used for the consolidated financial statements based on IFRS and the scope of Aegon Group for the consolidated data determined in accordance with Article 335 of the Delegated Regulation Solvency II, are discussed in more detail in chapter D. Valuation for solvency purposes.

#### **Basis of presentation**

This report is prepared in accordance with the requirements of Solvency II Directive and Delegated Regulation (in particular article 256 of the Solvency II Directive, articles 359–371 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).

Aegon N.V. is referred to in this document as Aegon, or the Company, and is together with its member companies referred to as Aegon Group or the Group. For such purposes member companies means, in relation to Aegon, those companies required to be consolidated in accordance with Solvency II requirements.

The figures reflecting monetary amounts in the SFCR are presented in euro (unless stated otherwise). Aegon discloses monetary amounts in millions of units for disclosing purposes. All values are rounded to the nearest million unless otherwise stated. The rounded amounts may therefore 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.

In case IFRS figures are disclosed, the figures are prepared in accordance with the International Financial Reporting Standards as issued by the IASB (IFRS).

Under Solvency II, Aegon uses a combination of method 1 (Accounting Consolidation) and method 2 (Deduction & Aggregation) for the calculation of the Solvency II group solvency. The Solvency II consolidated data (the data included in accordance with method 1) does not include the entities that are included in the group solvency calculation in accordance with method 2 (for entities in the US, Bermuda, Mexico, Brazil, China, India and Turkey). The most notable difference in this respect for Aegon are the US insurance and reinsurance entities. Furthermore, joint ventures are partially consolidated under Solvency II, whereas joint ventures are not consolidated under IFRS. As part of method 1 under Solvency II, other financial sector (OFS) entities are included as related undertakings based on local sectorial rules, whereas, when OFS are controlled entities, such are consolidated under IFRS.

The consolidation under Solvency II is set out in more detail in chapter D. Valuation for solvency purposes and E. Capital management of the SFCR.

The 2016 SFCR of Aegon Group has been prepared and disclosed under the responsibility of the Executive Board.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



---

**Table of Contents**

**3 Introduction Summary**

**Summary**

The 2016 Solvency Financial Condition Report provides Aegon's stakeholders insight in:

**A. Business and performance**

In 2016, Aegon made further progress in transforming the Company in delivering on its strategy, despite a challenging macro-economic environment. The Solvency II ratio remained well within the target range of 140 to 170 percent throughout the year. The ratio on December 31, 2016 of 157 percent was above the midpoint of Aegon's target range. While Aegon experienced some significant headwinds during 2016 in the form of market volatility and some adverse claim experience the reported underlying earnings before tax amounted to EUR 1,913 million.

During 2016, the Aegon UK business has gone through a significant transformation in which the Company sold its annuity portfolio and acquired two new businesses.

This sale to Rothesay and Legal & General consisted of two separate transactions where Aegon initially reinsured GBP 9 billion of liabilities. This will be followed by Part VII transfers which conclude the sale.

Aegon announced the acquisition of BlackRock's UK Defined Contribution (DC) pension and administration platform business in May 2016. This transaction is subject to court approval. In August 2016, Aegon announced the acquisition of Cofunds from Legal & General. This transaction completed the strategic transformation of Aegon's operations in the United Kingdom from traditional life insurance to platform business, and firmly establishes the company as the number one provider in the retail platform market. The acquisition was successfully closed on January 1, 2017 following regulatory approval, adding 750,000 platform customers representing over GBP 80 billion assets under administration. As a result of this transaction, Aegon will serve over 3 million customers in the United Kingdom.

Aegon's underlying earnings before tax increased compared with 2015 to EUR 1,913 million in 2016. This was mainly driven by lower amortization of deferred policy acquisition costs related to upgrading customers to the retirement platform in the United Kingdom compared to 2015. The net income amounted to EUR 438 million in 2016 driven by underlying earnings before tax, and was impacted by the book loss on the divestment of the UK annuity portfolio and fair value losses, partly offset by gains on investments.

Commissions and expenses decreased in 2016 compared with 2015 to EUR 6.4 billion, mainly driven by lower amortization of deferred policy acquisition costs in the United Kingdom. Operating expenses increased by 1% in 2016 compared with 2015 to EUR 3.6 billion.

Policyholder claims and benefits amounted to EUR 42.0 billion in 2016, which is comprised of EUR 23.9 billion claims and benefits paid for Aegon's life business and EUR 2.1 billion of claims and benefits paid for non-life business. In addition, policyholder claims and benefits were significantly impacted by market movements (equity markets and interest rates) and reflect changes in technical provisions resulting from fair value changes on for account of policyholder financial assets included in results from financial transactions of EUR 15.1 billion.

Full details on the Aegon's business and performance are described in chapter A. Business and performance.

## **B. System of governance**

### **General governance**

Aegon is incorporated and established in the Netherlands and therefore must comply with Dutch law and is subject to the Dutch Corporate Governance Code.

Aegon's Executive Board is charged with the overall management of the Company and is therefore responsible for achieving Aegon's aims and developing the strategy and its associated risk profile, in addition to overseeing any relevant sustainability issues and the development of the Aegon's earnings, Aegon's Executive Board is assisted in its work by the Management Board. Aegon's Management Board is comprised of the Executive Board, the Group CRO and CEOs of the Americas, the Netherlands, United Kingdom and CEE. During 2016, the Management Board was expanded by the CEO of Asset management, General Counsel, Global Head of HR and the

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

4 Introduction **Summary**

Chief Technology Officer. Aegon's CFO Darryl Button was a member of the Management Board until he concluded his tenure with Aegon on December 1, 2016<sup>1</sup>.

Aegon's Supervisory Board oversees the management of the Executive Board, in addition to the Company's business and corporate strategy. The Supervisory Board members, eight members as per December 31, 2016, are appointed by the General Meeting of Shareholders and Aegon aims to the Supervisory Board to be well-balanced in terms of professional background, geography and gender. The following committees exist, exclusively comprised of Supervisory Board members, in dealing with specific issues related to Aegon's financial accounts, risk management, executive remuneration and appointments:

Audit Committee;

Risk Committee;

Remuneration Committee; and

Nomination and Governance Committee.

**Risk management**

Aegon's risk management framework is designed and applied to identify and manage potential events and risks that may affect Aegon. This is established in the Enterprise Risk Management (ERM) framework; which aims to identify and manage individual and aggregate risks within Aegon's risk tolerance in order to provide reasonable assurance regarding the achievement of Aegon's objectives. The ERM framework applies to all material businesses of Aegon for which it has operational control. Aegon's businesses are required to either adopt the Group level ERM framework directly, or tailor it to local needs, while meeting the requirements of the Group level ERM framework. Aegon's ERM framework is based on a well-defined risk governance structure:

Supervisory Board;

Executive and Management Boards;

Group Risk & Capital Committee and its sub-committees; and

Regional Risk & Capital Committees.

In 2016, the Group Risk & Capital Committee (GRCC) structure was restructured with the aim to further integrate governance for risk, actuarial and finance matters. The scope of the GRCC has been extended and representation of the Risk function was strengthened. The scope includes both financial and non-financial (operational) risks.

### **Control environment**

In addition to risk management, Aegon's Solvency II control environment consists of an internal control system, an actuarial function and an internal audit function. The internal control system 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. Aegon's internal audit function is independent and objective in performing its duties in evaluating the effectiveness of Aegon's internal control system.

Full details on the Aegon's system of governance are described in chapter B. System of governance.

### **C. Risk profile**

As an insurance group, Aegon accepts and manages risk for the benefit of its customers and other stakeholders. Aegon'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. The targeted risk profile is determined by customer needs, Aegon's competence to manage the risk, the preference of Aegon for the risk, and whether there is sufficient capacity to take the risk. Aegon currently targets an equal balance between financial market and credit risks and underwriting risks. The targeted risk profile is set at Aegon Group level and developed in more detail within the subsidiaries where insurance business is written. Aegon's risk strategy provides direction for the targeted Aegon risk profile while supporting Aegon's business strategy. The Company is exposed to a range of underwriting, market, credit, liquidity and operational risks.

1 On September 6, 2016, Aegon announced Mr. Button's decision to step down as CFO and to leave the Company on December 1, 2016.

Aegon's Supervisory Board appointed Matthew J. Rider (1963, US Citizen) as CFO and member of the Executive Board at its Annual General Meeting of Shareholders on May 19, 2017.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### **5 Introduction Summary**

The sale of the majority of the UK annuity business in 2016 reduced the exposure to longevity risk, interest rate risk arising from this business. As a result of the transaction, which is expected to be completed during 2017, Aegon entered into reinsurance contracts with Rothesay Life and Legal & General. These temporary reinsurance contracts resulted in an additional counterparty risk exposure up until completion.

Full details on the Aegon's risk profile are described in chapter C. Risk profile.

### **D. Valuation for solvency purposes**

Aegon values its Solvency II balance sheet items on a basis that reflects their economic value. Where the IFRS fair value is consistent with Solvency II requirements, Aegon follows IFRS for valuing assets and liabilities other than technical provisions.

The reconciliation of Excess Assets over Liabilities (Solvency II basis) and Shareholder's Equity (IFRS basis) can be summarized as follows:

Revaluation differences on mainly insurance liabilities and other assets which are valued other than fair value in the IFRS balance sheet;

Differences in scope, where Aegon's Non-EEA (re)insurance entities are aggregated based on the Deduction & Aggregation method and the net asset values is represented in the line Participation on Aegon's Solvency II economic balance sheet; and

De-recognition of items on the Solvency II economic balance sheet which are admissible on the IFRS balance sheet, for instance Deferred policy acquisition costs, Goodwill and Intangible assets.

Aegon applies the matching adjustment, in Aegon UK and Aegon Spain, which has a positive impact to the Group own funds of EUR 107 million as of December 31, 2016 and an impact of EUR (105) million on the Group solvency capital requirement. The matching adjustment methodology has been approved by local regulators. In addition, Aegon applies the volatility adjustment, in Aegon the Netherlands, Aegon UK and Aegon Spain, which has a positive impact to the Group own funds of EUR 651 million and an impact of EUR (1,636) million on the Group solvency capital requirement.

The combined positive impact of the matching adjustment and volatility adjustment on the Group Solvency II ratio is 26%.

Full details on the reconciliation between Aegon's economic balance sheet based on Solvency II and consolidated financial statements based on IFRS are described in chapter D. Valuation for solvency purposes.

### **E. Capital management**

Aegon maintains a target capital ratio between 140% - 170%. At December 31, 2016, the Solvency II ratio of 157% was above the midpoint of this target range.

In the following table the Solvency II key figures for Aegon are presented as at December 31, 2016:

**Total eligible own funds**

Amounts in EUR millions

Tier 1 unrestricted own funds	10,656
Tier 1 restricted own funds	2,517
Tier 2 own funds	3,309
Tier 3 own funds	1,638

<b>Total eligible own funds</b>	<b>18,119</b>
---------------------------------	---------------

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**6 Introduction **Summary****Group SCR/Solvency II ratio**

Amounts in EUR millions

Investment & counterparty risk	2,730
Mismatch risk	81
Underwriting risk	1,127
Standard formula	2,892
Other capital requirement	6,036
LAC-DT and other	(1,302)

<b>Group PIM SCR</b>	<b>11,563</b>
----------------------	---------------

<b>Group Solvency II ratio</b>	<b>157%</b>
--------------------------------	-------------

Aegon uses a combination of Accounting Consolidation (method 1) and Deduction & Aggregation (method 2) for the calculation of the Solvency II group solvency. In addition, Aegon uses a Partial Internal Model (PIM) to calculate the solvency position of its EU-domiciled (re)insurance activities under Accounting Consolidation. In the table above, Aegon's PIM is reflected in Investment & counterparty risk, Mismatch risk and Underwriting risk.

In Aegon's Non-EEA regions, (re)insurance entities domiciled in third countries deemed (provisional) equivalent (US, Bermuda, Japan, Mexico and Brazil) the capital requirement is based on local capital requirements. For other Non-EEA (re)insurance entities domiciled in China, India and Turkey, the capital requirement is based on Solvency II. In the table above, Aegon's Non-EEA regions, is reflected as Other capital requirement.

Aegon's internal model was approved by the College of Supervisors as part of the Internal Model Application Process. Aegon believes a (partial) internal model is a better representation of the actual risk since this contains Company specific modelling and sensitivities as opposed to industry-wide approximations included in the standard formula methodology.

It is noted that Aegon's Solvency II capital is subject to final interpretations of Solvency II regulations including the assumptions underlying Aegon's factor for the loss absorbing capacity of deferred taxes in the Netherlands. New guidance from the Dutch Central Bank issued in February 2017 is under review. At December 31, 2016, the worst case tax factor of LAC-DT is assumed 75% for Aegon the Netherlands. In addition, the Group own funds do not include any contingent liability potentially arising from unit-linked products sold, issued or advised on by Aegon in the Netherlands in the past as the potential liability cannot be reliably quantified at this point.

Full details on the Aegon's available and eligible own funds are described in section E.1 Own funds on the Aegon's PIM SCR is described in section E.2.1 Solvency capital requirement.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

7 Business and performance **Business**

**A. Business and performance**

**A.1 Business**

**A.1.1 Overview**

Aegon N.V. is a public limited liability company with its corporate seat and head office in The Hague, the Netherlands. Aegon's common shares are listed on stock exchanges in Amsterdam (Euronext) and New York (NYSE).

**A.1.2 Regulators and auditor**

The supervisory authority responsible for Solvency II group supervision on the Aegon Group and for supplementary group supervision in accordance with the EU Financial Conglomerates Directive (FCD) is:

De Nederlandsche Bank (DNB), the Dutch Central Bank

Address: Westeinde 1, 1017 ZN, Amsterdam

Telephone: +31(0)20 524 91 11

Aegon's external auditor is PricewaterhouseCoopers Accountants N.V. The external auditor's mandate does not cover an audit on the information disclosed in this SFCD. Their contact details are:

PricewaterhouseCoopers Accountants N.V.

Address: Thomas R. Malthusstraat 5, 1066 JR, Amsterdam

Telephone: +31 (0)88 792 00 20

**A.1.3 Holders of qualifying holdings**

A qualifying holding means a direct or indirect holding in an undertaking which represents 10% or more of the capital or of the voting rights or which makes it possible to exercise a significant influence over the management of that undertaking. Only Vereniging Aegon qualifies based on this definition.

Vereniging Aegon, 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, 2016, Vereniging Aegon, Aegon's largest shareholder, held a total of 279,236,609 common shares and 567,697,200 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, 2016, the voting power of Vereniging Aegon under normal circumstances amounted to approximately 14.4%, 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.

#### **A.1.4 Aegon's Group structure**

Aegon's main operating units are separate legal entities and operate under the laws of their respective countries. The shares of these legal entities are directly or indirectly held by three intermediate holding companies incorporated under Dutch law: Aegon Europe Holding B.V., the holding company for all European activities; Aegon International B.V., which serves as a holding company for the Aegon Group companies of all non-European countries; and Aegon Asset Management Holding B.V., the holding company for a number of its asset management entities.

Aegon has the following operating segments: the Americas, which includes the United States, Mexico and Brazil; the Netherlands; the United Kingdom; Central & Eastern Europe; Spain & Portugal; Asia and Aegon Asset Management. The separate operating segments of the Netherlands, the United Kingdom, Central & Eastern Europe and Spain & Portugal may be referred together as Europe, but Europe is not an operating segment.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

8 Business and performance **Business**

**A.1.5 List of material related undertakings**

The principal undertakings of the parent company Aegon N.V. are listed by geographical segment. All are wholly owned, directly or indirectly, unless stated otherwise, and are involved in insurance or reinsurance business, asset management or services related to these activities. The voting power in these undertakings held by Aegon is equal to the shareholdings.

**Americas**

Transamerica Advisors Life Insurance Company (Little Rock, Arkansas);

Transamerica Casualty Insurance Company (Columbus, Ohio).

Transamerica Corporation (Wilmington, Delaware);

Transamerica Financial Life Insurance Company (Albany, New York);

Transamerica Life Insurance Company (Cedar Rapids, Iowa);

Transamerica Premier Life Insurance Company (Cedar Rapids, Iowa);

Akaan-Aegon S.A.P.I. de C.V. (Mexico City, Mexico) (99.99%); and

Mongeral Aegon, Seguros e Previdencia S.A. (Rio de Janeiro, Brazil) (50%).

**Europe**

The Netherlands

Aegon Bank N.V. (The Hague);

Aegon Hypotheken B.V. (The Hague);

Aegon Levensverzekering N.V. (The Hague);

Aegon PPI B.V. (The Hague);

Aegon Schadeverzekering N.V. (The Hague);

Aegon Spaarkas N.V. (The Hague);

Cappital Premiepensioeninstelling B.V. (Groningen).

Optas Pensioenen N.V. (Rotterdam);

TKP Pensioen B.V. (Groningen);

Unirobe Meeùs Groep B.V. (The Hague);

AMVEST Vastgoed B.V. (Utrecht) (50%), property management and development; and

N.V. Levensverzekering-Maatschappij De Hoop (The Hague) (33.3%).  
United Kingdom

Aegon Investment Solutions Ltd (Edinburgh, Scotland).

Scottish Equitable PLC (Edinburgh, Scotland);

Stonebridge International Insurance Ltd (London, United Kingdom); and

Tenet Group Limited (Leeds, United Kingdom) (22%).  
Central & Eastern Europe

Aegon Czech Life (Aegon Pojištovna, a.s) (Prague, Czech Republic);

Aegon Hungary Composite Insurance Co. (Aegon Magyarország Általános Biztosító Zártkörűen Működő Részvénytársaság) (Budapest, Hungary);

Aegon Poland Life (Aegon Towarzystwo Ubezpieczeń na Życie Spółka Akcyjna) (Warsaw, Poland);

Aegon Poland Pension Fund Management Co. (Aegon Powszechnie Towarzystwo Emerytalne Spółka Akcyjna) (Warsaw, Poland);

Aegon Romania Pension Administrator Co. (Aegon Pensii Societate de Administrare a Fondurilor de Pensii Private S.A) (Cluj, Romania);

Aegon Slovakia Life (Aegon životná poisťovňa, a.s.) (Bratislava, Slovakia);

Aegon Slovakia Pension Management Co. (Aegon, d.s.s., a.s) (Bratislava, Slovakia); and

Aegon Turkey (Aegon Emeklilik ve Hayat A.Ş.) (Istanbul, Turkey);  
Spain & Portugal

Aegon Activos A.V., S.A. (Madrid, Spain);

Aegon Administracion y Servicios A.I.E. (Madrid, Spain);

Aegon España S.A.U. de Seguros y Reaseguros (Madrid, Spain);

Aegon Santander Generales Seguros y Reaseguros S.A. (Madrid, Spain) (51%);

Aegon Santander Portugal Não Vida-Companhia de Seguros S.A. (Lisbon, Portugal) (51%);

Aegon Santander Portugal Vida-Companhia de Seguros de Vida S.A. (Lisbon, Portugal) (51%);

Aegon Santander Vida Seguros y Reaseguros S.A. (Madrid, Spain) (51%); and

Liberbank Vida y Pensiones, Seguros y Reaseguros, S.A. (Oviedo, Spain) (50%).

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

9 Business and performance **Business**

**Asia**

Transamerica Life (Bermuda) Ltd. (TLB) (Hamilton, Bermuda);

Aegon Life Insurance Company (Mumbai, India) (49%);

Aegon Sony Life Insurance Co. Ltd. (Tokyo, Japan) (50%);

Aegon THTF Life Insurance Co. Ltd. (Shanghai, China) (50%); and

SA Reinsurance Ltd. (Hamilton, Bermuda) (50%).

**Asset Management**

Aegon Asset Management Holding B.V. (The Hague);

Kames Capital Holdings Ltd (Edinburgh, Scotland);

TKP Investments B.V. (Groningen);

Aegon Industrial Fund Management Company (AIFMC) (Shanghai, China) (49%); and

La Banque Postale Asset Management (Paris, France) (25%).

For a complete list of related undertakings, please refer to QRT S.32.01.22 - Undertakings in scope of the group. A list of Aegon's branches is provided below:

<b>Aegon's branches</b>	<b>Ownership</b>	<b>Registered Office town/city</b>	<b>Registered Office country</b>
<b>Company name</b>			
AEGON Asia B.V. - Hong Kong Branch	100%	Island East	Hong Kong
AEGON CEE B.V., Hungarian Branch Office	100%	Budapest	Hungary

Aegon Direct Marketing Services - German Branch (being closed)	100%	Frankfurt am Main	Germany
Aegon Direct Marketing Services - Spanish Branch (being closed)	100%	Madrid	Spain
Aegon Insights Limited - Singapore Branch	100%	Singapore	Singapore
AEGON Ireland plc. - German Branch	99.99%	Frankfurt am Main	Germany
AEGON Magyarország Általános Biztosító Zártkörűen Csehországi Fióktelepe - Czech Branch	100%	Prague	Czech Republic
AEGON Magyarország Általános Biztosító Zártkörűen Szlovákiai Fióktelepe - Slovakian Branch	100%	Bratislava	Slovakia
AEGON Ubezpieczenia Majątkowe Oddział w Polsce Zakładu AEGON Magyarország Általános Biztosító Spółka Akcyjna w Budapeszcie - Polish Branch	100%	Chorzów	Poland
AEGON UK Corporate Services Limited - Irish Branch	100%	Dublin	Ireland
S.C. AEGON Towarzystwo Ubezpieczeń na Życie S.A. Varsovia-Sucursala Floresti - Romanian Branch	100%	Floresti	Romania
Transamerica Life (Bermuda) Ltd. - Hong Kong Branch	100%	Island East	Hong Kong
Transamerica Life (Bermuda) Ltd. - Singapore Branch	100%	Singapore	Singapore

### **A.1.6 Material lines of business and material geographical areas**

Following below, per geographical area, a high level overview of the countries and their material lines of business is provided.

#### **Americas**

##### Life

Products offering protection against mortality, morbidity and longevity risks, including traditional and universal life, in addition to endowment, term, and whole life insurance products.

##### Accident & health

Products offering supplemental health, accidental death and dismemberment insurance, critical illness, cancer treatment, credit/disability, income protection, travel and long-term care insurance.

##### Mutual funds

Wide range of specialized mutual funds, including asset allocation, US equity, global/international equity, alternative investments, hybrid allocation, fixed income and target date funds.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

10 Business and performance **Business**

Retirement plans

Comprehensive and customized retirement plan services to employers across the entire spectrum of defined benefit, defined contribution and non-qualified deferred compensation plans. Includes services to individuals rolling over funds from other qualified retirement funds or Individual Retirement Accounts (IRAs).

Variable annuities

Variable annuities allow the holder to accumulate assets for retirement on a tax-deferred basis and to participate in equity or bond market performance, in addition to receiving one of many payout options designed to provide income in retirement.

Fixed annuities

Fixed annuities allow customers to make a lump-sum payment or a series of payments and receive income in the form of periodic payments that can begin immediately or after a period of time.

Stable value solutions

Synthetic Guaranteed Investment Contracts (GICs) in the United States offered primarily to tax-qualified institutional entities such as 401(k) plans and other retirement plans.

Brazil

Life and critical illness insurance; private and company pensions; pension scheme administration; and investment funds.

Mexico

Individual life, group life, and health insurance; and saving plans.

**Europe**

The Netherlands

Life

Products with mortality, morbidity, and longevity risks, including traditional and universal life, in addition to employer, endowment, term, whole life insurance products; mortgages; annuity products; and banking products, including saving deposits.

Pensions

Individual and group pensions usually sponsored by, or obtained via, an employer. Administration-only services are offered to company and industry pension funds.

#### Non-life

General insurance, consisting mainly of automotive, liability, disability, household insurance, and fire protection.

#### Distribution

Independent distribution channel, offering both life and non-life insurance solutions.

#### United Kingdom

##### Life

Individual protection products, such as term insurance, critical illness, income protection and international/offshore bonds.

##### Pension

Individual pensions, including self-invested personal pensions and drawdown products, such as guaranteed income drawdown products; group pensions, sponsored by, or obtained via, an employer. Also includes the tied-agent distribution business.

#### Central & Eastern Europe

Activities in the Czech Republic, Hungary, Poland, Romania, Slovakia, and Turkey. Includes life insurance, individual and group pension products, savings and investments, in addition to general insurance.

#### Spain & Portugal

Distribution partnerships with Santander in Spain & Portugal and with Liberbank in Spain. Includes life insurance, accident and health insurance, general insurance and investment products.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



**Table of Contents**

11 Business and performance **Business**

**Asia**

High net worth businesses

Life insurance marketed to high-net-worth individuals in Hong Kong and Singapore.

Aegon Insights

Full range of direct insurance solutions from product design, customer analytics insights, marketing campaign design and multi-channel product distribution to policy administration and claims management.

Strategic partnerships

Joint ventures in China and India offering (term) life insurance and savings products, and in Japan offering variable annuities.

**Aegon Asset Management**

Americas

Investment products covering third-party customers, insurance-linked solutions, and Aegon's own insurance companies.

The Netherlands

Investment products covering third-party customers, insurance-linked solutions, and Aegon's own insurance companies in addition to manager selection and tailored advice on balance sheet solutions for the pension market.

United Kingdom

Fixed income, equities, real estate and multi-asset solutions to Aegon's own insurance companies as well as external UK and international customers.

Rest of the world

Asset management activities in Central & Eastern Europe and Spain & Portugal and distribution in Asia.

Strategic partnerships

China

Aegon Asset Management owns 49% of the shares of Aegon Industrial Fund Management Company, a Shanghai-based asset manager.

France

Aegon Asset Management has a strategic asset management partnership with La Banque Postale through its 25% equity stake in La Banque Postale Asset Management.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**12 Business and performance **Business****A.1.7 Results of operations****Results 2016 (IFRS)****Underlying earnings geographically**

Amounts in EUR millions	2016	2015	%
<b>Net underlying earnings</b>	<b>1,483</b>	<b>1,481</b>	
Tax on underlying earnings	429	386	11%
<b>Underlying earnings before tax geographically</b>			
Americas	1,249	1,278	(2%)
The Netherlands	534	537	(1%)
United Kingdom	59	(27)	
Central & Eastern Europe	55	37	51%
Spain & Portugal	8	12	(38%)
<i>Europe</i>	655	559	17%
Asia	21	20	3%
Asset Management	149	170	(12%)
Holding and other activities	(162)	(161)	
<b>Underlying earnings before tax</b>	<b>1,913</b>	<b>1,867</b>	<b>2%</b>
Fair value items	(840)	(651)	(29%)
Gains / (losses) on investments	340	346	(2%)
Net impairments	(54)	49	
Other income / (charges)	(771)	(2,180)	65%
Run-off businesses	54	88	(39%)
<b>Income before tax (excluding income tax from certain proportionately consolidated joint ventures and associates)</b>	<b>641</b>	<b>(482)</b>	
<i>Income tax from certain proportionately consolidated joint ventures and associates included in income before tax</i>	31	33	(6%)
Income tax	(203)	51	
<i>Of which Income tax from certain proportionately consolidated joint ventures and associates included in income before tax</i>	(31)	(33)	6%
<b>Net income</b>	<b>438</b>	<b>(431)</b>	
Commissions and expenses	6,696	6,916	(3%)
of which operating expenses	3,764	3,734	1%

**New life sales**

Amounts in EUR millions	<b>2016</b>	2015	%
Americas	542	599	(9%)
The Netherlands	111	130	(15%)
United Kingdom	66	72	(8%)
Central & Eastern Europe	83	91	(9%)
Spain & Portugal	39	39	1%
<i>Europe</i>	299	332	(10%)
Asia	128	173	(26%)
<b>Total recurring plus 1/10 single</b>	<b>969</b>	<b>1,104</b>	<b>(12%)</b>

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



Amounts in EUR millions

Life	779	774	1%
Individual Savings & Retirement	534	604	(12%)
Pensions	555	440	26%
Non-life	34	17	99%
Asset management	149	170	(12%)
Other	(139)	(139)	
<b>Underlying earnings before tax</b>	<b>1,913</b>	<b>1,867</b>	<b>2%</b>

**Net income**

The net income amounted to EUR 438 million in 2016 driven by underlying earnings before tax of EUR 1,913 million, and was impacted by the book loss on the divestment of the UK annuity portfolio and fair value losses, partly offset by gains on investments.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

14 Business and performance **Business**

**Underlying earnings before tax**

Aegon's underlying earnings before tax increased compared with 2015 to EUR 1,913 million in 2016. This was mainly driven by lower amortization of deferred policy acquisition costs (DPAC) in the United Kingdom following the write down of DPAC in the fourth quarter of 2015.

Underlying earnings before tax from the Americas declined compared with 2015 to EUR 1,249 million in 2016. Expense reductions and an improvement in claims experience offset lower variable annuities underlying earnings before tax compared with 2015 and the impact on recurring underlying earnings before tax of the actuarial assumption changes and model updates implemented in the third quarter of 2015;

In Europe, underlying earnings before tax in 2016 increased by 17% compared with 2015 to EUR 655 million. This was mainly driven by lower amortization of deferred policy acquisition costs in the United Kingdom related to upgrading customers to the retirement platform compared to 2015;

In Asia, underlying earnings before tax increased in 2016 compared with 2015 to EUR 21 million as a result of increased underlying earnings before tax from the High Net Worth business. This was partly offset by lower underlying earnings before tax from Strategic Partnerships compared with 2015 mainly a result of the increase in ownership from 26% to 49% in India, which is currently loss-making;

Underlying earnings before tax from asset management decreased by 12% in 2016 compared with 2015 to EUR 149 million. This decline was mainly driven by lower underlying earnings before tax from Aegon's Chinese asset management joint venture AIFMC due to the normalization of performance fees; and

Total holding costs remained stable compared with 2015 at EUR 162 million in 2016.

**Fair value items**

The results from fair value items amounted to a loss of EUR 840 million in 2016, and were mainly driven by fair value losses in the United States. EUR 521 million fair value losses in the United States in 2016 were driven by the loss on hedging programs and the underperformance of alternative investments. Included in the loss on hedging programs in the United States is the loss on fair value hedges without accounting match in the Americas (EUR 322 million). This was mainly driven by the loss on equity hedges, which were set up to protect Aegon's capital position. Underperformance of fair value investments of EUR 226 million was primarily driven by investments related to hedge funds in the United States. Fair value losses of EUR 236 million in Europe in 2016 were driven by credit spreads movements, declining interest rates as a result of a mismatch on an IFRS basis between the valuation of interest rate hedges and liabilities, and declining interest rates as a result of the mismatch on an IFRS basis between certain interest rate hedges on the mortgage portfolio and the underlying mortgages. In addition, the loss on interest rate swaps was the main driver of the EUR 74 million fair value losses in 2016 at the holding.

### **Realized gains on investments**

Realized gains on investments amounted to EUR 340 million in 2016 and were primarily related to a rebalancing of the investment portfolio in the United Kingdom and gains resulting from asset-liability management adjustments in the Netherlands.

### **Impairment charges**

Net impairments of EUR (54) million in 2016 primarily related to investments in the energy industry in the United States.

### **Other charges**

Other charges amounted to EUR 771 million in 2016. These were mostly caused by the book loss on the divestment of the annuity portfolio in the United Kingdom (EUR 682 million), and assumption changes and model updates (EUR (118) million).

### **Run-off businesses**

The results of run-off businesses declined to EUR 54 million in 2016 mainly as a result of an adjustment to the intangible balances for BOLI/COLI business.

### **Income tax**

Income tax amounted to EUR 203 million in 2016, and included one-time tax benefits in the United States and the United Kingdom. The effective tax rate on underlying earnings before tax and total income for 2016 was 22% and 32%, respectively.

### **Commissions and expenses**

Commissions and expenses decreased by 3% in 2016 compared with 2015 to EUR 6.4 billion, mainly driven by lower amortization of deferred policy acquisition costs in the United Kingdom. Operating expenses increased by 1% in 2016 compared with 2015 to EUR 3.6 billion. Increased variable personnel expenses compared with 2015 and the acquisition of the defined contribution business from Mercer more than offset expense savings.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



---

**Table of Contents****15 Business and performance Business****Production**

In 2016, compared with 2015, gross deposits were up 21% to EUR 100.3 billion, driven by higher gross deposits in asset management and Retirement Plans in the United States. Net deposits, excluding run-off businesses, declined to EUR 3.5 billion in 2016 compared with 2015, mostly due to lower gross deposits in variable annuities, anticipated contract discontinuances from the business acquired from Mercer, and low asset management net flows. The latter were mainly driven by market insecurity following the Brexit vote and a reduction in flows from money market funds in China. New life sales declined by 12% compared with 2015 to EUR 969 million in 2016, mostly driven by lower universal life and term life production in the United States, fewer pension buy-out sales in the Netherlands, and lower sales in Asia as a result of Aegon's strict pricing policy in a low rate environment. New premium production for accident & health and general insurance decreased by 9% compared with 2015 to EUR 954 million in 2016, mainly as a result of several product exits and a lower contribution from portfolio acquisitions.

**A.1.8 Related party transactions**

This section provides information about the material transactions during the reporting period with Aegon's shareholders, with persons who exercise a significant influence on Aegon and with members of the administrative, management or supervisory body. The second part of this section provides information on relevant operations and transactions within the Group.

**Material transactions with shareholders**

Referring to section A.1.3 Holders of qualifying holdings, Aegon largest and only material holder of qualifying holdings is Vereniging Aegon. All other qualifying holdings in Aegon are less than 10% and considered not material. The transactions with Vereniging Aegon during the financial year 2016 were:

On May 19, 2016, Aegon N.V. repurchased 13,450,835 Common Shares from Vereniging Aegon for the amount of EUR 58 million, being the Value Weighted Average Price of the common shares of the 5 trading days preceding this transaction, as part of the EUR 400 million Share Buy Back program, initiated by Aegon N.V. in January 2016 to neutralize the dilutive effect of the cancellation of Aegon N.V.'s preferred shares in 2013. Also the amount of EUR 58 million is 14.5% of EUR 400 million, which percentage is equal to the percentage of shares held by Vereniging Aegon in the total number of outstanding and voting shares Aegon N.V. at the time of this transaction; and

On June 6, 2016, Aegon N.V. repurchased 17,324,960 Common Shares B from Vereniging Aegon for the amount of EUR 1,968,332, being 1/40th of the Value Weighted Average Price of the common shares of the 5 trading days preceding this transaction. The repurchase of common shares B was executed to align the aggregate shareholding of Vereniging Aegon in Aegon N.V. with its special cause voting rights of 32.6%.

**Material transactions with persons who exercise a significant influence on the undertaking**

There are no material transactions with other persons who exercise a significant influence on the undertaking.

## **Remuneration of and transaction with Aegon's Boards**

The transactions during 2016 that classify as being transactions with members of the Executive, Management and Supervisory Board consist of transactions related to the remuneration (fixed compensation / conditional variable compensation) of the members of the Executive and Management Board and the remuneration of active and retired members of the Supervisory Board.

### **Executive Board**

Through 2016, the Executive Board consisted of Mr. Wynaendts and Mr. Button. Mr. Button stepped down as CFO and member of Aegon's Executive Board with effect from December 1, 2016. Amounts are disclosed for the period Mr. Button has been part of the Executive Board and are reflective of his time with Aegon till December 1, 2016. The total amount of remuneration, consisting of the fixed compensation, conditional variable compensation awards, other benefits and pension contributions, for Mr. Wynaendts related to 2016 was EUR 4,538 thousand and for Mr. Button EUR 2,793 thousand.

At the reporting date, Mr. Wynaendts had no loans with Aegon (mortgage loan 2015: EUR 249,158). In 2016, Mr. Wynaendts made a repayment on the mortgage loan totalling EUR 249,158. No other outstanding balances such as guarantees or advanced payments exist.

### **Management Board**

On December 31, 2016, The Management Board, which assists the Executive Board in pursuing Aegon's strategic goals, is formed by members of the Executive Board, the CEOs of Aegon USA, Aegon the Netherlands, Aegon UK and Aegon Central & Eastern Europe, Aegon's Chief Risk Officer, CEO Asset Management, Chief Technology Officer, Global Head HR and the General Counsel. The total remuneration for the members of the Management Board over 2016 was EUR 18.6 million, consisting of EUR 7.0 million fixed compensation, EUR 6.4 million variable compensation awards, EUR 1.9 million other benefits and EUR 3.4 million pension benefits.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

16 Business and performance **Business**

Supervisory Board

The total remuneration in 2016 of active and retired members of the Supervisory Board amounted to EUR 935,875 excluding VAT. Aegon's Supervisory Board members are entitled to a base fee for membership of the Supervisory Board. No separate attendance fees are paid to members for attendance at the regular Supervisory Board meetings. For each extra Board meeting attended, be it in person or by video and/or telephone conference, an attendance fee of EUR 3,000 is paid. Not included in the total remuneration is a premium for state health insurance paid on behalf of Dutch Supervisory Board members. There are no outstanding balances such as loans, guarantees or advanced payments.

**Relevant operations and transactions within the Group**

Aegon facilitates intra-group transactions (IGTs) to support intra group efficiencies, including optimizing economies of scale, processes, liquidity and capital management. Due to the nature of these activities, there is interaction with business units and affiliates within the Group, resulting in a diverse set of IGTs. These include amongst other intercompany loans, derivatives, guarantees, internal reinsurance and capital distributions. Governance of Aegon's IGT Policy establishes definitions, governance, reporting and monitoring of IGTs ensuring a consistent standard of IGT usage across the Aegon Group for new and existing IGTs. All IGTs are further covered by the Aegon Global Transfer Pricing policy in order to ensure compliance with the internationally accepted at arm's length principle, which dictates that related entities transact with each other as if they are third parties.

Loans

Aegon utilizes intercompany loans for operational liquidity and capital purposes. Within the Group, the following material uncollateralized intra-group loans are granted:

Loans granted by Aegon N.V. to Transamerica Corporation, for an amount of EUR 3,666 million, to finance activities in the US;

Loans granted by Coöperatieve Aegon Financieringsmaatschappij U.A. (Coop) to Transamerica Corporation for an amount of EUR 662 million, to finance activities in the US;

A subordinated loan from Aegon Nederland N.V. to Aegon Levensverzekering N.V. for an amount of EUR 636 million to provide Aegon Levensverzekering N.V. with capital; and

A loan from Optas Pensioenen N.V. to Aegon Nederland N.V. for an amount of EUR 850 million.  
Current account balances

Within the Group, the following material (uncollateralized) current account balances exist on December 31, 2016: A position from Aegon Nederland N.V. to Aegon Levensverzekering N.V.; a position from Aegon Leven Beleggingen

B.V. to Aegon Nederland N.V. and a position from Aegon Global Investment Fund B.V. to Aegon Nederland N.V. for an amount of EUR 2,985 million, EUR 2,474 million and EUR 2,692 million respectively.

#### Derivatives

Aegon Derivatives N.V., a 100% pass-through vehicle, centralizes and mitigates counterparty risk related to the use of OTC derivatives across the Aegon Group in one entity. Primarily European entities (except UK domiciled entities), make use of Aegon Derivatives N.V. In addition, foreign exchange derivatives are centrally managed within Aegon N.V. ensuring netting advantages. As of December 31, 2016, the net (credit) exposure on the abovementioned internal arrangements were very limited as most of these are supported by collateral arrangements.

#### Guarantees

Aegon N.V. and its subsidiaries provide guarantees for performance under contracts for certain aspects of the business transacted within the group. The agreements include, but are not limited to, letters of credit, (re)insurance contracts, maintenance of liquidity, capital and net worth. The performance of the various entities under the terms of the agreements are regularly assessed to ensure that the entity has sufficient resources on a best estimate basis to meet the obligations guaranteed under the agreement. As a result there is minimum exposure for these guarantees to the group.

#### Reinsurance

Subsidiaries of Aegon N.V. enter into reinsurance agreements in the normal course of business to (among other reasons), segregate or pool risks, manage volatility, and efficiently manage capital. Reinsurance exposures are evaluated based on the resources available within the assumptive entity and, in many cases, the reinsurance is supported by trusts, funds withheld, letters of credit and guarantees. Any exposure above these amounts are assessed based on Aegon N.V.'s IGT policy to ensure the exposure is within policy limits. There are currently no exposures greater than the policy levels set for affiliated reinsurance.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**17 Business and performance **Underwriting performance**

## Capital distributions

Upstreaming of cash to a Holding Company is in general a capital distribution and can be in the form of a dividend. In addition, there may be situations in which an Aegon entity provided a loan to a Holding Company or when an Aegon entity repays (part of) a loan provided by a Holding Company. The decision whether or not to upstream cash to a Holding Company requires various considerations such as, but not limited to, ratings agency capital, regulatory capital, accounting and tax treatment.

**A.2 Underwriting performance**

Underwriting performance by line of business	2016				2015			
	Group	Life	Non-Life	Other <sup>1)</sup>	Group	Life	Non-Life	Other <sup>1)</sup>
in EUR millions								
<b>Underwriting income</b>	<b>23,453</b>	<b>20,400</b>	<b>3,053</b>		22,925	19,583	3,342	
<b>Reinsurers' commissions paid to reinsurers</b>	<b>3,176</b>	<b>2,932</b>	<b>244</b>		2,979	2,694	286	
<b>Underwriting claims and benefits</b>	<b>41,974</b>	<b>39,620</b>	<b>2,354</b>		26,443	23,847	2,596	
<b>Underwriting commissions and expenses</b>								
Commissions	2,929	2,495	662	(228)	3,313	2,845	731	
Operating expenses	3,560	2,363	513	684	3,558	2,324	549	
Other expenses	(1,203)	(1,110)	(92)		(1,533)	(1,419)	(108)	
Amortization of intangibles	1,065	978	83	4	1,261	1,151	106	
<b>Underwriting commissions and expenses</b>	<b>6,351</b>	<b>4,726</b>	<b>1,166</b>	<b>460</b>	<b>6,598</b>	<b>4,901</b>	<b>1,278</b>	

Includes Holding and Asset Management.

Underwriting performance by geographical	2016					2015				
	Group	Americas	The Netherlands	United Kingdom	Other <sup>1)</sup>	Group	Americas	The Netherlands	United Kingdom	Other <sup>1)</sup>
in EUR millions										
<b>Underwriting income</b>	<b>23,453</b>	<b>9,433</b>	<b>2,491</b>	<b>9,924</b>	<b>1,605</b>	22,925	9,195	2,947	8,512	2,873
<b>Reinsurers' commissions paid to reinsurers</b>	<b>3,176</b>	<b>2,609</b>	<b>13</b>	<b>593</b>	<b>(39)</b>	2,979	2,552	13	474	(10)
<b>Underwriting claims and benefits</b>	<b>41,974</b>	<b>15,497</b>	<b>5,713</b>	<b>18,874</b>	<b>1,889</b>	26,443	10,220	3,495	10,574	2,154
<b>Underwriting commissions and expenses</b>										
Commissions	2,929	2,613	149	175	(8)	3,313	2,805	213	234	(10)
Operating expenses	3,560	1,609	821	394	736	3,558	1,619	831	398	710
Other expenses	(1,203)	(970)	(11)	(79)	(143)	(1,533)	(1,205)	(13)	(102)	(223)
Amortization of intangibles	1,065	761	32	177	95	1,261	731	39	377	106

Commissions and expenses	6,351	4,013	991	667	680	6,598	3,950	1,070	907
--------------------------	-------	-------	-----	-----	-----	-------	-------	-------	-----

<sup>1</sup> includes all other businesses except for Americas, NL and UK.

### Premium income

Americas' total premium income for the year 2016 amounted to EUR 9.4 billion and is comprised of recurring premiums for an amount of EUR 8.9 billion and single premiums for an amount of EUR 0.6 billion. The main lines of businesses contributing to Americas' total premium income are Life (EUR 6.4 billion) and Individual Savings & Retirement (EUR 1.3 billion). Premiums related to run-off business for the Americas amounted to EUR 1.7 billion, and were mainly driven by the run-off for Life reinsurance. The increase in Americas' premium income compared to 2015 is the result of an increase in renewal premiums, partly offset by a decrease in first year premiums. Total premium income of Aegon the Netherlands amounted to EUR 2.5 billion and almost entirely reflects recurring premiums. Most of Aegon the Netherlands' premium income relates to the Pensions (EUR 1.3 billion) and Life business (EUR 0.7 billion), both reported in the Life segment, and the Non-life segment with EUR 0.5 billion. The decrease in premium income compared to 2015 is mainly caused by the decrease in premium income in the Pensions business (2015: EUR 1.5 billion) and the Non-life segment (2015: EUR 0.7 billion). Total premium income of Aegon UK amounted to EUR 9.9 billion of which EUR 2.8 billion relates to recurring premiums and EUR 7.2 billion to single premiums (including premiums related to insurance policies upgraded to the retirement platform in the UK EUR 5.3 billion). Most of Aegon UK's premium income relates to the Pensions business (EUR 9.3 billion).

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**18 Business and performance **Investment performance**

The increase in premium income compared to 2015 is driven by Pensions, as the total premium income for Pensions in 2015 amounted to EUR 7.8 billion.

**Commissions and expenses**

In 2016, commissions and expenses in the Americas increased by 2% compared with 2015 to EUR 4.0 billion. Operating expenses in the Americas decreased by 1% compared with 2015 to EUR 1.6 billion in 2016. Expense savings and lower restructuring charges compared with 2015 were partly offset by increased variable personnel expense and the acquisition of the defined contribution business acquired from Mercer. Commissions and expenses in the Netherlands decreased compared with 2015 to EUR 991 million in 2016. Operating expenses in the Netherlands were down compared with 2015 to EUR 821 million in 2016 as the non-recurrence of one-time charges in 2015 and expense savings were partly offset by investments in new business initiatives, Solvency II related expenses, and the cost of an IT project that will result in annual expense savings going forward. Commissions and expenses in the UK decreased by 27% in 2016 to EUR 667 million compared with 2015. Operating expenses in the UK decreased by 1% in 2016 to EUR 394 million compared with 2015, mainly due to favorable currency movements, partly offset by expenses related to the acquisitions of Cofunds and BlackRock's defined contribution business.

**Policyholder claims and benefits**

Total policyholder claims and benefits amounted to EUR 42.0 billion in 2016 compared to EUR 26.4 billion in 2015. The increase of EUR 15.5 billion is mainly attributable to changes in the valuation of liabilities of insurance contracts (2016: EUR 16.2 billion and 2015: EUR 7.9 billion) and investment contracts (2016: EUR (0.1) billion) and 2015: EUR (6.7 billion). These movements are primarily driven by market impacts (equity markets and interest rates) and reflect changes in technical provisions resulting from fair value changes on for account of policyholder financial assets included in results from financial transactions of EUR 15.1 billion (2015: EUR (0.1) billion) (please see section A.3.2 *Investment related results and impairments*). In addition, the change in valuation of liabilities for insurance contracts includes an increase in technical provisions for life insurance contracts of EUR 2.3 billion (2015: increase of EUR 3.4 billion).

Total Claims and benefits paid amounted to EUR 25.9 billion (2015: EUR 25.3 billion) and is comprised of claims and benefits paid for Aegon's life business amounting to EUR 23.9 billion (2015: EUR 23.1 billion) and claims and benefits paid for Aegon's non-life business amounting to EUR 2.1 billion (2015: EUR 2.1 billion).

Of the total policyholder claims and benefits of EUR 42.0 billion, EUR 15.5 billion relates to the Americas, EUR 5.7 billion to the Netherlands and EUR 18.9 billion to the UK.

**A.3 Investment performance****Investment performance recognized in income statement**

Amounts in EUR millions	Note	2016	2015
Investment income	<b>A.3.1</b>	7,788	8,525
Results from financial transactions	<b>A.3.2</b>	15,753	521

Gains/(losses) on investments	<b>A.3.2</b>	334	338
Net impairments	<b>A.3.2</b>	(54)	28

The following sections will provide more detail about Aegon's investment income in general and by asset class (section A.3.1) and its investment related results and impairments (section A.3.2). Section A.3.3 provides information about Aegon's gains and losses of investments recognized directly in equity. Finally, the last section A.3.4 provides information about Aegon's investments in securitizations.

### **A.3.1 Investment income**

Americas is the largest contributor to the investment income with EUR 3,717 million (2015: EUR 3,680 million). Aegon Americas is followed by Aegon the Netherlands, EUR 2,135 million (2015: EUR 2,277 million), and Aegon UK with EUR 1,661 million (EUR 2,331 million).

Most of Aegon's investment income relates to investment income related to general account investments for an amount of EUR 5,737 million (2015: EUR 6,099 million), while the investment income for account of policyholders amounted to EUR 2,051 million (EUR 2,426 million), mainly due to the fact that the investments for account of policyholders are on a fair value through profit or loss (FVTPL) basis.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



**Table of Contents**19 Business and performance **Investment performance****Investment income by asset class**

For interest-bearing assets, interest is recognized as it accrues and is calculated using the effective interest rate method. Fees and commissions that are an integral part of the effective yield of the financial assets or liabilities are recognized as an adjustment to the effective interest rate of the instrument. Investment income includes the interest income and dividend income on financial assets carried at fair value through profit or loss. Investment income also includes rental income due, as well as fees received for security lending.

<b>Investment Income by asset class</b>	<b>2016</b>			<b>2015</b>			<b>Total</b>
	<b>Interest income</b>	<b>Dividend income</b>	<b>Rental income</b>	<b>Interest income</b>	<b>Dividend income</b>	<b>Rental income</b>	
Amounts in EUR millions							
Shares		1,180			1,306		1,306
Debt securities and money market instruments	4,838			5,332			5,332
Loans	1,752			1,760			1,760
Real estate			129			133	133
Other	(111)			(6)			(6)
<b>Total</b>	<b>6,479</b>	<b>1,180</b>	<b>129</b>	<b>7,086</b>	<b>1,306</b>	<b>133</b>	<b>8,525</b>

Included in interest income is EUR 230 million (2015: EUR 223 million) in respect of interest income accrued on impaired financial assets. The interest income on financial assets that are not carried at fair value through profit or loss amounted to EUR 5,642 million (2015: EUR 5,951 million).

Most of Aegon's investment income relates to debt securities and money market instruments, namely EUR 4,838 million (2015: EUR 5,332 million), which represent 62% (2015: 63%) of total investment income. The expenses related to debt securities and money market instruments mainly consisted of transaction costs. As the transaction costs are included in the fair value at the date of recognition, these are not separately disclosed.

**A.3.2 Investment related results and impairments**

First, this section will provide more information about Aegon's results from financial transactions amounting to EUR 15,753 million, followed by its gains/(losses) on investments amounting to EUR 334 million. Finally, information about Aegon's net impairments is provided, amounted to EUR (54) million.

**Results from financial transactions**

The income arising from financial transactions during the years 2016 and 2015 comprises of:

**Results from financial transactions**

Amounts in EUR millions	2016	2015
Net fair value change of General Account investments at FVtPL other than derivatives	(42)	(35)
Realized gains and losses on financial investments	327	349
Gains and (losses) on investments in real estate	70	145
Net fair value change of derivatives	239	123
Net fair value change of policyholder assets at FVtPL	15,121	(110)
Net fair value change of investments in real estate for policyholder	(26)	67
Net foreign currency gains and (losses)	41	(29)
Net fair value change on borrowing and other financial liabilities	21	9
Realized gains and (losses) on repurchased debt	1	2
<b>Total results from financial transactions</b>	<b>15,753</b>	<b>521</b>

The net fair value change on for account of policyholder financial assets amounted to EUR 15,121 million in 2016 (2015: EUR (110) million) and is driven by equity markets and interest rate movements. Net fair value change on for account of policyholder at FVtPL are offset by changes in technical provisions.

#### **Gains/(losses) on investments**

Gains on investments amounted to EUR 334 million in 2016 (2015: EUR 338 million) and were primarily related to a rebalancing of the investment portfolio in the United Kingdom and gains resulting from asset-liability management adjustments in the Netherlands.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**20 Business and performance **Investment performance****Net impairments**

Net impairments amounted to EUR (54) million in 2016 (2015: EUR 28 million), and were primarily related to investments in the energy industry in the United States.

**A.3.3 Gains and losses recognized directly in equity**

This section provides information about the gains and losses of investments recognized directly in equity. The gains and losses of investments recognized directly in equity consist of the unrealized gains or losses of available-for-sale investments.

<b>Items that may be reclassified subsequently to profit and loss</b>		
Amounts in EUR millions	<b>2016</b>	<b>2015</b>
Gains/(losses) on revaluation of available-for-sale investments	854	(2,175)
(Gains)/losses transferred to income statement on disposal and impairment of available-for-sale investments	(2,122)	(485)

Gains on revaluation of available-for-sale investments amounted to EUR 854 million (2015: EUR (2,175) million) reflecting favorable markets resulting in credit spreads tightening and an overall positive revaluation of available-for-sale investments.

As of December 2016, gains transferred to the income statement on disposal and impairment of available-for-sale investments amounted to EUR (2,122) million (2015: EUR (485) million) and reflect the previously held unrealized gains as bonds were sold mainly as part of the sale of the UK annuity portfolio.

**A.3.4 Investments in securitization**

This section provides information about any of Aegon's investments in securitizations.

**Residential mortgage-backed securities**

Aegon Americas, Aegon the Netherlands and Aegon UK hold EUR 4,162 million (2015: EUR 5,011 million) of residential mortgage-backed securities available-for-sale (RMBS), of which EUR 3,494 million (2015: EUR 4,232 million) is held by Aegon Americas, EUR 649 million (2015: EUR 757 million) by Aegon the Netherlands, and EUR 19 million (2015: EUR 21 million) by Aegon UK. Residential mortgage-backed securities are securitizations of underlying pools of non-commercial mortgages on real estate. The underlying residential mortgages have varying credit characteristics and are pooled together and sold in tranches. The following tables show the breakdown of Aegon USA's RMBS available-for-sale (AFS) portfolio.

**2016**

AFS RMBS by quality						Total	Total fair
	AAA	AA	A	BBB	<BBB	amortized cost	value
Amounts in EUR millions							
GSE guaranteed	771	500				1,272	1,271
Prime jumbo		1	1	11	170	182	194
Alt-A		39	27	11	403	479	572
Negative amortization floaters				1	679	679	712
Other housing		50	71	43	519	683	745
<b>At December 31, 2016</b>	<b>771</b>	<b>589</b>	<b>98</b>	<b>65</b>	<b>1,771</b>	<b>3,295</b>	<b>3,494</b>
Of which insured			43	8	203	254	237

AFS RMBS by quality	2015					Total	Total fair
	AAA	AA	A	BBB	<BBB	amortized cost	value
Amounts in EUR millions							
GSE guaranteed	1,471					1,471	1,493
Prime jumbo		1	1	13	199	213	224
Alt-A			30	3	476	509	596
Negative amortization floaters				1	781	782	807
Reverse mortgage RMBS				190	46	237	171
Other housing	1	43	120	93	618	876	943
<b>At December 31, 2015</b>	<b>1,472</b>	<b>44</b>	<b>151</b>	<b>301</b>	<b>2,121</b>	<b>4,090</b>	<b>4,232</b>
Of which insured			66	10	268	343	333

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**21 Business and performance **Investment performance**

A significant part of Aegon USA's RMBS holdings are rated < BBB, as the issuances took place before the United States housing downturn that started in 2007. Additionally, Aegon USA has investments in RMBS of EUR 89 million (December 31, 2015: EUR 93 million), which are classified as fair value through profit or loss.

For more information about Aegon's residential mortgage-backed securities, reference is made to pages 188-190 of the Annual Report on Form 20-F 2016 of Aegon Group.

**Commercial mortgage-backed securities**

As of December 31, 2016, Aegon Americas, Aegon the Netherlands and Aegon UK hold EUR 5,579 million (2015: EUR 5,636 million) of available-for-sale commercial mortgage-backed securities (CMBS), of which EUR 5,340 million (2015: EUR 4,969 million) is held by Aegon USA, EUR 195 million (2015: EUR 590 million) by Aegon UK and EUR 44 million (2015: EUR 78 million) by Aegon the Netherlands. CMBS are securitizations of underlying pools of mortgages on commercial real estate. The underlying mortgages have varying risk characteristics and are pooled together and sold in different rated tranches. The company's CMBS include conduit, large loan, single borrower, commercial real estate collateralized debt obligations (CRE CDOs), collateralized debt obligations (CDOs), government agency, and franchise loan receivable trusts.

The total gross unrealized loss on available-for-sale CMBS of Aegon Americas amounted to EUR 67 million as of December 31, 2016 (2015: EUR 39 million). The total net unrealized gain on the available-for-sale CMBS as of December 31, 2016, is EUR 87 million (2015: EUR 181 million), of which EUR 34 million (2015: EUR 61 million) relates to positions of Aegon USA, followed by Aegon UK at EUR 50 million and Aegon the Netherlands at EUR 1 million. CMBS fundamentals continued to slowly improve in 2016 as the pace of credit deterioration moderated and financing availability remained high. The percentage of delinquencies increased during the year; however, this was a result of a declining outstanding balance of CMBS. Commercial real estate valuation increases have slowed as peak levels have been reached. Liquidity remains reasonable for the CMBS market; however, credit spreads on many legacy subordinate CMBS tranches remain at wide levels.

The tables below summarize the credit quality of Aegon USA's available-for-sale (AFS) CMBS portfolio. Additionally, Aegon USA has no investments in CMBS (2015: EUR 1 million), which are classified as fair value through profit or loss.

CMBS by quality	2016					Total	
	AAA	AA	A	BBB	<BBB	amortized cost	Total fair value
Amounts in EUR millions							
CMBS	4,295	688	141	73	105	5,301	5,337
CMBS and CRE CDOs					5	5	3
<b>At December 31, 2016</b>	<b>4,295</b>	<b>688</b>	<b>141</b>	<b>73</b>	<b>110</b>	<b>5,306</b>	<b>5,340</b>

CMBS by quality	2015					Total amortized cost	Total fair value
	AAA	AA	A	BBB	<BBB		
Amounts in EUR millions							
CMBS	3,879	705	87	119	117	4,908	4,969
<b>At December 31, 2015</b>	<b>3,879</b>	<b>705</b>	<b>87</b>	<b>119</b>	<b>117</b>	<b>4,908</b>	<b>4,969</b>

For more information about Aegon's commercial mortgage-backed securities, reference is made to pages 190-191 of the Annual Report on Form 20-F 2016 of Aegon Group.

#### Asset-backed securities

Aegon Americas, Aegon the Netherlands and Aegon UK hold EUR 6,188 million (2015: EUR 7,583 million) of AFS ABS instruments of which EUR 3,377 million (2015: EUR 3,178 million) is held by Aegon USA, EUR 2,714 million (2015: EUR 2,396 million) by Aegon the Netherlands and EUR 97 million (2015: EUR 2,018 million) by Aegon UK. Additionally, Aegon Americas has investments in ABS of EUR 13 million (2015: EUR 12 million), which are classified as fair value through profit or loss. ABS are securitizations of underlying pools of credit card receivables, auto financing loans, small business loans, bank loans, and other receivables. The underlying assets of the asset backed securities have been pooled together and sold in tranches with varying credit ratings.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**22 Business and performance **Performance of other activities**

The total gross unrealized loss on available-for-sale ABS of Aegon Americas, Aegon the Netherlands and Aegon UK amounted to EUR 54 million as of December 31, 2016 (2015: EUR 85 million). Aegon USA has EUR 44 million (2015: EUR 55 million) of this gross unrealized loss and Aegon the Netherlands EUR 10 million (2015: EUR 29 million). In the United States, increasing investor demand has been met with new issuance in the asset-backed sector. The combination of these factors has led to varied performance by sector with most sectors exhibiting tighter credit spreads over the course of the year. The European ABS market experienced a volatile year. Macroeconomic concerns about a slowdown in global economic growth affected the market throughout the first half of the year. Performance recovered more than their initial losses after the ramifications of Brexit turned out to be less severe in the short term. As fundamental performance continues to improve, most asset classes within European ABS market are trading at their tightest levels since the financial crisis and record issuance levels are met with strong demand.

The breakdown by quality of the available-for-sale (AFS) ABS portfolio of Aegon USA, Aegon the Netherlands and Aegon UK is as follows:

ABS US, NL and UK	2016					Total	
	AAA	AA	A	BBB	<BBB	amortized cost	Total fair value
Amounts in EUR millions							
Credit cards	482	28	35	30		575	589
Autos	277	9	46	42		375	374
Small business loans		1	7	6	104	118	116
CDOs backed by ABS, Corp. bonds, Bank loans	2,108	790	368	134	94	3,493	3,504
Other ABS	627	165	697	85	22	1,596	1,606
<b>At December 31, 2016</b>	<b>3,495</b>	<b>992</b>	<b>1,153</b>	<b>296</b>	<b>220</b>	<b>6,156</b>	<b>6,188</b>
	2015						
ABS US, NL and UK						Total	Total fair
Amounts in EUR millions	AAA	AA	A	BBB	<BBB	amortized cost	value
Credit cards	392	63	36			491	505
Autos	243	18	13	20		295	295
Small business loans		3	12		151	166	154
CDOs backed by ABS, Corp. bonds, Bank loans	1,747	744	304	128	107	3,031	3,004
Other ABS	736	424	1,700	333	53	3,246	3,626
<b>At December 31, 2015</b>	<b>3,117</b>	<b>1,252</b>	<b>2,066</b>	<b>482</b>	<b>312</b>	<b>7,228</b>	<b>7,583</b>

For more information about Aegon's asset-backed securities, reference is made to page 191 of the Annual Report on Form 20-F 2016 of Aegon Group.

#### **A.4 Performance of other activities**

##### **A.4.1 Other activities income and expenses**

Aegon did not recognize other material income or expenses related to other activities during 2016.

##### **A.4.2 Material leasing arrangements**

###### **Aegon is the lessee**

Leases that do not transfer substantially all the risks and rewards of ownership are classified as operating leases. Payments made under operating leases, where the Group is the lessee, are charged to the income statement on a straight line basis over the period of the lease.

In the United States, Aegon owns many of the buildings that the Company uses in the normal course of its business, primarily as offices. Aegon owns 16 offices located throughout the United States with 2 million square feet of office space in total. Aegon also leases space for various offices located throughout the United States under long-term leases with a total square footage of 1 million.

Other principal offices owned by Aegon are located in The Hague, the Netherlands; Budapest, Hungary; Madrid, Spain. Aegon owns its headquarters and leases other offices in the Netherlands (Leeuwarden) and the United Kingdom under long-term leases.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



**Table of Contents**

23 Business and performance **Performance of other activities**

**Future lease payments**

The operating lease obligations relate mainly to office space leased from third parties. The operating lease rights relate to non-cancellable commercial property leases.

**Aegon is the lessor**

Where the Group is the lessor under an operating lease, the assets subject to the operating lease arrangement are presented in the statement of financial position according to the nature of the asset. Income from these leases are recognized in the income statement on a straight line basis over the lease term, unless another systematic basis is more representative of the time pattern in which use benefit derived from the leased asset is diminished.

Aegon USA has entered into a commercial property portfolio, consisting of office, retail and industrial buildings. These non-cancellable leases have remaining lease terms up to 20 years. Most leases include a clause to enable upward revision of the rental charge on an annual basis according to either a fixed schedule or prevailing market conditions.

Aegon the Netherlands has entered into long-term residential property leases that can be terminated subject to a short-term notice. Under Dutch law, the maximum annual rent increase on residential property rented in the affordable housing segment is specified by the Dutch national government and equals the annual inflation rate plus a small margin.

**Investment in real estate for account of policyholders**

As of December 31, 2016, the investment property amounted to EUR 686 million (2015: EUR 1,022 million) and is leased out under operating leases.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

24 System of governance **General information on the system of governance**

**B. System of governance**

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

**B.1.1 Corporate governance**

Aegon is governed by three main corporate bodies: the Executive Board, the Supervisory Board, and the General Meeting of Shareholders. The Executive Board is assisted in its work by the Management Board who provides vital support and expertise in safeguarding Aegon's strategic goals. The Supervisory Board has established an Audit Committee, Risk Committee, Remuneration Committee and Nomination and Governance Committee from amongst its members.

**B.1.1.1 The Executive Board**

Aegon's Executive Board is charged with the overall management of Aegon. It is therefore responsible for achieving Aegon's aims and developing the strategy and its associated risk profile, in addition to overseeing any relevant sustainability issues and the development of the Company's earnings. Each member has duties related to his or her specific area of expertise.

Aegon's Articles of Association determine that for certain decisions, the Executive Board must seek prior approval from the Supervisory Board and/or the approval of the General Meeting of Shareholders. In addition, the Supervisory Board may also subject other Executive Board decisions to its prior approval.

**Composition of the Executive Board**

On December 31, 2016, the Executive Board of Aegon consisted of: Alex Wynaendts, Chief Executive Officer (CEO) and Chairman of the Executive Board. Darryl Button, Aegon's former Chief Financial Officer (CFO), was a member of the Executive Board until he concluded his tenure with the Company on December 1, 2016.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

25 System of governance **General information on the system of governance**

The number of Executive Board members and their terms of employment are determined by the Company's Supervisory Board.

Executive Board members are appointed by the General Meeting of Shareholders, after having been nominated by the Supervisory Board.

**B.1.1.2 The Management Board**

Aegon's Executive Board is assisted in its work by the Company's Management Board. The Management Board includes the members of the Executive Board.

Composition of the Management Board

On December 31, 2016, Aegon's Management Board was composed of Alex Wynaendts (Chairman), Mark Bloom, Adrian Grace, Allegra van Hövell-Patrizi, Marco Keim, Gábor Kepecs, Onno van Klinken, Carla Mahieu, Mark Mullin and Sarah Russell. Darryl Button was a member of the Management Board until he concluded his tenure with the Company on December 1, 2016.

Role of the Management Board

The Management Board is entrusted with the overall strategic direction of Aegon Group, particularly with respect to:

Setting, implementing and achieving Aegon Group's business objectives and strategy, as well as ensuring the delivery of results;

Discussing and sponsoring Aegon Group's policies;

Discussing and sponsoring enterprise risk management, in particular:

Embedding of risk strategy into business strategy and enterprise risk management into business operations;

Reviewing risk governance structures, risk tolerance statements, Aegon Group's level risk policy limits, the pricing and product development policy, and the introduction of new risk policies; and

Supervising compliance with the Enterprise Risk Management framework and policies.

Corporate responsibility issues that are relevant to Aegon Group;

Sharing relevant information; and

Providing vital support and expertise, together with making recommendations to Management Board members on strategic business matters and to the Executive Board on all strategic matters that affect the business of Aegon Group (e.g. cross-border business initiatives, capital allocation and Mergers & Acquisitions).

Each individual Management Board member is accountable for the operations and management in the unit(s) or the function(s) that the member is responsible for, in line with the Company's policies, values and principles and compliance standards.

### **B.1.1.3 The Supervisory Board and its committees**

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

#### Composition of the Supervisory Board

Members of the Supervisory Board are appointed by the General Meeting of Shareholders, following nomination by the Supervisory Board. Aegon aims to ensure that the composition of the Company's Supervisory Board is well balanced in terms of professional background, geography and gender. Aegon has established a profile that outlines the required qualifications of its members. Supervisory Board members are no longer eligible for (re)appointment after reaching the age of 70, unless the Supervisory Board makes an exception. Remuneration of the Supervisory Board members is determined by the General Meeting of Shareholders. On December 31, 2016, Aegon's Supervisory Board consisted of eight members.

#### Committees

The Supervisory Board also oversees the activities of its committees. These committees are composed exclusively of Supervisory Board members, and deal with specific issues related to Aegon's financial accounts, risk management, executive remuneration and appointments. These committees are the:

Audit Committee;

Risk Committee;

Remuneration Committee; and

Nomination and Governance Committee.



**Table of Contents**

26 System of governance **General information on the system of governance**

Audit Committee

Since Aegon has both an Audit Committee and a Risk Committee, the risk management responsibilities stated in the Dutch Corporate Governance Code are assigned to the Risk Committee. With regard to the oversight of the operation of the risk management framework and risk control systems, including supervising the enforcement of relevant legislation and regulations, the Audit Committee operates in close coordination with the Risk Committee. Certain committee members partake in both committees and a combined meeting of the Audit and Risk Committees takes place on an annual basis.

The main role and responsibilities of the Audit Committee are to assist and advise the Supervisory Board in fulfilling its oversight responsibilities regarding:

The integrity of the consolidated interim and full-year financial statements and financial reporting processes;

Internal control systems and the effectiveness of the internal audit process; and

The performance of the external auditors and the effectiveness of the external audit process, including monitoring the independence and objectivity of PwC.

The Audit Committee reports to the Supervisory Board on its activities, identifying any matters about which it considers action or improvements are needed, and making recommendations as to the steps to be taken. For more information about the functioning of the Audit Committee, please see the Audit Committee Charter on [aegon.com](http://aegon.com).

Risk Committee

The risk management responsibilities as mentioned in the Dutch Corporate Governance Code are allocated to the Risk Committee.

The main role and responsibilities of the Risk Committee are to assist and advise the Supervisory Board in fulfilling its oversight responsibilities regarding the effective operation and appropriateness of the Enterprise Risk Management (ERM) framework and internal control systems of Aegon N.V. and its subsidiaries and affiliates that comprise the Aegon Group. These include:

Risk strategy, risk tolerance and risk governance;

Product development and pricing;

Risk assessment;

Risk responses and internal control effectiveness;

Risk monitoring; and

Risk reporting.

Furthermore, the Risk Committee 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. For more information about the functioning of the Risk Committee, please see the Risk Committee Charter on [aegon.com](http://aegon.com).

#### Remuneration Committee

The main role and responsibilities of the Remuneration Committee are to advise the Supervisory Board and prepare decisions to be taken by the Supervisory Board. The Remuneration Committee is designated to safeguard sound remuneration policies and practices within Aegon Group by overseeing the development and execution of these policies and practices. These include:

Reviewing the Aegon Group Global Remuneration Framework and making recommendations on the outcomes;

Preparing recommendations regarding variable compensation both at the beginning and after the end of the performance year;

Overseeing the remuneration of the Executive Board, Identified Staff and Aegon Group Control functions; and

Preparing the information provided to shareholders on remuneration policies and practices, including the Remuneration Report.

#### Nomination and Governance Committee

The main role and responsibilities of the Nomination and Governance Committee are to assist and advise the Supervisory Board in fulfilling its responsibilities in the areas of Human Resources Management and Corporate Governance. These include:

Board member and senior management succession planning;

Drawing up selection criteria and procedures;

Advising and proposing on nominations, appointments and reappointments;

Reviewing and updating board profile and charters for board and committees;

Discussing the annual global employee survey; and

Overseeing the corporate governance structure of the Company, compliance with the Dutch Corporate Governance Code; and

Any other applicable corporate governance legislation and regulations.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



## **Table of Contents**

### 27 System of governance **General information on the system of governance**

#### **B.1.1.4 General Meeting of Shareholders**

A General Meeting of Shareholders is held at least once a year and, if deemed necessary, the Supervisory Board or Executive Board of the Company has the authority to convene an Extraordinary General Meeting of Shareholders. The main function of the General Meeting of Shareholders is to decide on matters such as the adoption of annual accounts, the approval of dividend payments and (re)appointments to the Supervisory Board and Executive Board of Aegon.

#### **B.1.1.5 Key Functions**

A description of the main roles and responsibilities of key functions, as well as their necessary and operational independence is disclosed in section B.2 Fit and proper requirements. Reference is made to sections B.3, B.4, B.5 and B.6 for more details on Aegon's key functions.

#### **B.1.1.6 Material changes in the system of governance**

Changes in the composition of the Executive Board and Management Board implemented during 2016 represented material changes in the system of governance. The Nomination and Governance Committee reviewed the composition of both the Executive Board and Management Board, together with the functioning and effectiveness of the Board members, both individually and as a team. In particular, the Committee discussed the search process and appointment of a new CFO following the resignation of Darryl Button. The Committee discussed the rationale supporting the proposal to the Annual General Meeting of Shareholders on May 19, 2017, to appoint Matthew Rider as Aegon's CFO.

The Committee also discussed the expansion of the Management Board with the addition of the General Counsel, Global Head Human Resources, Chief Technology Officer and Chief Executive Officer of Aegon Asset Management.

Risk management, internal control systems and reporting procedures

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

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

The Aegon Group Global Remuneration Principles, as set out in the Aegon Global Remuneration Framework, have been applicable in the Aegon Group and consistently applied to regional and local remuneration policies and practices. The below provides a summary of Aegon's Remuneration policy. For further details, reference is made to the Remuneration Report on page 113 of the IFRS Annual Report on Form 20-F 2016 of Aegon Group.

#### **Global Remuneration Principles**

The Aegon Group Global Remuneration Principles provide the foundation for remuneration policies and practices throughout Aegon Group.

Aegon's Global Remuneration Framework (AGRF) contains the guiding principles to support sound and effective remuneration policies and practices by ensuring consistency throughout Aegon Group.

Aegon's remuneration policies are derived from the AGRF, which includes the Remuneration Policy for the Executive Board. These policies define specific terms and conditions for the employment of various groups of staff.

For compensation of staff outside Europe, the Company obtained shareholder approval at the Annual General Meeting of Shareholders on May 20, 2016, to pay a maximum of 200% of base salary as variable compensation. The Company's capital is not adversely impacted by the maximum variable compensation that could be paid out.

### **Role of risk management and regulatory compliance**

The risk management and regulatory compliance functions are involved in the design and execution of remuneration policies and practices.

Risk management is involved in deciding which positions are deemed Identified Staff. Furthermore, risk management and regulatory compliance are involved in order to ensure exceptions to policies to reflect local practices or regulations do not undermine effective risk management and that sufficient mitigating measures are undertaken.

In addition, the risk management and regulatory compliance functions, together with the Human Resources and Finance functions, are responsible for the execution of the various measures that ensure the AGRF and associated practices are aligned with the defined risk tolerances and behaviors.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

28 System of governance **General information on the system of governance**

**General compensation practices**

Aegon has a pay philosophy that is based on total compensation. The aim is for total remuneration for experienced and competent employees to be consistent with those in the markets in which Aegon operates and competes for employees.

Variable compensation, if any, is capped at an appropriate level as a percentage of base pay. Variable compensation for senior management is usually paid out in cash and shares over multiple years, and is subject to further conditions being fulfilled. Additional holding periods may apply to shares after they have vested, restricting their sale for a further one to three years. Variable compensation already paid out may also be retrieved under certain circumstances ( Claw-back ).

Pension arrangements are typically offered in line with market practice.

**Supervisory Board Remuneration Policy 2016**

Aegon's Remuneration Policy for members of its Supervisory Board is aimed at ensuring fair compensation, and protecting the independence of the Supervisory Board's members. Terms and conditions for members of the Supervisory Board are part of Aegon's broader Remuneration Policy, and are the responsibility of the Company's Remuneration Committee.

**Fees and entitlements**

Members of the Supervisory Board are entitled to:

A base fee for the regular Supervisory Board meetings;

An attendance fee for additional Supervisory Board meetings attended;

A committee fee for members of each of the Supervisory Board's Committees;

An attendance fee for each Committee meeting attended; and

An additional fee for attending meetings that require intercontinental travel.

Each of these fees is a fixed amount. Members of Aegon's Supervisory Board do not receive any performance or equity-related compensation, and do not accrue pension rights with the Company. These measures are designed to ensure the independence of Supervisory Board members and to strengthen the overall effectiveness of Aegon's corporate governance.

## **Executive Board remuneration**

The Executive Board Remuneration Policy was adopted at the General Meeting of Shareholders on May 12, 2011. The Policy will remain in force until such time as the Supervisory Board proposes changes or amendments. Any material changes in the Executive Board Remuneration Policy will be referred to the General Meeting of Shareholders for adoption.

## **Role of the Remuneration Committee**

The Supervisory Board has overall responsibility for the Company's Remuneration Policies, including the Executive Board Remuneration Policy. Members of the Remuneration Committee are drawn from the Supervisory Board.

Each year, Aegon's Remuneration Committee reviews Aegon's remuneration policies to ensure they remain in line with prevailing international standards. This review is based partly on information provided by Aegon's external advisor, Towers Watson. The advisor does not, however, advise individual members of the Executive and Supervisory Boards.

The Remuneration Committee may recommend changes to the policies to the Supervisory Board.

## **Review of the Remuneration Policy**

Aegon's Executive Board Remuneration Policy is reviewed every year by the Remuneration Committee. The policy applies to all members of Aegon's Executive Board.

## **Ensuring pay remains competitive**

The Company regularly compares its levels of executive remuneration with those of other comparable companies.

The peer group comprises the following 14 companies: Allianz, Aviva, Axa, CNP Assurances, Generali, Legal & General, Mapfre, Münchener Rückversicherung, NN Group, Old Mutual, Prudential plc., Standard Life, Swiss Re and Zurich Financial Services.

In addition, in order to monitor alignment with the general industry in the Netherlands, a reference group is used. This is comprised of the 12 leading companies listed on Euronext Amsterdam, excluding financial services providers. The Supervisory Board regularly reviews the composition of the two groups in order to ensure that they continue to provide a reliable and suitable basis for comparison.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

29 System of governance **General information on the system of governance**

**Total compensation**

For each member of the Executive Board, Aegon's Supervisory Board determines a maximum total compensation, reflecting the specific roles and responsibilities of the individual.

The Supervisory Board conducts regular scenario analysis to determine the long-term effect on the level and structure of compensation granted to members of the Executive Board. The Supervisory Board (Remuneration Committee) discussed and endorsed the 2016 total compensation for the Executive Board.

**Fixed compensation**

It is the responsibility of the Supervisory Board to determine fixed compensation for members of the Executive Board based on their qualifications, experience and expertise.

**Variable compensation**

Variable compensation is based on a number of individual and company performance indicators that are linked to the Company's objectives, business strategy, risk tolerance and long-term performance.

Performance is determined by using a mix of financial and non-financial indicators. The individual performance criteria concern a basket of strategic and personal objectives related to Aegon's strategy. The type of performance indicators are selected in accordance with the long-term goals of the Company. The targets and levels are agreed by the Supervisory Board.

Performance is assessed by Aegon's Remuneration Committee and validated by the full Supervisory Board. Each year, a one-year target is set for each performance indicator. By paying half of the variable compensation in cash and the other half in shares, together with adding deferral and additional holding periods to the variable compensation that is allocated, Aegon believes that the long-term interests of Executive Board members are aligned with the interests of Aegon and its stakeholders.

All variable compensation is conditionally granted at the beginning of each performance period. Variable compensation is allocated once the accounts for the financial year in question have been adopted by the Company's General Meeting of Shareholders and after an ex-ante assessment.

The allocated variable compensation consists of equal parts of cash and shares, of which 40% is paid out (or vests) in the year following the performance year, and 60% is deferred to later years and vests in equal individual parts in the 3 years following. These deferred portions remain conditional until it vests.

**Risk adjustment methodology (ex-ante)**

At the end of the performance period, but prior to allocation of variable compensation, the Supervisory Board assesses whether (downward) modifications are needed. For this purpose, quantitative and qualitative measures at Aegon Group, regional unit and individual level are taken into account.

**Ex-post assessment and discretionary adjustments**

The Supervisory Board uses judgment in the assessment of the outcome of strategic/personal targets to ensure that, taken together, they represent a fair reflection of the overall performance of the Executive Board member over the performance period.

In addition, the Supervisory Board applies an ex-post risk assessment to deferred payouts of variable compensation to determine whether allocated (that is, unvested) variable compensation should become unconditional (meaning it vests) or should be adjusted. This ex-post assessment is based on informed judgment by the Supervisory Board, taking into account significant and exceptional circumstances that are not (sufficiently) reflected in the initially applied performance indicators.

Deferred variable compensation may only be adjusted downwards. Ex-post, risk-based assessments concern deferred variable compensation, not fixed compensation.

**Circuit breaker**

Variable compensation is only paid if the threshold level set for that performance indicator is reached.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### 30 System of governance **Fit and proper requirements**

#### **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, Aegon's Supervisory Board is obliged to claim back variable compensation that has already been paid out or vested.

#### **Pension arrangements**

Members of Aegon's Executive Board are offered pension arrangements and retirement benefits. Benefits offered are consistent with Executive Board members' agreements. Pension arrangements do not include discretionary elements.

The arrangements with the members of the Executive Board include retirement provisions that allow benefits to be taken at the end of the term. The retirement arrangements stem from pre-Executive Board membership. The bespoke arrangements are based on contributions to Defined Benefit and/or Defined Contribution plans that are higher than the regular plans that apply to other staff. This implies that it is possible for the Executive Board members to take early retirement from a certain age or at the end of their term.

Pensions include provisions that allow for taking early retirement. Differences exist based on geographical region and local market practices for comparable positions. These differences result in the possibility to take early retirement from a certain age or at end of term.

#### **Loans**

Aegon does not grant Executive Board members personal loans, guarantees or other such arrangements, unless in the normal course of business and on terms applicable to all employees, and only with the approval of the Company's Supervisory Board.

#### **Terms of Engagement Agreement**

Members of the Executive Board are appointed for four years, and may then be re-appointed for successive mandates also for a period of four years.

Executive Board members have an engagement agreement with Aegon N.V., rather than a contract of employment. Members of the Executive Board may terminate their engagement agreement with a notice period of three months. The Company must give six months' notice if it wishes to terminate the agreement of a member of its Executive Board.

The arrangements with current members of the Executive Board contain provisions for severance payments in the event that their agreement is terminated as a result of a merger or takeover.

It is expected that the terms of the engagement agreements will remain largely unchanged during 2017.

For information regarding material transactions with shareholders, with persons who exercise a significant influence on the undertaking, and with members of the Executive Board or Supervisory Board, please refer to section A.1.8

Related party transactions.

## **B.2 Fit and proper requirements**

### **B.2.1 Requirements**

#### **The Executive Board**

The Executive Board is charged with the management of the Company, which means, among other things, that it is responsible for setting and achieving the Company's objectives, strategy and the associated risk strategy and risk tolerance, and ensuring delivery of results and corporate social responsibility issues that are relevant to the Company. The Executive Board is accountable for these matters to the Supervisory Board and the General Meeting of Shareholders. Responsibility for the management of the Company is vested collectively in the Executive Board. The Executive Board is responsible for compliance with all relevant laws and regulations, for managing the risks attached to the Company's activities and for the financing of the Company. The Executive Board reports on these issues to and discusses the internal risk management and control systems with the Supervisory Board, the Audit Committee of the Supervisory Board, and the Risk Committee of the Supervisory Board.

Individual members of the Executive Board may be charged with specific parts of the managerial tasks, without prejudice to the collective responsibility of the Executive Board as a whole. The Executive Board is collectively responsible for decisions, even if they are prepared by individual members of the Executive Board. An individual member of the Executive Board may only exercise such powers if these are explicitly attributed or delegated to the individual member and the individual member may never exercise powers beyond those exercisable by the Executive Board as a whole. The division of tasks within the Executive Board is determined (and amended, if necessary) by the Executive Board, subject to the approval of the Supervisory Board. Executive Board members especially charged with particular managerial tasks are primarily responsible for the risk control and monitoring of the managerial tasks concerned.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



## **Table of Contents**

### 31 System of governance **Fit and proper requirements**

To fulfil these tasks, the specific skills that members of the Executive Board should have at their disposal include:

Leadership (i.e. ideas, people and change);

Strategic thinking and sound judgment, financial and commercial acumen, particularly around complex and inorganic change activities;

Influencing and relationship building;

Communication;

Delivery with clear focus on outcomes; and

Innovation and problem solving and customer-centric.

Moreover, the members of the Executive Board should possess knowledge and experience in the areas of having a strategic understanding of and insight into the financial services industry, with particular emphasis on the challenges and opportunities associated with achieving success for a market leading life and pensions and digitized platform company specifically, a good understanding of the different regimes associated with insurance and investments, including capital management and regulatory frameworks. The Executive Board should possess extensive industry and executive management experience in a number of financial, operational and strategic roles in addition to being an industry leader respected by regulators, trade associations and government bodies. In addition, the Executive Board should have a proven ability to lead complex transactions across an organization, including inorganic activity.

### **The Management Board**

As stated in section B.1.1.1, the Executive Board is assisted in its work by the Company's Management Board. The Management Board is entrusted with the overall strategic direction of Aegon Group, particularly with respect to Aegon Group's business objectives and strategy as well as ensuring delivery of results, Aegon Group's policies, Enterprise Risk Management, corporate responsibility issues that are relevant to Aegon Group.

Management Board members are collectively responsible for managing Aegon's senior leadership talent. Management Board members have a responsibility to manage talent consistently at all Aegon's business units around the world. The Management Board has full information rights vis-à-vis all countries and business lines within the Aegon Group.

The Management Board has, in performing its duties, access to the expertise of and support and services from all Corporate Center departments. In undertaking its responsibilities the Management Board acts in accordance with the interests of Aegon Group and the business units connected with it, taking into consideration the interests of Aegon

Group's stakeholders. Members of the Management Board express views with respect to important affairs, matters of principle and matters of general interest in accordance with final decision-making, and with due observance of each member's individual responsibilities.

All members of the Executive and Management Boards (as day-to-day policymakers of Aegon) have been approved by the Dutch supervisory authorities on fitness and propriety prior to their respective appointments and fulfil these requirements on an ongoing basis.

### **The Supervisory Board**

Aegon's Supervisory Board oversees the management of the Executive Board, in addition to the Company's business and corporate strategy. The Supervisory Board must take the interests of all Aegon stakeholders into account. 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 the administrative procedures and internal control systems; an affinity with and knowledge of the industry, its clients, its products and services, the financial services market and Aegon's businesses and strategy;

Knowledge and experience in (digital) marketing and distribution and the applications of information technology;

Expertise and experience in digital transformation;

Experience in the business world, both nationally and internationally; and

Expertise in financial, accounting and business economics, and the ability to judge issues in the areas of risk management, solvency, actuary, currencies and investment and acquisition projects.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

32 System of governance **Fit and proper requirements**

Individual members of the Supervisory Board will be assessed on the basis of personal qualifications including: managerial experience and skills at the highest levels; experience with large listed companies; understanding of a global business; entrepreneurial attitude; sound business judgment, common sense and decisiveness; independence and a critical attitude with regard to the other Supervisory Board members and the Executive Board; an international orientation; and outside experience.

All members of Aegon's Supervisory Board have been approved by the Dutch supervisory authorities, the Dutch Central Bank (DNB) and the Netherlands Authority of Financial Markets (AFM), with regard to 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, Aegon has implemented the following four key control functions: risk management, compliance, internal audit and the actuarial function. These functions have been in place within Aegon for many years.

Risk management

The Aegon Group CRO is the function holder for risk management. The Aegon Group CRO is also member of the Management Board and of high level Risk Committees. For more information about the risk management system and its functions, please refer to section B.3 Risk management system.

Compliance

The Head of Operational & Conduct Risk Management (OCRM) is the key function holder for Compliance. OCRM reports to the Aegon Group CRO and is therefore a second line role given Solvency II independence requirements, and responsibility for ensuring that the risk profile is managed in line with risk tolerance. The regulatory compliance function supports the Head of OCRM in meeting its responsibilities as Solvency II key function holder for Compliance. For more details about the compliance function reference is made to section B.4 Internal control system.

Internal Audit

The Global Head of Internal Audit is the function holder for Internal Audit. In line with the requirements, Internal Audit is fully objective and independent from all other functions, reporting directly to the CEO and Supervisory Board Audit Committee. For more details about the Internal Audit function refer to section B.5 Internal audit function.

Actuarial function

The actuarial function holder is the Global Chief Actuary/Head of Underwriting Risk Management and is part of the second line of defense at Aegon Group level with a functional line to the CFO for financial control related aspects. For more details about the Actuarial function please refer to section B.6 Actuarial function.

The key functions stated above have the necessary resources to carry out their tasks. Resourcing of staff and other means required to execute control is documented as part of the charters agreed with the Supervisory Board of Aegon N.V. Changes to the resources require approval from the key function. Issues can be brought forward to the Supervisory Board of Aegon N.V. for resolution.

The necessary operational independence of the key functions is documented as part of the charters agreed with the Supervisory Board of Aegon N.V. Issues can be brought forward to the Supervisory Board of Aegon N.V. for resolution.

### **B.2.2 Process for assessment**

In accordance with the Dutch Financial Supervision Act, Aegon 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.

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 Aegon.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

33 System of governance **Risk management system including the Own Risk and Solvency Assessment**

Fitness of the persons that effectively run the undertaking or have other key functions is determined at the point of selection as well as thereafter. As regards the point of selection, Aegon has drawn up a specific job profile for each function. These profiles detail the requirements in terms of the level of skills, knowledge and experience required to successfully fulfil the specific position within the Company. The selection of the jobholder takes place by assessing the candidate for a position against these specific job requirements. The score on the three elements (expertise, knowledge and experience) is balanced and leads to potential recruitment in the position. Once selected, fitness of a specific person for a function is continuously assessed against this job profile. The ongoing compliance with fitness requirements is monitored as part of the regular human resource cycle within Aegon. Regular formal assessments of performance against the requirements are part of this cycle and are documented for record keeping purposes. In the human resources cycle, performance management is an important element in which targets are set and the results are monitored to assess if the jobholder continues to meet both the specific job requirements and the fitness requirements.

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

**B.3.1 Risk management system**

**B.3.1.1 Aegon's Enterprise Risk Management framework**

Aegon's ERM framework is designed and applied to identify and manage potential events and risks that may affect Aegon. The aim is to identify and manage individual and aggregate risks within Aegon's risk tolerance in order to provide reasonable assurance regarding the achievement of Aegon's objectives. The ERM framework applies to all material businesses of Aegon for which it has operational control. Aegon's businesses are required to either adopt the Group level ERM framework directly, or tailor it to local needs, while meeting the requirements of the Group level ERM framework.

For Aegon, enterprise risk management involves:

Understanding the risks that Aegon faces;

Maintaining a company-wide ERM framework for identifying, measuring and managing all material risks to which Aegon is exposed;

Maintaining risk tolerances and supporting policies to limit exposure to a particular risk or combination of risks; and

Monitoring risk exposure and actively maintaining oversight of Aegon's overall risk and solvency positions. By setting certain pre-defined tolerances and adhering to policies that limit the overall risk to which the Company is exposed, Aegon is able to accept risk with the knowledge of potential returns and losses.

The ERM framework consists of various components, as shown below:

#### Risk strategy and risk tolerance

The formulation of the risk strategy starts with the notion that taking a risk should be based on serving a customer need. Next the competence of Aegon to manage the risk is assessed and Aegon's risk preferences are formulated, taking into account Aegon's risk capacity. The risk preferences eventually lead to a targeted risk profile that reflects the risks Aegon wants to keep on the balance sheet and which risks Aegon would like to avoid. Aegon's tolerance for risk is established in order to assist management in carrying out Aegon's strategy within the resources available to Aegon Group.

#### Risk identification and risk assessment

Aegon has identified a risk universe that captures all known material risks the Company is exposed to. An Emerging Risk process is in place to ensure on-going appropriateness of the risk universe and the risk management framework. In order to assess all risks, a consistent methodology for measuring risks is required. Aegon's methodology for this is documented in a manual and kept up-to-date. The risk metrics are embedded in Aegon's key reports and are used for decision making.

#### Risk response

Aegon distinguishes the following risk responses:

When the risk exposure is within the set risk tolerance, management can accept the risk; and

When exposure exceeds the risk tolerance of management or cost-benefit analysis supports further actions, management can decide to control, transfer or avoid the risk.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

34 System of governance **Risk management system including the Own Risk and Solvency Assessment**

Risk monitoring and reporting

Risks are monitored regularly and reported on a periodic basis, at least quarterly. The reports show the impact of key financial, underwriting and operational risk drivers on earnings and capital for the various risk types separately as well as on an aggregate level.

Risk exposures are compared with the limits as defined by Aegon's risk tolerance statements. Reporting also includes risk policy compliance and incident and compliance reporting. Finally, top risks derived from Aegon's strategy and the day-to-day business are discussed, as well as forward looking points for attention. Where necessary mitigating actions are taken and documented.

Risk control

A system of effective controls is needed to mitigate the risks identified. In Aegon's ERM framework risk control includes risk governance, internal control framework, risk policies, model validation, risk embedding, risk culture and compliance.

**B.3.1.2 Aegon's risk governance framework**

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

Clearly define roles and responsibilities, and risk reporting procedures for decision makers;

Institute a proper system of checks and balances;

Manage risk in line with the targeted risk profile; and

Facilitate risk diversification.

Aegon's risk management framework is represented across all levels of the organization, and Aegon has a comprehensive range of company-wide risk policies that detail specific operating guidelines and limits. Any (near) breach of policy limits triggers remedial action or heightened monitoring. Additional risk policies may be developed and implemented at a local level to cover situations specific to particular regions or business units.

Aegon's risk management governance structure has four basic layers, as shown below:

The Supervisory Board;

The Executive Board and the Management Board;

The Group Risk & Capital Committee (GRCC) and its sub-committees; and

The Regional Risk & Capital Committees.

1. Supervisory Board

The Supervisory Board is responsible for overseeing Aegon's Enterprise Risk Management (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 and Solvency II and compliance with Aegon's Group risk policies.

2. Executive Board and Management Board

Aegon's Executive Board has an overall responsibility for risk management. The Executive Board adopts the risk strategy, risk governance, risk tolerance and material changes in risk methodology and risk policies. The Group CRO has a standing invitation to attend Executive Board meetings and a direct reporting line to the Supervisory Board to discuss ERM and related matters. The Group CRO is a member of the Management Board.

The Executive Board is assisted by the Management Board. The Management Board 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 Aegon Group level risk policy limits;

The Pricing and Product Development Policy;

The introduction of new risk policies; and

Compliance with the ERM framework and policies.

The Executive Board and Management Board are supported by the Group Risk & Capital Committee.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



---

**Table of Contents**

35 System of governance **Risk management system including the Own Risk and Solvency Assessment**

3. Group Risk & Capital Committee (GRCC)

The GRCC is Aegon's top level risk committee. The Executive Board established the GRCC to facilitate proper capital and risk management. It is responsible for managing Aegon's balance sheet at a global level and is in charge of risk oversight, risk monitoring and risk management related decisions on behalf of the Executive Board. The GRCC focuses on managing Aegon's overall solvency position, while ensuring that risk-taking is within the risk tolerance statements and Aegon's Group Risk policies. The GRCC informs the Executive Board about any identified (near) breaches of overall tolerance levels, as well as any potential threats to the Company's solvency, liquidity or operations. The GRCC is comprised of the Group CFO, the Group CRO, the Head of Corporate Financial Center, the Global Chief Actuary, the CFOs and CROs of the Americas, the Netherlands, the United Kingdom, the CFOs of Asia and Aegon Asset Management and the Global Head of Financial Risk Management.

4. Regional Risk & Capital Committee (RCC)

Each of Aegon's reporting units has a Risk & Capital Committee (RCC). The role and responsibilities of the RCCs are set out in their respective charters, and are similar to those of the GRCC, but tailored to local circumstances. The regional RCCs and the GRCC interact on the topics relevant for Aegon Group, as determined by the respective charters and the ERM framework.

The GRCC has three sub-committees: the ERM framework, Accounting and Actuarial Committee (ERMAAC), the Non-Financial Risk Committee (NFRC) and the Model Validation Committee (MVC).

The ERM framework, Accounting and Actuarial Committee (ERMAAC)

The purpose of the ERMAAC is to assist the GRCC with accounting, actuarial and risk management framework setting, and maintenance across all balance sheets based on the various applicable standards (Solvency II and IFRS). Framework setting and maintenance includes policies, standards and guidelines across the Finance, Actuarial and Risk disciplines, methodologies and assumptions and the Solvency II PIM.

The Non-Financial Risk Committee (NFRC)

The NFRC is an advisory committee that exchanges information on non-financial risk matters and prepares decision making for the GRCC or other relevant decision making bodies, in line with the applicable governance requirements. The NFRC receives and reviews quarterly reports on non-financial risk exposure, including topics related to regulatory compliance and conduct.

The Model Validation Committee (MVC)

The MVC is responsible for approving all model validation reports within Aegon. The committee reports its independent opinions to the GRCC and Executive Board to provide information on model integrity and recommendations for further strengthening of models.

2016 review of risk committee structure

In 2016, the risk committee structure was re-assessed and restructured with the aim to further integrate governance for risk, actuarial and finance matters. The scope of the GRCC has been extended and representation of the Risk function was strengthened. The scope includes both financial and non-financial (operational) risks.

In addition, the Enterprise Risk Management Committee (ERMC) was replaced in 2016 by the ERM framework, Accounting and Actuarial Committee (ERMAAC), and its membership was also broadened.

#### Group-wide risk function

In addition to the four basic governance layers described above, Aegon has an established group-wide risk function. It is the objective of the Risk Management function to ensure the continuity of the Company through safeguarding the value of existing business, protecting Aegon's balance sheet and reputation, and through supporting the creation of sustainable value for all stakeholders.

In general, the Risk Management function supports the Executive Board, Management Board, Supervisory Board and business unit's Boards in ensuring that the Company reviews, assesses, understands and manages Aegon's risk profile. Through oversight, the Risk Management function ensures the group-wide risk profile is managed in line with Aegon's risk tolerances, and stakeholder expectations are managed under both normal business conditions and extreme events.

To realize the objective of the Risk Management function, the following aspects are important:

Advising on risk-related matters including risk tolerance, risk governance, risk methodology and risk policies;

Supporting and facilitating the development, incorporation, maintenance and embedding of the Enterprise Risk Management (ERM) framework and sound practices; and

Challenging, monitoring and overseeing of the implementation and effectiveness of ERM practices.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

36 System of governance **Risk management system including the Own Risk and Solvency Assessment**

With respect to the aspects outlined above, amongst others the following main roles and responsibilities can be distinguished:

Developing and maintaining the ERM framework for identifying, measuring and managing all material risks the Company is exposed to and protecting Aegon's reputation;

Developing and maintaining Aegon's risk methodology;

Monitoring the ERM framework and overseeing compliance with the Aegon Group wide risk governance requirements, risk strategy and risk tolerances, risk policies and risk methodology;

Supporting the businesses in implementing the ERM framework, risk methodology and standards of practice where needed;

Sharing of good practices and working together on relevant case studies and external standards in order to develop, adopt and maintain standards of practice throughout Aegon;

Providing subject matter expertise and overseeing critical business initiatives to strengthen risk management activities, to improve the risk profile and to resolve the impact of risk events and control deficiencies;

Ensuring appropriate risk management information is prepared for use by the GRCC, the Management Board, the Executive Board and the Supervisory Board; and

Embedding robust oversight and strong risk management culture and processes across Aegon.

Aegon's risk management staff structure is fully integrated. Business unit CROs have either a direct reporting line to the Group CRO or one of the regional CROs that reports directly to the Group CRO.

Lines of defense

Aegon'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. The Company's first line of defense, including 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 the Risk Management function 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 systems of internal control, risk management and

governance.

#### Model validation process

Aegon has group-wide requirements in place on model validation. The requirements are covered in the Model Validation Framework, including the Model Validation and Model Change policies. The Model Validation function is part of the Risk Management function, and is independent from model owners and business users. The model validation reports are approved in the independent Model Validation Committee (MVC).

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.

#### Solvency II PIM governance

The governance of Aegon's Solvency II Partial Internal Model (PIM) is fully integrated in Aegon's risk management system and governance structure. Aegon's methodology for assessing risks includes the Solvency II PIM and is used to measure and aggregate risks and to calculate the Solvency Capital Ratio.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### **37 System of governance Risk management system including the Own Risk and Solvency Assessment**

The Risk Management function is responsible for design of the Solvency II PIM. All Solvency II PIM models have been independently validated. After passing the initial validation, models are part of the regular validation program, in which models are subject to validation on a rolling basis to secure ongoing appropriateness.

In addition to the validation of individual models, the Solvency II PIM is also subject to a top-down analysis as part of the overarching validation. The overall purpose of the overarching validation is to provide an independent assessment of the overall appropriateness of the Solvency II PIM as adopted and used within Aegon. The overarching validation of the Solvency II PIM is updated annually. The last overarching validation was completed at the end of 2016, with a positive conclusion.

In 2016, the Model Validation Framework was further updated to include recommendations from the College of Supervisors following the approval of the Solvency II PIM. Material governance updates to the Model Validation Policy included:

Explicit mentioning of independent Audit assurance as part of the model change governance controls; and

Adding the requirement that the overarching validation on the Solvency II PIM is updated annually. Material governance updates to the Model Change Policy included:

The addition of an appendix that provides an overview of Solvency II PIM methodology changes that will be considered as major Solvency II PIM model changes, requiring supervisory approval before implementation; and

The method of aggregation of minor model changes to evaluate whether they should be treated as a major model change.

The Model Validation Committee has been formalized as an independent subcommittee of the GRCC and its charter has been approved by the Executive Board.

### **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) Aegon's business strategy, b) the risks to which the business is exposed and c) Aegon's capital levels. It assesses the financial security of the business given the risks Aegon is exposed to. 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**

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

38 System of governance **Risk management system including the Own Risk and Solvency Assessment**

The ORSA is integrated within the Company through Aegon'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 to indicate different economic assumptions. 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 Aegon's strategic objectives. The outcomes of the process inform management, enabling them to determine appropriate mitigating actions and define capital and solvency needs.

A Risk and Capital assessment takes into account the proposed strategy and the acceptable level of the associated risks in pursuit of that strategy. Aegon's risk management process and ORSA cover Aegon's risk universe and also give explicit attention to strategic risks, emerging risks and top risk themes.

The ORSA process is iterative and subject to on-going monitoring. The Budget/MTP and ORSA Steering Committee is responsible for the direction, integration of the business strategy and key decision making in respect of the Budget/MTP and ORSA process. The committee oversees the delivery of the Budget/MTP and ORSA and acts as an escalation point for decisions, risks or issues up to the Management Board. It approves all key deliverables throughout the process. The ORSA process is also used for decision making and responding to changes impacting the business.

Use of the ORSA process relates to actions recommended to the Board arising from the ORSA process.

All of the above is evidenced and documented in Aegon's annual ORSA report. More frequent, quarterly reports are produced internally that document the ongoing Risk and Capital assessments of the ORSA process throughout the year. The outcomes of these reports contribute to the annual ORSA report.

The ORSA report is targeted primarily at the Management Board, Executive Board and Group Risk & Capital Committee as key approval bodies. However, the concepts of ORSA are business wide and all senior management engage with the ORSA process in developing business plans that are aligned with Aegon's overall risk and capital strategy. The Executive Board approves and signs off the annual (and any non-regular) ORSA reports.

**B.3.2.2 ORSA frequency**

The ORSA is performed annually or more often if deemed necessary. 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 Executive Board is responsible for the execution of a non-regular Aegon Group ORSA.

**B.3.2.3 Aegon's own solvency needs**

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

Financial strength;

Continuity;

Culture; and

Risk balance.

The **financial strength** statements are integrated within the Capital Management Policy. The primary measure of group capital adequacy that Aegon manages is Aegon Group's SCR ratio. Aegon's Capital Management Policy sets the targeted capitalization level for Aegon Group. Capital management zones are set to provide adequate protection against a breach of the set risk tolerance. The use of the capital management zones is instrumental to trigger appropriate and timely adjustments to capital plans and appropriate and timely management actions with increasing intensity if necessary. For more details about the Capital Management Policy and the capital management zones, please refer to section E. Capital management.

Capitalization is also featured in the **continuity** related risk tolerance statements. Aegon has identified extreme event scenarios for testing the continuity of the Company given its current business and risk profile. The ability to meet the obligations to policyholders under the identified extreme event scenarios is measured by testing whether regulatory minimum capital requirements continue to be met. For more information about the Solvency Capital Requirement and Minimum Capital Requirement, reference is made to section E.2 Solvency capital requirement. A breach of any of the continuity risk tolerances needs to be followed by a review of business plans and identification of management actions, in order to successfully pass the subsequent risk tolerance testing.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



---

## **Table of Contents**

### 39 System of governance **Internal control system**

Capitalization is not an explicit factor in the risk **culture** tolerance statements, which link risk management to the organization culture and sets tolerances for operational risk events, ensuring business integrity and operational resilience.

Capitalization is a relevant factor in the **risk balance** related risk tolerance statements. The targeted risk balance or risk profile is the outcome of Aegon's risk strategy setting process. This process assesses by risk type whether the risk serves a customer need, whether Aegon has the competence to manage the risk, if Aegon has a preference for the risk and if the risk fits within Aegon's risk taking capacity. The risk taking capacity is determined by the available capital. Ultimately, the risk taking capacity is allocated to specific risks through risk limits in line with the Company's risk preferences.

#### **B.4 Internal control system**

Aegon has developed an internal control system that serves to facilitate its compliance with applicable laws, regulation and administrative processes and the effectiveness and efficiency of operations in view of its objectives, 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 and is considered wider than the Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission, (COSO, 2013) on which criteria the internal control system is based. The internal control system has been developed in accordance with regulations that Aegon must comply with globally (i.e. Sarbanes Oxley 404 and Solvency II). Aegon's control activities aim to assure an adequate level of internal control over Aegon's objectives and in particular compliance, operational and financial reporting objectives including the production of Solvency II and IFRS numbers. 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.

As part of the internal control system, a financial reporting internal control framework has been established supported by Aegon's Group Sarbanes Oxley methodology. For more information about Aegon's internal control framework, reference is made to section B.4.2 OCRM risk framework. Furthermore, as required by Solvency II, Aegon's internal control framework includes a compliance function, which is described in section B.4.3.

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

##### **B.4.1 General principles of Aegon's internal control system**

The general principles of Aegon's internal control system apply to all functional areas or departments. These principles are:

All employees must comply with the Code of Conduct. The Code of Conduct states that all employees will conduct their work in an ethical manner;

If employees become aware or observe fraud, questionable accounting practices, or other unethical behavior, they should report it to a member of management, human resources or to their local ethics hotline;

Employees are instructed regarding the sensitivity and confidentiality of the Company and policyholder information or client information;

All departments should develop a system of internal control to ensure that the assets and records of the Company are adequately protected from loss, theft, alteration or unauthorized access;

All departments embed and maintain adequate segregation of duties. Where adequate segregation cannot be achieved, other risk mitigating controls are designed, implemented, effectively performed and results documented;

All departments have business continuity plans in place that are periodically updated; and

Records of the Company are maintained in compliance with record retention policies and local regulatory requirements.

#### **B.4.2 OCRM risk framework**

A key element of Aegon's internal control system is to facilitate action planning and embed continuous improvement regarding the internal control environment throughout the organization. From an OCRM perspective and given the different nature of operational risks vis-à-vis financial and underwriting risks, the OCRM risk framework is considered integral part of the internal control system to facilitate its compliance with applicable laws, regulation and administrative processes and the effectiveness and efficiency of operations in view of its objectives. The ORCM framework is part of the more comprehensive ERM Framework, which is not limited to operational risk. From that perspective the Operational & Conduct Risk Management (OCRM) function applies building blocks of the ERM framework. The figure below provides a graphical illustration of this OCRM risk framework.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**40 System of governance **Internal control system****Aegon s OCRM Risk Framework**

**Process Mapping** encompasses the identification of significant processes and their owners. Process owners are responsible for the effective execution of risk management activities within their processes.

**A Risk (Self) Assessment (RSA)** is achieved through periodic risk control self-assessments (RCSAs). These are performed to understand business objectives, identify operational risks for realizing these objectives, assess the adequacy of the risk mitigating factors or controls in place given the identified risks, and assess the impact and likelihood of losses (including financial reporting errors). These assessments contribute to the understanding of all known risks for which key control activities can be determined to (partly) mitigate those risks. This risk identification is supported by a value chain contributing to the completeness of the risk assessment and the identification of handover points.

Scenario Analysis (SA) is the process of developing scenarios along structured dimensions, using opinions from subject matter experts and business leaders, and deriving reasoned risk assessment of the severity and frequency, thereby enabling business improvements, enhanced risk management and improved measurement of required operational risk capital.

**Risk Monitoring** is accomplished through the effective design and implementation of Key Risk Indicators (KRIs) or other monitoring mechanisms that inform about current risk and control profiles. Relative to financial reporting, management actively monitors processes and key controls to ensure that they are designed and operating effectively. Management s active monitoring of key controls, KRIs, or other measurements along with identifying and implementing related action plans reflects the proactive nature of risk management efforts. Appropriate metrics or measurements should be identified to the extent that they are indicators of potential risk or control deficiencies.

**Risk Validation** is obtained through the identification, collection and analysis of operational loss events, or through validating the effectiveness of controls that mitigate risks. The operational loss events are collected and analyzed in a centralized loss database (LDB). To stimulate learning within and as an organization, root causes of operational loss events or control deficiencies are analyzed and shared. By sharing the root causes, Aegon facilitates more effective risk management and continuous process improvement. The number of loss events or control deficiencies confirm that the risk assessments are effective, and that the KRIs are effective to monitor or predict risk.

**Risk Response & Action Plans** follow the risk identification, monitoring and validation process. Risk response is the decision-making process to accept, control, transfer or avoid risks. Action plans are developed and activities performed to achieve the desired risk mitigation. Action plans arise from losses incurred, risk assessments performed, key risk indicators identified and control testing results.

**Risk Reporting** covers all aspects of operational risk management, validating and demonstrating the importance of risk management to Aegon s operations. Reporting of (key) risks, loss events, control weaknesses and trends in KRIs provides a mechanism for taking appropriate and adequate actions on a timely basis, enhancing the decision making process and providing feedback that gauges the success for the OCRM program as a whole.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

41 System of governance **Internal control system**

**B.4.3 Compliance function**

**B.4.3.1 Introduction**

For Aegon, compliance is based on Integrity risk which is defined as the threat to the reputation of, or the current or future threat to the capital or the results of Aegon due to insufficient compliance with the rules that are in force under or pursuant to the law and regulations, internal company rules and policies governing its operations and established good business practices.

The business is supported by the Regulatory Compliance (RC) function at Aegon Group and business unit-level with:

Identifying new and revised regulations, e.g. establishing compliance universe;

Identifying and assessing integrity risks stemming from these regulations;

Advising how to comply with new changes and existing regulations, e.g. risk mitigation;

Compliance policy setting and implementation, e.g. risk mitigation;

Investigating compliance breaches, e.g. incident management; and

Periodic and ad hoc reporting on regulatory developments, and compliance and integrity incidents.

**B.4.3.2 Aegon Group Compliance function**

At Aegon Group level, the key function holder for Compliance assurance with Solvency II requirements is the Head of Operational and Conduct Risk. This structure is mirrored as much as possible locally, in particular in Solvency II entities. The regulatory compliance function supports the Solvency II Compliance Function holder in meeting its obligations.

**B.4.3.3 Objective of the regulatory compliance function**

The objective of the regulatory compliance function is to support the Executive Board, Management Board and business unit s Management Boards in ensuring that Aegon acts in line with relevant legal, regulatory requirements and Aegon Group risk tolerance. In this role, the regulatory compliance function will promote and foster compliance with laws and regulations. Conducted effectively, strong regulatory compliance enables the organization to act with integrity, and provide optimal service delivery to Aegon s clients.

#### **B.4.3.4 Activities**

The regulatory compliance function is responsible for the identification and assessment of regulatory developments and associated integrity risks, the management and implementation of programs to respond to regulatory developments (risk mitigation) and first line monitoring, and reporting of compliance with existing regulations and internal policies to ensure that Aegon operates within its integrity risk tolerance.

The following thematic regulatory areas fall within the scope of the regulatory compliance function:

Market Conduct Regulation (Treating Customers Fairly);

Prudential Financial Regulation (Solvency II, et al.);

Organizational Conduct Regulation (Market Abuse, Privacy, Anti-Trust and Competition);

Personal Conduct Regulation (Conflict of Interest, Fitness & Propriety); Personal Conduct Regulation (Conflict of Interest, Fitness & Propriety);

Customer Conduct Regulation (Sanctions); and

Financial Crime Regulation (Anti-Money Laundering, Counter Terrorist Financing, Fraud, Anti-Bribery and Corruption).

#### **B.4.3.5 Role of Management**

Regulatory compliance is a global function within Aegon. The Executive Board, together with the Management Board, is responsible for the effectiveness of the Aegon organization as a whole, at all times. They are responsible for the establishment of an effective regulatory compliance function that meets the requirements set out in the function's Charter.

#### **B.4.3.6 Responsibilities and roles of the regulatory compliance function**

Regulatory compliance acts as a gatekeeper within the organization to identify regulatory requirements, and, working with business unit management, ensure these regulations are complied with. The regulatory compliance function operates in accordance with Aegon policies and procedures specific to the function. In addition, the function is designed to ensure compliance with applicable regulatory and legal requirements applicable to the business, supported by the relevant external professional or good market practice standards.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

42 System of governance **Internal control system**

In realizing the objective of the regulatory compliance function, the following aspects are important:

**Advise** the Executive Board and Management Board on:

The (potential) impact of regulatory developments on Aegon;

The development of a regulatory compliance framework that encompasses the relevant regulatory requirements and risks pertaining to Aegon and serves as a standard for all entities of Aegon; and

The status of Aegon's compliance with laws, regulations and appropriate Aegon Group's policies.

**Support and facilitate** the Executive Board, Management Board, business unit Management Boards and the business in the implementation, maintenance and embedding of the regulatory compliance framework.

**Monitor** on behalf of the Executive Board, Management Board and business unit Management Boards (in cooperation with local teams) the implementation and effectiveness of the regulatory compliance framework.

**B.4.3.7 Responsibilities and role of the OCRM function**

The OCRM function is the Solvency II key function holder for Compliance, executes its duties objectively and independently in all parts of Aegon. The OCRM function operates in accordance with law and regulations, Aegon policies and procedures supported by relevant external professional or good/market practices standards.

In realizing the objective of the OCRM function, the following roles and objectives (including certain compliance-related objectives) which are set out in the OCRM function charter are important:

Advise:

Keep well informed of good practices, regulatory and industry standards and trends in the fields of operational & conduct risk management, and determine relevancy and the impact on Aegon; and

Advise on the development of the Operational & Conduct Risk framework, and the development of improvements and new initiatives that encompasses the relevant, material risks pertaining to the Aegon organization and serves as a standard for all business units within Aegon.

Support and facilitate:

Provide challenge and oversight of the regulatory compliance framework, monitoring the effectiveness of implementation on all elements (including methodology, policies, programs) in managing regulatory risks, and report to the Management Board, the Executive Board and senior management;

Maintain and support the implementation and embedding of an appropriate operational & conduct risk strategy and framework, including methodologies, risk & internal control systems, (Aegon Group) policies, guidelines and programs, and provide expertise where needed;

Support identification and assessment of material risks by facilitating Risk Control Self-Assessment sessions where required and not already conducted by business units' OCRM functions, both on a strategic level and an operational level, reviewing and challenging business strategy and business developments in relation to operational, conduct and regulatory risks;

Support assessment of (aggregated) risk exposures and management of risks (by identifying mitigating measures such as key controls as performed by the business);

Lead and support the sharing of best practice and key risk information across Aegon;

Implement, maintain and embed an appropriate Operational Risk Capital (ORC) model and coordinate the global ORC process including scenario analysis;

Develop and maintain a curriculum to educate all staff, enhance awareness and lead training regarding operational and conduct risk management-related responsibilities and accountabilities;

Ensure pro-active and effective communication with regulators, including but not limited to the Dutch Central Bank, on the area of Operational & Conduct Risk Management supported by the relevant regulatory compliance function; and

Lead the development and reporting of appropriate OCRM information across Aegon.

Challenge:

Report to the Management Board and senior management on the actual operational and conduct risk profile compared with the risk tolerance levels. This includes monitoring of the effectiveness of the risk management and internal control framework related to operational & conduct risks, and of the effectiveness of the performance management and remuneration processes;

Detect potential violations or deficiencies in compliance with Aegon's OCRM framework, investigate incidents, and help senior management to address these issues and develop remediation plans as appropriate;



Ensure that serious incidents are reported to the external regulator adequately and in a timely manner; and

Provide oversight and reporting to the Management Board and senior management on the effectiveness of remediation measures including action plan monitoring.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

43 System of governance **Internal Audit function**

**B.5 Internal Audit function**

**B.5.1 Internal Audit function**

Aegon's Internal Audit function (Internal Audit) assists the Executive Board, the Supervisory Board and Senior Management in protecting Aegon'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.

The Aegon Group Chief Audit Executive reports functionally and administratively to Aegon's Group Chief Executive Officer and the Audit Committee of the Supervisory Board. Internal Audit's main tasks and responsibilities are to:

Prepare and execute a risk based audit plan that is approved (semi-)annually by the Risk and Audit Committees of the business units, the Audit Committee of the Supervisory Board and the Executive 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 management and the Audit Committee, 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 freely and objectively in accordance with the Institute of Internal Auditors International Standards for the Professional Practices of Internal Audit, in addition to Aegon policies and procedures. Internal Audit's policies also align with the local professional auditing standards.

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 business units' Chief Audit Executives verify as to whether any resource not employed by Internal Audit departments (for example contractors or other externally hired resources) possesses the necessary knowledge, skills

and other competencies to execute the duties of Internal Audit. These resources are appropriately assigned to audit teams or otherwise assist the internal auditors, and comply with the principles of the Aegon Internal Audit Charter.

Resources employed within the Internal Audit function do not execute any operational duties for Aegon 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, the business units' Chief Audit Executives have a reporting line to the Aegon Group Chief Audit Executive, as well as to their respective business units' Risk and Audit Committee and business units' Chief Executive Officer.

## **B.6 Actuarial function**

### **Global functions**

The Executive Board has defined the Global Chief Actuary function (first line of defense in Finance) and the Underwriting Risk Management (URM) function (second line of defense in Risk). Both functions are present at Aegon Group level and at business unit level. Aegon has decided to allocate both Global functions to one person at Group level.

**Chief Actuary function** is to advise, to support, to facilitate, to monitor and to challenge on matters relating to insurance liabilities, pricing and product development, reinsurance use, underwriting practices, required capital assessment and maintenance of a strong risk culture.

**URM function** is to monitor and to challenge on matters relating to actuarial risk analysis, risk policy and limit framework setting, risk management and compliance, assessment of required capital methodology and modelling, in addition to related risk controls. Furthermore, the role of the Head of URM is to set frameworks in which the Chief Actuary operates, and to perform independent peer reviews of the Actuarial Function reports.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### 44 System of governance **Outsourcing**

The Chief Actuary function is a sub-function of the Finance function falling under the responsibility of the CFO. The URM function is a sub-function of the Risk Management function falling under the responsibility of the CRO.

#### **Objectives of the functions**

The objectives of the actuarial functions 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 senior management 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 functions objectives contain framework/policy setting, monitoring compliance with respect to actuarial risks and supporting management 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 local actuarial sign-off on the adequacy and reliability of technical provisions (also referred to as reserves).

The Chief Actuary function reports periodically about the adequacy and reliability of the technical provisions (AFR), 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 Chief Actuary function is responsible for the Solvency II Actuarial Function report except in the case of operating insurance entities in the Netherlands, where the regulatory framework requires a second line Actuarial Function Holder to provide and sign off the Solvency II Actuarial Function report.

#### **Reporting**

The URM function reports periodically about peer reviews of actuarial assumptions and Actuarial Function reports (except for insurance companies operating in the Netherlands), actuarial/underwriting risks versus risk limits, compliance with pricing & product development policies, reinsurance counterparty risk exposure and policy compliance, actuarial risk framework developments, and relevant risk controls.

### **B.7 Outsourcing**

#### **B.7.1 External outsourcing arrangements**

External outsourcing arrangements are arrangements of any form between Aegon and a supplier, in which the supplier performs a function or an activity, whether directly or by sub-outsourcing, which could otherwise be performed by the Company itself.

Outsourcing risk is considered material under Solvency II and by Aegon when a function or activity is a critical or important function or activity on the basis of whether this function or activity is essential to the operation of the

undertaking as it would be unable to deliver its services to policyholders without the function or activity. Aegon defines the materiality of the outsourcing party based on a vendor classification matrix, which is included in Aegon's Outsourcing & Supplier Risk Policy .

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 outsourcing arrangements, Aegon has an 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. In case arrangements are identified as outsourcing arrangements that can result in a material risk (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 these activities are appropriately managed to ensure that Aegon is able to meet both its financial and service obligations.

### **B.7.2 Intra-group outsourcing arrangements**

Aegon has material intra-group outsourcing agreements. At business unit level, Aegon makes use of several ancillary service companies. These companies perform a range of services for Aegon entities. These ancillary service companies are fully owned by Aegon and in most cases (hierarchical) managed by the local business units. Aegon's insurance entities have outsourced their asset management to Aegon Asset Management. Aegon Asset Management manages investments for Aegon's insurance companies based on investment mandates.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

45 System of governance **Any other information**

The Outsourcing & Supplier Risk Policy also covers the intra-group outsourcing. For intra-group outsourcing (i.e. the supplier is a legal entity fully owned by Aegon) the examination of the vendor may be less detailed, provided that the business unit has greater familiarity with the vendor, and if the business unit has sufficient control over, or can influence the actions of, the vendor. However, for intra-group outsourcing agreements, Aegon requires a written agreement, including a service level agreement (SLA) (if applicable), stipulating duties and responsibilities of both parties.

**B.7.3 Material intra-group outsourcing arrangements**

The material intra-group outsourcing arrangements at Aegon Group level are:

An intra-group agreement between Transamerica Life Insurance Company and Aegon N.V., signed on September 1, 2010. The different services provided by Transamerica Life Insurance Company relate to information and technology services mutually agreed upon, which may be modified from time to time;

The business unit Aegon Asset Management manages a large part of the assets of Aegon's insurance companies, including Transamerica. The contracting entities Aegon Investment Management B.V. (AIM), Aegon USA Investment Management, LLC (AUIM) and Aegon USA Realty Advisors, LLC (AURA) are part of this Unit; and

Aegon Derivatives. The purpose of Aegon Derivatives is to facilitate the use of derivatives by Aegon Group companies by among other things: mitigating counterparty risk related to the use of derivatives through netting and collateral management, and monitoring regulatory and legal developments. Pursuant to mandate agreements with certain Aegon Group entities, Aegon Derivatives enters into derivatives transactions with third parties. Aegon Derivatives does so in its own name, but for the account and risk of internal clients.

**B.8 Any other information**

**B.8.1 Assessment of adequacy**

Corporate governance at Aegon is determined by the Management Board (including the Executive Board) and Supervisory Board of Aegon Group. Regulations and (inter)national guidelines are taken into account and the roles and responsibilities of the Management Board 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 Aegon employees are committed to the Code of Conduct, which consists of Aegon's purpose, core values, business principles and rules of conduct. The Code of Conduct also addresses governance aspects and reflects compliancy with laws and regulations, information sharing and the identification and management of risks in a prudent way (for instance internal guidelines and policies).

Aegon's risk management system is an important part of Aegon's system of governance. Both its risk governance framework, as described in section B.3.1.2, and its ERM framework, as described in section B.3.1.1, are designed to adequately manage risks according to the nature, scale and complexity of the risks inherent in Aegon's business. Where appropriate, the risk governance structure is updated to meet changing demands.

As mentioned in section B.3.1.2, the risk committee structure was re-assessed and restructured in 2016, and the relevant charters were updated. Escalation thresholds for decision making are linked to the scale and impact of the risks to the organization. Risk tolerances, policies, methodologies and models are regularly reviewed to ensure they remain appropriate and up-to-date. Aegon's Solvency II PIM is fully integrated into Aegon's risk management system and governance structure, and the model validation function regularly assesses the Solvency II PIM and underlying components. The model integrity is assessed, including performance of the model and ongoing appropriateness of its specifications.

The conclusion of the latest assessment was that the Solvency II PIM, including underlying internal models, standard formula shocks, and aggregation methodology, is considered fit for purpose for use within SCR calculations. Aegon's risk management is continuously being improved to ensure capabilities remain at a high level in changing conditions. In this context, ERM maturity assessments are conducted throughout the group to inform the business unit as to where they are on the ERM maturity ladder, and more specifically as to whether the actual maturity levels are consistent with target maturity levels as defined by management based on the size and complexity of the business unit and the related nature, scale and complexity of risks. The assessment results are also used as input for identifying and prioritizing ERM areas for further development in the business units.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

46 Risk profile **General**

**C. Risk profile**

**General**

This section provides general information regarding Aegon's risk profile.

**Introduction to Aegon's risk profile**

As an insurance group, Aegon accepts and manages risk for the benefit of its customers and other stakeholders. The pre-diversified capital requirement, categorized as prescribed by EIOPA, are as follows:

As a result, the Company is exposed to a range of underwriting, market, credit, liquidity and operational risks. (Spread, migration and default risk are for the purpose of this chapter categorized within credit risk). The last category includes capital requirements for entities under Deduction & Aggregation on a (provisional) equivalence or on Solvency II basis; where US Life insurance entities, Bermuda and Japan are based on (provisionally) equivalence and China, India and Turkey are on Solvency II basis. In addition, the capital requirements of Other Financial Sector entities (excluding Aegon Bank) are also part of this category. Aegon's internal categorization is different and represents better the risks and how Aegon manages its risks. Reference is made to section E.2.1 Solvency capital requirement for more detail about the categorization.

When managing its day-to-day risk exposures, Aegon includes the D&A businesses in its analysis and mitigation of underwriting risk, market risk, credit risk, liquidity risk and operational risk. Aegon'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. Risk management and controls systems are designed to be applied consistently across the Group.

Aegon's risk strategy provides direction for the targeted Aegon risk profile while supporting Aegon's business strategy. The targeted risk profile is determined by customer needs, Aegon's competence to manage the risk, the preference of Aegon for the risk, and whether there is sufficient capacity to take the risk. Aegon currently targets an equal balance between financial market and credit risks and underwriting risks. The targeted risk profile is set at Aegon Group level, and developed in more detail within the subsidiaries where insurance business is written.

To manage its risk exposure, Aegon has risk policies in place. Many of these policies are group-wide while others are adapted to the situation of local businesses. As mentioned in B.3.1.2 Risk governance framework, Group level policies limit the Group's exposure to major risks such as equity, interest rates, credit, and currency. The limits in these policies in aggregate remain within the Group's overall tolerance for risk and the Group's financial resources.

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



Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**47 Risk profile **Prudent person principle**

In addition to the targeted risk profile, risk tolerances and limits are established to ensure that Aegon 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. Aegon has established a number of risk criteria and tolerances as part of its risk strategy, including financial strength, continuity, culture and risk balance.

Aegon uses sophisticated techniques to measure and mitigate risks associated with options and guarantees that are complex and related to both underwriting and market risk. Risk mitigation techniques that are used to reduce risk can also result in the introduction of new smaller risks. For example, using derivatives to hedge market risk can significantly reduce market risk but also introduce credit or liquidity risk. Complex or dynamic hedges also introduce new operational risks. Overall the impact is a significant reduction in risk retained despite the small increase to exposure in terms of these risk types.

Sensitivity and scenario analysis is utilized to test the overall financial strength of the business and the exposure to specified risks. Sensitivities and scenario analysis is a core part of the risk framework and enable the business to measure, monitor and manage risk exposures at any time. For EEA legal entities the method and assumptions used rely primarily on the Partial Internal Model where applicable, and Standard Formula for the rest. For non-EEA legal entities the methods and assumptions are based on local regulatory requirements. The scenarios and assumptions used are reviewed regularly and updated as necessary. Aegon assumes within the sensitivity analysis 100% recoverability of possible DTA on own funds in jurisdictions subject to Solvency II. Jurisdictions deemed provisionally equivalent apply local solvency rules when determining DTA admissibility which may result in less than 100% recoverability. Assumptions underlying Aegon's factor for the loss absorbing capacity of deferred taxes jurisdictions subject to Solvency II will be reviewed following new guidance from the Dutch Central Bank issued in February 2017. At December 31, 2016, the factor of LAC-DT is assumed 75% for Aegon the Netherlands.

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 Aegon's Solvency ratio.

In addition, it does 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 Aegon's system of governance, and is applicable for Underwriting risk, Market risk and Credit risk.

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

The investment mandates section of the Standard of Practice paper ensures that the prudent person principles are satisfied. The risks on the investment side are reported in Risk Reporting and more detailed in Reporting done 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 are avoided by testing extreme scenarios in the Budget/MTP process and by setting single counterparty limits in the Group 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;

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents****48 Risk profile Off-balance positions and special purpose vehicles**

The Securities Lending and Repo Policy ensures a consistent standard for Securities Lending and Repurchase (Repo) programs within the Aegon Group. This Policy sets out the minimum required processes and documentation standards that must be in place for any unit to operate in these instruments; and

The Reinsurance Use Policy establishes the process with which reinsurance use is conducted at 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**

This section provides information regarding Aegon's risk exposure arising from off-balance sheet positions and the transfer of risk to special purpose vehicles. The off-balance sheet positions at the end of 2016, which consist of other commitments and contingencies and contractual obligations, are disclosed including a description of the risk exposure arising from them. Aegon has no exposure to special purpose vehicles.

**Other commitments and contingencies**

As of December 31, 2016, guarantees amounted to EUR 682 million and include those guarantees associated with the sale of investments in low-income housing tax credit partnerships in the United States. Standby letters of credit amounts reflected above are the liquidity commitment notional amounts. In addition to the guarantees shown in the table, guarantees have been given for fulfillment of contractual obligations such as investment mandates related to investment funds.

**Other commitments and contingencies**

Amounts in EUR millions	2016
Guarantees	682
Standby letters of credit	29
Share of contingent liabilities incurred in relation to interests in joint ventures	40
Other guarantees	18
Other commitments and contingent liabilities	12

**Contractual obligations**

Transamerica Life Insurance Company, an indirect US life insurance subsidiary of Aegon N.V. has a net worth maintenance agreement with its subsidiary Transamerica Life (Bermuda) Ltd. to provide capital sufficient for Transamerica Life (Bermuda) Ltd. to maintain a S&P AA financial strength rating and to comply with the requirements of the countries in which its branches are located.

Transamerica Corporation, a wholly-owned subsidiary of Aegon N.V., has provided a parental guarantee to TLIC Riverwood Reinsurance, Inc. (TRRI), an affiliated captive reinsurer, for the cash payments required fulfilling reinsurance payments to Transamerica Life Insurance Company, to the extent that the assets in the captive (TRRI) are

not sufficient to cover reinsurance obligations. As of December 31, 2016, this amounted to EUR 2,002 million.

Aegon N.V. entered in 2016 into a contingent capital letter for an amount of JPY 6 billion (EUR 49 million) to support its joint venture Aegon Sony Life Insurance Company in meeting local statutory requirements.

Aegon N.V. has guaranteed and is severally liable for the following:

Due and punctual payment of payables due under letter of credit agreements applied for by Aegon N.V. as co-applicant with its captive insurance companies that are subsidiaries of Transamerica Corporation and Commonwealth General Corporation. On December 31, 2016, the letter of credit arrangements utilized by captives to provide collateral to affiliates amounted to EUR 3,720 million; as of that date no amounts had been drawn, or were due, under these facilities. Other letter of credit arrangements for subsidiaries amounted to EUR 104 million; as of that date no amounts had been drawn, or were due, under these facilities;

Due and punctual payment of payables due under letter of credit agreements or guarantees provided for subsidiaries of Transamerica Corporation on December 31, 2016, amounted to EUR 3,563 million. As of that date, no amounts had been drawn, or were due, under letter of credit facilities. The guarantees partly related to debt amounted to EUR 1,505 million;

Due and punctual payment of payables by the consolidated group companies Transamerica Corporation, Aegon Funding Company LLC and Commonwealth General Corporation with respect to bonds, capital trust pass-through securities and notes issued under commercial paper programs amounted to EUR 633 million; and

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

49 Risk profile **Underwriting risk**

Due and punctual payment of any amounts owed to third parties by the consolidated group company Aegon Derivatives N.V. in connection with derivative transactions. Aegon Derivatives N.V. only enters into derivative transactions with counterparties with which ISDA master netting agreements, including collateral support annex agreements, have been agreed. Net (credit) exposure on derivative transactions with these counterparties was therefore limited as of December 31, 2016.

**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 behavior 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. The Underwriting risk component of the pre-diversified SCR is as follows:

Underwriting risk can be broken down into five distinct risk types: mortality risk, morbidity risk, policyholder behavior risk, property & casualty risk and expense risk. These five risk types are relevant across many of Aegon's businesses and are detailed hereafter.

**Mortality/longevity risk**

Mortality risk arises from economic losses due to mortality levels deviating from expectation (when mortality is lower than expected, this is referred to as longevity). 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. Aegon is exposed to the risk that the best estimate assumptions are inaccurate.

From Aegon's perspective, mortality risk translates into increased policyholder benefits.

In Aegon's life insurance business (i.e. term assurance and other death protection products), mortality risk is the risk that mortality is higher than expected; and

In Aegon's immediate annuity business (i.e. annuity portfolios, survivorship pensions) and Long Term Care (providing living accommodation for people with a chronic illness or disability), mortality risk is the risk that mortality is lower than expected. This is referred to as longevity risk, as Aegon is exposed to an increase in life expectancy.

Material changes over the reporting period

The sale of the majority of the annuity business within Scottish Equitable plc in 2016 reduced the exposure to Longevity risk arising from this business.

**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.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

50 Risk profile **Underwriting risk**

**Policyholder behavior risk**

Policyholder behavior risk arises from economic losses due to policyholder behavior deviating from expectation. Insurance contracts typically provide policyholders with a variety of options that they may or may not exercise. Policyholder behavior risk is the risk that actual policyholder behavior 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.

**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.

In practice, Aegon's overall exposure to P&C-related risk is relatively small. Examples of property & casualty risks within Aegon are:

Motor, which includes automobile property damage and third-party liability coverage;

Commercial property: commercial structures and contents;

Marine, aviation and transport;

Liability: public/third-party liability; and

Homeowners: buildings and contents coverage.

**Expense risk**

Expense risk is the risk that the expenses arising from servicing (re)insurance 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 Aegon has within their businesses will be subject to expense risk if not contractually defined. These types of expenses include for example: salaries, office space, software licenses and fees to intermediaries.

### **C.1.2 Underwriting risk assessment**

Aegon 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. Aegon's units also perform experience studies for underwriting risk assumptions, comparing Aegon's experience with industry experience as well as combining Aegon's experience and industry experience based on the depth of the history of each source to Aegon's underwriting assumptions. Where policy charges are flexible in products, Aegon uses these analyses as the basis for modifying these charges, with a view to maintain a balance between policyholder and shareholder interests. Aegon also has the ability to reduce expense levels over time, thus mitigating unfavorable expense variation.

Aegon 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.

As part of Aegon's continuous effort to strengthen risk management, the following adjustments were made to the assessment and management of longevity risk, which is one of the most significant underwriting risks:

Achieving a consistent internal best practice for measuring the risk which is built on a One-Year-Value at Risk framework. Consistent measurement of the risk helps Aegon to achieve a level playing field when allocating capital; and

Aegon decided to require more Return on Capital to take on longevity risk in new business pricing. In 2016, this measure has been adopted by Aegon Americas as well, creating a consistent longevity pricing framework, ensuring sufficient pricing margins are added given the uncertainty of future mortality improvements. In addition to the longevity transactions in Aegon the Netherlands which occurred over the last years, Aegon also looked for opportunities to reduce the longevity risk of Aegon UK. On April 11, and May 23, 2016, Aegon announced the divestment of its own annuity portfolio to Rothesay Life and Legal & General respectively.

For other underwriting risks, Aegon manages the risks by regularly reviewing the experience, holding capital to cover the extreme events, monitoring the risk exposures against risk limits (which are set in accordance to the Risk Strategy) and continues to look for risk mitigation opportunities.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### **51 Risk profile Underwriting risk**

#### **C.1.3 Risk concentration**

Within Aegon, the concentration risk in underwriting is managed by the use of retention limits, meaning that it is required to reinsure the risk for policies above a certain exposure level. The retention levels are typically chosen in such a way that for the remaining exposure is not material relative to the size of the balance sheet of the company.

Aegon also monitors on a regular basis underwriting geo-concentration risk. This is the risk that an event causes losses on more than one underwriting exposure. An example of such an event is a terrorist attack on a single building leading to property damage, multiple deaths and severe injuries in the building and surrounding areas.

#### **C.1.4 Risk mitigation**

Aegon'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 others, 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**

Underwriting serves as a key risk management tool to manage the underwriting risk by selecting or controlling the 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. Underwriting process also collects data to be used in the risk management cycle. 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 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. Aegon's business units must have a Claims Manual in place that includes among others: 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.

##### **Best estimate assumption review process**

Aegon's business units must set up and maintain an underwriting assumption catalogue that contains all the underwriting risks that may impact financials of the company. Each risk must be reviewed periodically in those instances in which frequency is based on materiality. Material assumptions must be reviewed at least annually.

##### **Underwriting risk limits**

Aegon Risk Strategy sets out risk tolerance limits for each risk type including underwriting risks. These limits define the maximum risk that Aegon is willing to be exposed to. Business units should actively monitor the actual risk exposure (measured by gross required capital) and management should take actions when these limits are breached. In addition to risk tolerance limits, it is common practice to address concentration of risk on one insured life or, for property and casualty business, insured object, using retention limit per life or per insured object. Exposure on a few lives with a much higher net amount at risk than the average in the portfolio can create additional volatility in results. A retention limit reduces the impact of process risk and also increases the stability of the underwriting results.

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

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

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**52 Risk profile **Market risk****C.1.5 Risk sensitivity****Longevity sensitivity**

An important underwriting sensitivity Aegon applies internally is a longevity shock of 5%, which implies an additional 1-time reduction in annual mortality rates by 5%. This shock decreases the Solvency II ratio of Aegon Group with 7% points. Lower mortality rates increase the longevity exposed liabilities, especially for Aegon the Netherlands and Aegon UK, the latter mainly via the own pension scheme. The higher liability values decrease own funds, as longevity is only partially hedged, and increase the SCR.

<b>Sensitivities</b>	<b>Scenario</b>	<b>Group</b>
Longevity shock	+5%	(7%)

**C.2 Market risk****C.2.1 Market risk description**

As an insurance group, Aegon is exposed to a variety of risks. Aegon's largest exposures are to changes in financial markets (e.g. bond market, equity market, interest rate and currency exchange rate risks, as described below, and credit risk which is described in section C.3 Credit risk). When market prices fall, the value of Aegon's investments is reduced. For certain products, Aegon's insurance liabilities may also increase, as investments held for the benefit of policyholders reduce in value. In addition, the value of future fee income potential reduces. The cost of insurance liabilities are 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. The Market risk component of the pre-diversified SCR is as follows:

**Equity market risk and other investments risk**

A decline in equity markets may adversely affect Aegon's profitability and shareholders' equity, sales of savings and investment products, and the amount of assets under management. There is a risk for both Aegon and its customers that the market value of its equity investments declines. Exposure to equity markets exists in both assets and liabilities. Asset exposure exists through direct equity investments in which Aegon bears all or most of the volatility in returns and investment performance risk. The existence of direct equity risk is very limited, as defined by Aegon's Risk policies.

Equity market exposure is also present in policyholders' accounts for insurance and investment contracts (such as variable annuities, unit-linked products and mutual funds) in which funds are invested in equities. Although most of the risk remains with the policyholder, guarantees within certain products may transfer some or all of this risk to Aegon. Lower investment returns also reduce the asset management fee that Aegon earns on the asset balance in these products, and prolonged investment under-performance may cause existing customers to withdraw funds and potential

customers not to grant investment mandates.

Some of Aegon's insurance and investment contract businesses have minimum return or accumulation guarantees, which require Aegon to establish reserves to fund these future guaranteed benefits when equity market returns do not meet or exceed these guarantee levels. Volatile or poor market conditions may also significantly reduce the demand for some of Aegon's savings and investment products, which may lead to lower sales and net income. Deteriorating general economic conditions may again result in significant decreases in the value of Aegon's equity investments.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents****53 Risk profile Market risk****Interest rate risk**

Interest rate volatility or sustained low interest rate levels may adversely affect Aegon's profitability and shareholders equity.

Aegon is exposed to interest rate risk, as both its assets and liabilities are sensitive to movements in long- and short-term interest rates. Aegon is exposed to changes in the volatility of interest rates. In periods of rapidly increasing interest rates, policy loans, surrenders and withdrawals may and usually do increase. Premiums in flexible premium policies may decrease, as policyholders seek investments with higher perceived returns. This activity may result in cash payments by Aegon requiring the sale of invested assets at a time when the prices of those assets are adversely affected by the increase in market interest rates. This may result in realized investment losses.

The sale of the majority of the annuity business within Aegon UK in 2016 reduced the exposure to interest rate risks arising from this business.

**Currency risk**

Fluctuations in currency exchange rates may affect Aegon's reported results of operations. As an international group, Aegon is subject to foreign currency translation risk. Foreign currency exposure also exists when policies are denominated in currencies other than Aegon's functional currency of the Euro. Currency risk in the investment portfolios backing insurance and investment liabilities are managed using asset liability matching principles. Assets allocated to equity are kept in local currencies to the extent shareholders' equity is required to satisfy regulatory and Aegon's self-imposed capital requirements. Currency exchange rate fluctuations may therefore affect the level of Aegon's consolidated shareholders' equity as a result of translation of the equity of Aegon's subsidiaries into euro, Aegon's reporting currency. Aegon holds the remainder of its capital base (capital securities, subordinated and senior debt) in various currencies in amounts that are targeted to correspond to the book value of Aegon's business units. This balancing is intended to mitigate currency translation impacts on equity and leverage ratios. Aegon may also hedge the expected dividends from its principal business units that maintain their equity in currencies other than the Euro.

**C.2.2 Market risk assessment**

On January 1, 2016, Solvency II came into force and Aegon transitioned to the approved partial internal model for Solvency II required capital calculations. This internal model represents the most appropriate reflection of Aegon's risk profile and focuses on the measurement of market risks. The partial internal model used by Aegon can be used to assess 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. An analysis confirmed the appropriateness of the capital management zones under Aegon's Capital Management Policy for protection against a breach of Aegon's stated 1-in-10 year risk tolerance.

Investment strategies are established based on asset and liability studies. Business units set an objective function and clearly state the constraints that apply. The investment strategy seeks to achieve the objective function while satisfying the constraints.

For third-party business sourced externally, Aegon Asset Management distributes its investment strategies directly to its clients. The wholesale businesses typically sell collective investment vehicles (mutual funds) to customers through wholesale distributors and independent intermediaries. The main asset classes are fixed income and equities, and the funds are usually managed against a benchmark or peer group target.

In line with the Solvency II volatility adjustment (VA) policy, a scenario was included in the assessment to explicitly cover Aegon the Netherlands' exposure to corporate bond spread tightening. This exposure results from the specifics of the Solvency II volatility adjustment and Aegon the Netherlands' investment portfolio. The impact of such a scenario at Group level is relatively small due to diversification between the units.

In addition to the assessment outlined above, Aegon carried out an annual review of the risk strategy and concluded not to increase the Aegon Group risk limits for market risks. Risk exposures remained within these limits throughout 2016.

### **C.2.3 Risk concentration**

Aegon minimizes concentration risks by maintaining a well-diversified portfolio across and within investment categories such as assets 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.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**54 Risk profile **Market risk****Equity market risk**

Equity risk is generally well-diversified, with exposure coming through indirect exposure to policyholder account values and exposure to major market indices through derivatives instruments used for hedging. Any aggregate exposure to specific corporations is managed through the Credit Name Limit Policy, and described in more detail in section C.3.3 Credit risk risk concentration.

**Currency risk**

As an international group, Aegon is subject to foreign currency translation risk. Aegon's reporting currency is Euro. Aegon Group has a large exposure to the US Dollar to Euro exchange rate through its ownership of equity in Transamerica.

**Managing risk concentration**

A key part of Aegon's ERM framework is setting risk limits for each risk. Each quarter individual Country Units and the Group calculate actual exposures and compare 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 Aegon limits its exposure to a single risk type.

The risk of concentration to an individual counterparty is covered by the Credit Name Limit Policy (CNLP) (refer to section C.3.3 Credit risk risk concentration for more detail). The CNLP Policy covers all asset classes such as equity, 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 Risk mitigation**

Aegon has generally positive income benefits from equity market increases and negative impacts from equity market declines as it earns fees on policyholder account balances and provides minimum guarantees for account values. Hedging of exposures may change those effects significantly and equity hedges are used extensively to manage the equity market risk of variable annuity investment guarantees.

Hedging programs are in place that are designed to manage the risks within the limits as defined as part of Aegon's Group risk policies. Equity hedge programs use equity options and dynamic option-replicating strategies to provide protection against the impact of equity market declines.

Aegon employs sophisticated interest rate measurement techniques. Fixed interest assets along with interest rate swap and swaption derivatives are used extensively to manage the interest rate risk exposure. Aegon operates an Interest Rate Risk policy that limits the amount of interest rate risk to which the Group is exposed. All derivative use is governed by Aegon's Derivative Use Policy.

Aegon operates a Currency Risk Policy that applies currency risk exposure limits both at Group and regional levels. Subsidiaries do not engage in direct currency speculation or program trading and any assets or liabilities not in the



functional currency of the business are hedged back to that currency. In any case where this is not possible or practical, the remaining currency exposure is controlled by limits on total exposure at both group and local level.

Aegon has issued debt instruments in Euro, US Dollar and British Pound denominations. The Group also uses currency derivatives such as swaps, forwards and futures to manage currency exposures.

Hedging programs are operated by many of the Country Units within Aegon. The performance of these hedge programs is monitored closely by both the Country Units and Aegon Group.

### **C.2.5 Risk sensitivity**

Results of Aegon's sensitivity analyses are presented throughout 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. Management action is taken into account to the extent that it is part of Aegon's regular policies and procedures, such as established hedging programs. However, incidental management actions that would require a change in policies and procedures are not considered.

Aegon 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, 2016.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**55 Risk profile **Credit risk****Equity market risk and other investments risk**

Aegon is mainly exposed to a down shock in equities, predominantly via the variable annuity portfolio in the US and the reduction in the value of separate account business in the UK and the Netherlands.

<b>Sensitivities</b>	<b>Scenario</b>	<b>Group</b>
Equity markets	+20%	(1%)
Equity markets	(20%)	(6%)

**Interest rate risk**

The sensitivity towards lower interest rates is mainly caused by higher SCR of Aegon the Netherlands and Aegon UK and lower own funds in the US due to additional reserves. The upward interest rate shock scenario is affected by the impact from statutory hedge losses on the recognition of the DTAs within the US.

When these impacts are brought together at the Group level the result is a reduction in solvency level if rates go up or down, however, the reduction is more pronounced in the down scenario.

<b>Sensitivities</b>	<b>Scenario</b>	<b>Group</b>
Interest rates	+100 bps	+2%
Interest rates	-100 bps	(18%)

In general, increases in interest rates are beneficial to Aegon, while lower interest rates have a negative impacts in terms of reduced economic value and increased solvency capital requirements. However, rising interest rates may also introduce some negative effects as bond holdings incur losses. For example, falling bond values can erode unrealized gains and constrain recoverability of the full deferred tax asset.

**C.3 Credit risk****C.3.1 Credit risk description**

The credit risk component of the pre-diversified SCR is as follows:

Aegon considers credit risk to have three components, namely:

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; and

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

For general account products, Aegon typically bears the risk for investment performance and is exposed to credit risk in the fixed-income portfolio, over-the counter (OTC) derivatives and reinsurance contracts.

Aegon is also indirectly exposed to credit risk on separate account investments held for the benefit of policyholders. Credit losses reduce account values, leading to lower fee income to Aegon. For certain products, Aegon has also provided guarantees to protect customers against the risk of losses in the separate account. For these benefits Aegon is directly exposed to separate account credit losses.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

56 Risk profile **Credit risk**

Aegon's investment portfolios contain, among other investments, US treasury, agency and state bonds, Dutch government bonds and other government issued securities. The portfolios also include a significant proportion of corporate bonds investments, together with real estate and mortgage lending to US commercial and Dutch retail borrowers.

During 2016, Scottish Equitable plc sold its annuity portfolio to Rothesay and Legal & General. The sale consisted of two transactions where Aegon initially reinsured GBP 9 billion of liabilities. Until the point that the liabilities are legally transferred, Scottish Equitable plc retains the obligation to pay the annuity customers directly, and is therefore exposed to counterparty risk to both Rothesay and Legal & General in respect of their obligations to fund these annuity payments. The process to legally transfer the liabilities, and therefore to remove these counterparty exposures, is expected to be completed during 2017.

**C.3.2 Credit risk assessment**

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 under the Economic Framework (EF) that is designed using market consistent principles. In accordance with the relevant risk policies, absolute and early warning limits are set by each Country Unit, and for the Group as a whole, for the following credit risks:

Credit spread risk; and

Credit default / 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 Aegon's ERM framework. The results as of the fourth quarter of 2016 are shown in the table below.

It is important to ensure that there is no concentration to a particular name. The Credit Name Limit Policy 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, derivative positions as well as asset holdings are included.

The exposure to individual names is measured and reported on a quarterly basis. Limits are defined for each Country Unit and at a Group level 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 relevant risk committee. Any breaches to the Group Limits are reported to the GRCC and only the GRCC can grant an exemption.

### **C.3.3 Risk concentration**

The general account portfolios of Aegon business units are well-diversified with high credit quality exposures spread across a range of industry sectors.

In order to avoid concentrations of exposure to particular entities, Aegon operates a global Credit Name Limit Policy (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 individual country units. 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 the end of 2016, Aegon's largest corporate credit exposures were to American United Mutual Insurance, Reinsurance Group of America, Barclays and Citigroup. Aegon also had large government exposures, the largest being in the USA, the Netherlands, Germany, UK and Austria. Highly rated government bonds (AAA rated by all three agencies) and government exposure domestically issued and owned in local currency are excluded from the Credit Name Limit Policy. There was one Group-level violation of the Credit Name Limit Policy which will be resolved over time.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**57 Risk profile **Credit risk**

For Aegon Group, the long-term counterparty exposure limits as at December 31, 2016, are as follows:

<b>Group limit</b>	<b>2016</b>
Amounts in EUR million	
AAA	900
AA	900
A	675
BBB	450
BB	250
B	125
CCC or lower	50

**C.3.4 Risk mitigation**

Aegon 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**

Aegon generally mitigates credit risk in derivative contracts by entering into a credit support agreement, where practical, and in ISDA master netting agreements for most of Aegon's 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 Aegon or its counterparty.

Transactions requiring Aegon or its counterparty to post collateral are typically the result of derivative trades, comprised mostly of interest rate swaps, equity swaps, currency swaps, credit swaps and other bilateral exposure derivatives. Collateral received is mainly cash (USD and EUR). The credit support agreements that outline the acceptable collateral require high quality instruments to be posted.

New interest rate swap transactions in the US are traded via Central Clearing Houses, as required by the Dodd-Frank act. Similar requirements were introduced in Europe by the EMIR regulations. Credit risk in these transactions is mitigated through posting of initial and variation margins.

**Reinsurance**

Aegon 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. For the resulting net credit risk exposure, Aegon employs deterministic and stochastic credit risk modelling in order to assess the Group's credit risk profile, associated earnings and capital implications due to various credit loss scenarios.

To maintain compliance with the CNLP limits, Aegon may use Credit Default Swaps to manage credit risk.

### C.3.5 Risk sensitivity

#### Spread sensitivity

Aegon the Netherlands and Aegon UK are exposed to corporate credit spread narrowing, via the volatility adjuster and the IAS 19 discount rate respectively. Aegon US is not directly exposed to spread movements, as the assets are not on market value, but is exposed to credit losses due to defaults and migrations.

Aegon calculates sensitivities of its Solvency II ratios 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 at December 31, 2016.

<b>Sensitivities</b>	<b>Scenario</b>	<b>Group</b>
Credit spreads <sup>1)</sup>	+100 bps	+2%
US credit defaults <sup>2)</sup>	~+200 bps	(17%)
Dutch mortgage spreads <sup>3)</sup>	+50 bps	(3%)

1 Non-government bonds credit spreads

2 Additional defaults for 1 year including rating migration of structured products

3 Assumes no effect on the volatility adjustment

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### 58 Risk profile **Liquidity risk**

#### **C.4 Liquidity risk**

##### **C.4.1 Liquidity risk description**

Liquidity risk is inherent in much of Aegon's business. Different assets liabilities incurred 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, mortgage loans, real estate and limited partnership interests, have low liquidity. If Aegon were to require significant amounts of cash at short notice in excess of normal cash requirements and existing credit facilities, it would have difficulty in selling these investments at attractive prices or in a timely manner.

Aegon uses derivatives extensively within significant liability hedging programs in the US and Europe. These programs significantly reduce market risk, but collateral requirements can increase liquidity risk in the event of stock markets or interest rate rising significantly.

Aegon's liquidity risk does not give rise to a capital requirement.

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

Illiquidity of certain investment assets may prevent Aegon from selling investments at fair prices in a timely manner. Aegon needs to maintain sufficient liquidity to meet short-term cash demand under normal circumstances, as well as in crisis situations. The availability of sufficient liquidity ensures that Aegon can fulfill its obligations towards policyholders 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 Aegon's overall financial planning and capital allocation processes. The Company's liquidity risk policy sets guidelines for its operating companies and the holding in order to achieve a prudent liquidity profile and to meet cash demands even under extreme conditions.

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

On a regular basis, Aegon reviews medium-term cash-flow projections for unit business unit and legal entity in order to identify and manage liquidity requirements over the planning horizon. Stress testing is carried out in order to assess the ability of Aegon companies to continue to manage liquidity risk in the event of a financial market stress. The most onerous stress scenario for Aegon is a rapid increase in interest rates in key markets that leads to significant payment of collateral to Aegon's hedge counterparties.

Aegon's liquidity risk profile continued to be strong during 2016. Aegon previously strengthened its liquidity risk management with additional stress testing requirements for Business Units. During 2016, forecast liquidity



requirements continued to be well covered in the base case and stress scenario cash-flow projections. Having fallen steadily for a number of years, interest rates rose sharply towards the end of the year in US and European economies.

Many of Aegon's derivatives transactions require Aegon to pledge collateral against declines in the value of these contracts. Volatile financial markets may significantly increase requirements to pledge collateral and adversely affect Aegon's liquidity position. Furthermore, a downgrade of Aegon's credit ratings may also result in additional collateral requirements and affect Aegon's liquidity.

Any security Aegon issues in significant volume may be issued at higher financing costs if funding conditions are impaired, as they have been from time to time in recent years. The requirement to issue securities can be driven by a variety of factors, for instance Aegon may need liquidity for operating expenses, debt servicing and the maintenance of capital levels of insurance subsidiaries. Although Aegon manages its liquidity position for extreme events, including greatly reduced liquidity in capital markets, if these conditions were to persist for an extended period of time, it is possible that it would be necessary for Aegon to sell assets substantially below prices at which they are currently recorded to meet its insurance obligations.

Aegon makes use of (syndicated) credit facilities to support repayment of amounts outstanding under Aegon's commercial paper programs and to serve as additional sources of liquidity.

There have been no material changes to how Aegon assesses its liquidity risk during 2016.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents****59 Risk profile Liquidity risk****C.4.3 Risk concentration**

Liquidity risk originating directly from insurance 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. The first factor is the extensive use of interest rate swaps to hedge against falling interest rates. If interest rates were to rise rapidly in US and European economies then Aegon's main business units would have to increase liquidity requirements. The second factor is the risk of Aegon being downgraded. In this event counterparties will require greater collateral and available liquidity will be reduced. These scenarios are considered within the liquidity stress tests described in section C.4.5 Liquidity risk risk sensitivity.

**C.4.4 Risk mitigation**

Aegon operates a Liquidity Risk policy under which country units are 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 Aegon's financial strength due to multiple downgrades of Aegon Group's credit rating. At the same time, the liquidity of assets other than cash and government issues is assumed to be severely impaired for an extended period of time. All legal entities and Aegon Group must maintain enough liquidity in order to meet all cash needs under this extreme scenario.

Aegon Group 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.

Aegon Group also has access to back-up credit facilities, which were unused at the end of the reporting period.

Internal and external contingent liquidity support facilities can be used to ensure liquidity needs are met. An internal agreement may be used to provide liquidity support from Group to a subsidiary.

Aegon may also use repurchase agreements to avoid asset sales by exchanging ineligible assets such as corporate bonds for eligible assets such as cash to support liquidity.

**C.4.5 Risk sensitivity**

On a regular basis, Aegon reviews medium-term cash-flow projections for business units and legal entities in order to identify and manage liquidity requirements over the planning horizon. Stress testing is conducted in order to assess the ability of Aegon companies to manage liquidity needs in the event of financial market stress. The most adverse stress scenario for Aegon is a rapid increase in interest rates in key markets, which would require significant pledging of collateral.

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

The reported solvency position of Aegon 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 profits on December 31, 2016 was EUR 1,194 million.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

60 Risk profile **Operational risk**

### **C.5 Operational risk**

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

The Operational risk component of the pre-diversified SCR is as follows:

Aegon Group 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.

Aegon's systems and processes are designed to support complex products and transactions and to avoid such issues as system failures, business disruption, financial crime and breaches of information security. Aegon conducts analyses on a continuous basis by studying such operational risks and regularly develops contingency plans accordingly.

#### **C.5.2 Operational risk assessment**

Aegon'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 business area is running. The senior management of each strategic business unit reports their forward looking risk profile on a quarterly basis, together with details of action plans that address key risks and, where appropriate, the CRO's opinion on the effectiveness of those plans. Please see section B.4.2 OCRM risk framework for a detailed description.

Aegon has identified eight risk event categories that serve as a common language for the group and 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-voluntary legal liabilities, inadequate legal documentation; or products, services, people and actions failing to deliver the reasonable expectations of its 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.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

61 Risk profile **Operational risk**

**Tax risk**

The Group monitors tax risks through the operational risk management framework where the focus is on risks or issues in relation to Aegon's internal tax monitoring and management processes. In addition, Aegon is subject to the substance and interpretation of tax laws in all countries in which Aegon operates or invests. Tax risk is the risk associated with changes in tax laws, or the interpretation of tax laws, later jurisprudence or case law, or the introduction of new taxes or tax laws. This tax risk also includes the risk of changes in tax rates and the risk of consequences arising from failure to comply with procedures required by tax authorities. Failure to manage tax risks may lead to increased tax charges, including financial or operating penalties. This tax risk may have a direct materially adverse effect on Aegon's profits and financial condition.

**Financial crime risk**

A wrongful act (including money laundering), omission, breach of duty or trust, intentionally performed by an Aegon employee, intermediary or external party, which potentially could or results in disadvantage to Aegon 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, modeling 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 2016 to the measures used to assess Aegon's operational risk profile.

Processing risks are generally considered to be most material for Aegon, although this has reduced over the reporting period 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 Aegon's results of operations and corporate reputation. In addition, Aegon must commit significant resources to maintain and enhance its existing systems in order to keep pace with industry standards and customer preferences. If Aegon were to fail to keep up-to-date its information systems, 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, Aegon cannot assure investors 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 Aegon's businesses, results of operations and financial condition.

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

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

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### 62 Risk profile **Other material risks**

Changes towards more sophisticated internet technologies, the introduction of new products and services, changing customer needs and evolving applicable standards increase the dependency on the internet, secure systems and related technology. Material strategic business units are currently implementing major transformation programs to reposition the organization for a more customer-centric and digitally-based business environment. The level of change in these programs will introduce new challenges, in addition to increasing existing operational risks and, as a result, the group has invested significantly in the control and oversight processes and resources supporting these programs to ensure that operational risk exposures are monitored and managed effectively.

#### **C.5.3 Risk concentration**

Operational risk concentration can occur where specific risk exposures are in excess of operational risk appetite. Aegon'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 economic framework model and is determined annually.

Operational risk for Aegon is dominated by the following material risk concentrations:

Legal, regulatory, conduct & compliance for Americas and the Netherlands; and

Processing risk for Americas, the Netherlands and the UK.

#### **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**

ORC is held on the basis of potential but unlikely extreme loss events such as a material financial misstatement, non-payment of claims by reinsurer, modelling errors, or failure of an outsourcing partner.

Consistent with Aegon's strategic aims, the Company will be increasing the nature and volume of outsourced activities in its business operations over the course of the next three to four years. To ensure that the risks inherent with this developing concentration exposure are managed effectively, a revised and well-structured Outsourcing & Supplier Risk Management policy was approved in 2016, and is being implemented across the Group. This sets out clear requirements for all outsourcing and supplier arrangements, determined by the scale and potential impact of the arrangement.

#### **C.5.4 Risk mitigation**



Operational risks at Aegon are mitigated by maintaining a strong risk control framework and culture. Please refer to section B.4.2 OCRM risk framework for a detailed description of the compliance OCRM 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. As an example, operational risk scenarios are developed annually and mapped to insurance programs to provide transparency where risk mitigation is effective or not under risk transfer solutions.

### **C.5.5 Risk sensitivity**

Aegon's operational risk capital that is included in the Aegon PIM SCR is calculated using Standard Formula. Internally Aegon manages operational risk based on its economic framework, which is evaluated quantitatively and qualitatively on an annual basis, or more frequently if necessary due to unusual circumstances or newly identified material operational risk exposures. The additional review can be triggered by a business unit or by Group Risk, and is 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 risks**

Other material risks are the changes in the Ultimate Forward Rate (UFR) and in the loss-absorbing capacity of deferred taxes (LAC-DT). On April 5, 2017, the European Insurance and Occupational Pensions Authority (EIOPA) published an updated methodology to derive the UFR. If approved by the European Commission, this methodology will lead to a lowering of the UFR from 4.2% to 3.65% in steps of maximum 15 basis points per year from 2018 onwards. Aegon is exposed to a downward change in the UFR, mainly via Aegon the Netherlands. A lower UFR increases the technical provisions and thereby lowers the own funds. Furthermore, the higher Technical Provisions also cause an increase in the SCR.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents****63 Risk profile Any other information**

As mentioned in the general part of section C. Risk profile, the level of loss-absorbing capacity of deferred taxes (LAC-DT) within Aegon the Netherlands is currently under discussion with the regulator. At December 31, 2016, the factor of LAC-DT is assumed 75% for Aegon the Netherlands. The sensitivity shows the impact of lowering that factor to 50%.

<b>Sensitivities</b>	<b>Scenario</b>	<b>Group</b>
Ultimate Forward Rate	-50 bps	(4%)
Aegon the Netherlands loss absorbency of taxes factor	-25%pts	(3%)

**C.7 Any other information**

Aegon does not have any other material information regarding its risk profile.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**64 Valuation for solvency purposes **Solvency II valuation principles****D. Valuation for solvency purposes**

This chapter provides Solvency II valuation principles and the reconciliation between Aegon N.V.'s consolidated statement of financial position prepared under International Financial Reporting Standards as issued by the IASB (IFRS balance sheet) and Aegon N.V.'s consolidated economic balance sheet. The approach taken is described in the section Approach balance sheet reconciliation, subsequently followed by the quantitative assessment of the reconciliation of both balance sheets. The bases, methods and assumptions used under Solvency II for each balance sheet item separately and any material differences between the bases, methods and main assumptions used for valuation for solvency purposes and its valuation in Aegon's IFRS financial statements is described in section D.1 Assets, D.2 Technical provisions and D.3 Other liabilities.

(Amounts in EUR million)

**Solvency II valuation principles**

This section of the SFCR provides the bases, methods and assumptions used under Solvency II for each balance sheet item separately, together with any material differences between the bases, methods and main assumptions used for valuation for solvency purposes and its valuation in Aegon's IFRS financial statements for the year 2016.

During the reporting period, there were no changes made to the recognition and valuation bases used under Solvency II or to any estimation technique. Furthermore, the bases, methods and main assumptions used at Group level for the valuation for solvency purposes of the Group's assets do not differ materially from those used by any of Aegon's subsidiaries for the valuation for solvency purposes.

**General recognition principle**

Assets and liabilities are recognized, unless otherwise stated, in conformity with IFRS.

**General valuation principle**

Aegon values its balance sheet items on a market consistent basis. Where the IFRS fair value is consistent with Solvency II requirements, Aegon follows IFRS for the valuation of assets and liabilities. The following is a description of Aegon's methods of determining fair value.

Fair value is defined as the amount that would be received from the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date under current market conditions (i.e. an exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability). A fair value measurement assumes that the transaction to sell the asset or transfer the liability takes place either:

In the principal market for the asset or liability; or

In the absence of a principal market, in the most advantageous market for the asset or liability.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

65 Valuation for solvency purposes **Solvency II valuation principles**

Aegon uses the following hierarchy for measuring and disclosing of the fair value of assets and liabilities, other than technical provisions:

Level I: quoted prices (unadjusted) in active markets for identical assets or liabilities that Aegon can access at the measurement date;

Level II: inputs, other than quoted prices included within Level I, that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices of identical or similar assets and liabilities) using valuation techniques for which all significant inputs are based on observable market data; and

Level III: inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) using valuation techniques for which any significant input is not based on observable market data.

The best evidence of fair value is a quoted price in an actively traded market. In the event that the market for a financial instrument is not active or quoted market prices are not available, a valuation technique is used. The degree of judgment used in measuring the fair value of assets and liabilities generally inversely correlates with the level of observable valuation inputs. Aegon maximizes the use of observable inputs and minimizes the use of unobservable valuation inputs when measuring fair value. Financial instruments, for example, with quoted prices in active markets generally have more pricing observability and therefore less judgment is used in measuring fair value. Conversely, financial instruments for which no quoted prices are available have less observability and are measured at fair value using valuation models or other pricing techniques that require more judgment.

The assets and liabilities categorization within the fair value hierarchy is based on the lowest input that is significant to the fair value measurement.

**Active Market**

An active market is one in which quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis.

The judgment as to whether a market is active may include, although not necessarily determinative, lower transaction volumes, reduced transaction sizes and, in some cases, no observable trading activity for short periods. In inactive markets, assurance is obtained that the transaction price provides evidence of fair value or it is determined that adjustments to transaction prices are necessary to measure the fair value of the instrument.

The majority of valuation techniques employ only observable market data, and the reliability of the fair value measurement is therefore high. Certain assets and liabilities are, however, valued on the basis of valuation techniques that feature one or more significant market inputs that are unobservable and, for such assets and liabilities, the derivation of fair value is more judgmental. An instrument is classified in its entirety as valued using significant unobservable inputs (Level III) if, in the opinion of management, a significant proportion of the instrument's carrying

amount is driven by unobservable inputs. Unobservable in this context means that there is little or no current market data available from which to determine the price at which an at arm's length transaction would be likely to occur. It does not in general mean that there is no market data available at all upon which to base a determination of fair value. While Aegon believes its valuation techniques are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain instruments (both financial and non-financial) could result in a different estimate of fair value at the reporting date.

To operationalize Aegon's fair value hierarchy, individual instruments (both financial and non-financial) are assigned a fair value level based primarily on the type of instrument and the source of the prices (e.g. index, third-party pricing service, broker, internally modeled). Periodically, this logic for assigning fair value levels is reviewed to determine if any modifications are necessary in the context of the current market environment.

### **Technical provisions**

Technical provisions are valued at the current amount Aegon would have to pay if the insurance and reinsurance obligations were to be transferred immediately to another insurance or reinsurance undertaking. The value of technical provisions is equal to the sum of a best estimate and a risk margin. The best estimate corresponds to the probability-weighted average of future cash-flows, taking into account the time value of money, using the relevant risk-free interest rate term structure, including volatility adjustment where applicable (please refer to section D.2.4 Long term guarantees and transitional measures). The risk margin is set at a level such that the value of the technical provisions is equivalent to the amount that insurance and reinsurance undertakings would be expected to require in order to take over and meet the insurance and reinsurance obligations.

### **Valuation principles for other financial sector and entities consolidated under method 2**

For undertakings other than European Economic Area (EEA) insurance, Aegon follows the principles set by the Solvency II Directive and specifically:

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**66 Valuation for solvency purposes **Approach balance sheet reconciliation**

Other financial sector entities (e.g. Aegon Asset Management) are included based on the local sectoral rules; and

For method 2 (Deduction & Aggregation) entities Aegon applies either Solvency II (China, India and Turkey) or local regulatory regime for countries where (provisionally) equivalence has been granted (US, Bermuda, Japan, Mexico and Brazil).

**Approach balance sheet reconciliation**

The approach taken to reconcile the balance sheet under IFRS and Solvency II is illustrated below:

As a starting point, the IFRS balance sheets of all business units are collected and aggregated. These are then aligned to the Quantitative Reporting Template ( QRT ) format as prescribed by the Solvency II regulations (step 1). After performing the reconciliation steps (step 2 - 5), the IFRS balance sheet in QRT format is reconciled to the Solvency II balance sheet. The detailed steps in the reconciliation process are described below:

**Step 0:** Certain balance sheet items differ in method of valuation between IFRS and IFRS- EU and are included through this step. IFRS-EU differs from IFRS in respect of certain paragraphs in IAS 39 Financial Instruments: Recognition and measurement regarding hedge accounting for portfolio hedges of interest rate risk. Under IFRS-EU, Aegon applies fair value hedge accounting for portfolio hedges of interest rate risk (fair value macro hedges) in accordance with the EU carve out version of IAS 39. Under IFRS, hedge accounting for fair value macro hedges cannot be applied to mortgage loans and ineffectiveness arises whenever the revised estimate of the amount of cash flows in scheduled time buckets is either more or less than the original designated amount of that bucket. Step 0 adjusts for the hedge accounting impacts that are applied under the EU carve out version of IAS 39.

**Step 1:** To ensure accuracy of the reconciliation and correctness of the adjustments performed, the audited IFRS balance sheets of all business units are converted into their QRT equivalent and aggregated to a Group view.

**Step 2:** Entities located in Solvency II non-equivalent countries, entities for which Solvency II is not applicable and OFS entities are excluded for their IFRS value. These entities are added back at their Solvency II value in step 5 below. This step is also used for entities (such as joint ventures) that are consolidated using the equity method under IFRS, as opposed to the look-through (proportionally consolidated) approach under Solvency II.

**Step 3:** Certain balance sheet items might differ in classification between the IFRS and Solvency II balance sheet. To align with the definitions and categorizations under Solvency II, some IFRS balance sheet items or classes within the balance sheet item are reclassified.

**Step 4:** Adjustments for balance sheet items that differ in method of valuation between IFRS and Solvency II are included through this step. This step is also used to de-recognize balance sheet items that are not admitted on the Solvency II balance sheet such as Goodwill, DPAC and other intangibles.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



**Table of Contents**

67 Valuation for solvency purposes **Approach balance sheet reconciliation**

**Step 5:** Other financial sector entities and (re)insurance entities outside of the European Economic Area (Non-EEA) are included based on the Deduction & Aggregation (D&A) method, meaning that they are included in the Group's Solvency II own funds on a net asset value basis according to the following two approaches:

Local regulatory rules: The proportional share of own funds according to local regulatory rules is included in the Group own funds. This is applicable for entities in (provisional) equivalent regimes and include the US life insurance entities as well as operations in Bermuda, Japan, Mexico and Brazil; and

Adoption of Solvency II: The proportional share of own funds according to Solvency II requirements is included in the Group own funds. This is applicable for life insurance entities in non-equivalent regimes and includes Aegon's operations in China, India and Turkey.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**68 Valuation for solvency purposes **Approach balance sheet reconciliation****Aegon Group balance sheet 2016**

Amounts in EUR millions	Section	Starting Point and Step		IFRS-EU Total	Step 2 IFRS D&A entities <sup>1)</sup>	Step 5 D&A Reclassification entities <sup>1)</sup>	Step 3 Reclassification adjustments	Step 4 Revaluation adjustments	Result Solvency II Total
		Step 1 IFRS Total	Step 0 EU carve-out adjustment						
<b>Assets</b>									
Goodwill		294		294	197			(492)	
Deferred acquisition costs		11,423		11,423	(10,061)		(0)	(1,362)	(0)
Intangible assets		1,526		1,526	(1,259)	(3)		(264)	
Deferred tax assets		87		87	(380)		995	67	768
Pension benefit surplus		51		51	(51)				
Property, plant & equipment held for own use		572		572	(218)		(0)	(0)	355
Investments (other than held for index- and unit-linked funds)	<b>D.1.1</b>	127,333		127,333	(92,131)	12,261	6,102	59	53,623
Assets held for index- and unit-linked funds	<b>D.1.2</b>	203,610		203,610	(110,133)		(12,883)	9	80,603
Loans & mortgages	<b>D.1.3</b>	39,173	510	39,683	(23,192)	921	32	3,509	20,953
Reinsurance recoverables	<b>D.1.4</b>	11,208		11,208	(10,645)		14,494	2,565	17,621
Deposits to cedants					(0)		4		4
Insurance & intermediaries receivables	<b>D.1.5</b>	4,168		4,168	(3,828)		326	(29)	637
Reinsurance receivables		211		211	(147)		(11)	4	56
Receivables (trade, not insurance)	<b>D.1.6</b>	4,039		4,039	(1,898)	442	(455)	25	2,154
Own shares					7			180	186
Cash and cash equivalents	<b>D.1.7</b>	11,347		11,347	(2,102)	5	(400)		8,850
Any other assets	<b>D.1.8</b>	10,382		10,382	(881)		(9,194)	46	353
<b>Total assets</b>		<b>425,425</b>	<b>510</b>	<b>425,935</b>	<b>(256,724)</b>	<b>13,627</b>	<b>(991)</b>	<b>4,316</b>	<b>186,162</b>
<b>Liabilities</b>									
Technical provisions: non-life	<b>D.2.1</b>	9,066		9,066	(7,849)		(685)	(227)	305
Technical provisions: life (excluding index- and unit-linked)	<b>D.2.2</b>	130,075		130,075	(92,717)		17,261	5,875	60,494

Technical provisions: index- and unit-linked	<b>D.2.3</b>	205,703		205,703	(110,477)		(7,570)	(1,583)	86,073
Provisions other than technical provisions		173		173	(94)		(2)	1	77
Pension benefit obligations	<b>D.3.1</b>	4,817		4,817	(14)		(13)	(36)	4,754
Deposits from reinsurers					12			1	12
Deferred tax liabilities	<b>D.3.2</b>	2,201	117	2,318	(2,891)	(28)	990	(237)	152
Derivatives	<b>D.3.3</b>	8,878		8,878	(2,232)		(2,492)	(68)	4,085
Debts owed to credit institutions	<b>D.3.4</b>				497		2,627	386	3,510
Financial liabilities other than debts to credit institutions	<b>D.3.5</b>	13,281		13,281	(11,380)	1,210	(1,566)	(1)	1,544
Insurance & intermediaires payables	<b>D.3.6</b>	4,339		4,339	(3,670)		505	2	1,176
Reinsurance payables		875		875	(763)		(0)	27	139
Payables (trade, not insurance)	<b>D.3.7</b>	11,635		11,635	(6,770)	131	(1,197)	(27)	3,772
Subordinated liabilities	<b>D.3.8</b>	923		923	(787)			53	189
Any other liabilities	<b>D.3.9</b>	9,117		9,117	553		(8,848)	(44)	779
<b>Total liabilities</b>		<b>401,084</b>	<b>117</b>	<b>401,201</b>	<b>(238,582)</b>	<b>1,313</b>	<b>(991)</b>	<b>4,121</b>	<b>167,062</b>
<b>Excess of Assets over Liabilities</b>		<b>24,341</b>	<b>393</b>	<b>24,734</b>	<b>(18,142)</b>	<b>12,314</b>	<b>(0)</b>	<b>195</b>	<b>19,100</b>

<sup>1</sup> D&A includes legal entities outside of the European Economic Area, but also Non-regulated legal entities, Other Financial Sector entities (OFS) and any other legal entities that are presented differently for an IFRS view than for a Solvency II legal entity based view.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

69 Valuation for solvency purposes **Assets**

### **D.1 Assets**

Goodwill, DPAC and other intangibles are not admitted for recognition in the Solvency II balance sheet. The IFRS treatment of these items is not in scope of this publication. Please refer to Aegon's Annual Report on Form 20-F for the year 2016 for additional information on the treatment of these items.

#### **D.1.1 Investments (other than assets held for index- and unit-linked funds)**

This paragraph describes the treatment of Aegon's investments (other than assets held for index- and unit-linked funds). Though the majority of Aegon's portfolio is comprised of Bonds (51%), Related undertakings, including participations (25%), Derivatives (10%), Property other than for own use (5%), Collective Investment Undertakings (5%) and Equities (3%), a particular focus is given to Related undertakings, including participations as this element is the key material item for the comprehension of step 5 in the Approach to the balance sheet reconciliation described above.

No separate specification of the different financial instruments is given as the valuation treatment is consistent amongst them and described below.

#### **De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (92,131) million.

#### **Method of valuation under Solvency II**

Irrespective of whether investments are classified as fair value through profit or loss (FVTPL), held-to-maturity (HTM) or available-for-sale (AFS), Solvency II requires Fair Value to be applied while under IFRS, held-to-maturity investments are measured at amortized cost, while investments at fair value through profit and loss and available for sale assets are measured at fair value. To bridge between IFRS and Solvency II investment accounting principles-financial assets valued at amortized cost under IFRS, need to be accounted for at fair value under Solvency II. This will in particular be required for financial instruments classified as Held-to-maturity. All the financial instruments measured at Fair Value for IFRS are not revalued under Solvency II. However, there are presentational differences between IFRS and Solvency II, and reclassifications are required to conform to the Solvency II requirements.

#### **Material difference in valuation between Solvency II and IFRS**

The differences between the bases, methods and main assumptions used for valuation for solvency purposes do not generate material differences, though reclassification adjustments are required for presentational differences between the bases.

Reclassification adjustments

The total reclassification adjustments of EUR 6,102 million comprises mainly of the reclassification of policyholder accounts related assets from Investments (other than assets held for index- and unit-linked funds) to Assets held for index-linked and unit linked funds in respect of the with-profits subfund in the UK.

#### Revaluation adjustments

The amount of revaluation adjustments is not material, as the majority of Aegon's investments (other than assets held for index-and unit-linked funds) are measured at Fair Value on the IFRS balance sheet.

#### **Related undertakings, including participations**

##### Method of valuation under Solvency II

Under Solvency II, holdings in related undertakings, including participations at group level will include:

Holdings in related insurance or reinsurance undertakings, insurance holding companies and mixed financial holding companies that do not meet the definition of subsidiaries;

Holdings in related undertakings in other financial sectors (i.e. Aegon Bank);

Other related undertakings (not mentioned above and not part of consolidated data); and

Insurance or reinsurance undertakings, insurance holding companies or mixed financial holding companies included through the D&A method.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**
70 Valuation for solvency purposes **Assets**

Aegon's holdings in related EEA insurance or reinsurance undertakings, insurance holding companies and mixed financial holding companies that are not subsidiaries, are included based on the Solvency II adjusted equity method. Holdings in related undertakings in other financial sectors (e.g. Aegon Asset Management) are included based on the local sectoral rules. In addition, other related undertakings include non-insurance undertakings which are included under the AC method (method 1) but are not consolidated. These are measured at quoted prices in active markets (where available) or using the Solvency II adjusted equity method (where quoted prices in active markets are not available).

Related undertakings also include insurance undertakings in Non-EEA countries that have been granted (provisional) equivalence, which have been included under the D&A method (method 2). These undertakings (most notably US life insurance entities) are measured in accordance with the local supervisory requirements and reflected as Participations within the Aegon Group economic balance sheet. As of December 31, 2016, this amounted to EUR 12,261 million.

## Aggregation differences between Solvency II and IFRS

It is to be noted that there are material differences in aggregation stemming from insurance undertakings included under the D&A method, primarily driven by the US Life insurance entities. The main differences between its statutory regime and IFRS relate to technical provisions (EUR 8,232 million), valuation of other assets (EUR 1,518 million), investments (EUR (8,247) million) and taxes (EUR 1,614 million). In addition, there is no Deferred Policy Acquisition Cost (DPAC) under US statutory accounting (EUR (9,329) million). The main differences are described in further detail below:

*Technical provisions:* There are a number of valuation differences between US statutory accounting and IFRS with respect to reserves (i.e. use of deposit accounting, expense allowances and/or surrender charges, differences in assumptions and methodology). Generally, the statutory reserves assumptions and methodology are intended to be more conservative to ensure the company's ability to meet unmatured obligations, such as expected future claims. However, the impact of other methodology differences in bridging from IFRS to statutory values can offset the intended conservatism in statutory;

*Other assets:* On a statutory basis, certain assets are designated as "non-admitted", and are excluded from the balance sheet. Under IFRS, such assets are included in the balance sheet to the extent that they are not impaired. Other items causing differences from statutory basis to IFRS are hedge reserve offset, payables for derivative cash collateral, and letters of credit;

Under IFRS basis *investments* are generally reported at market value. On a statutory basis, investments are generally reported at amortized cost; and

Differences in *taxes* are driven by the carrying amount of statutory and IFRS assets and liabilities (as described above) as compared to the tax base of those assets and liabilities. The conservative nature of the US statutory

regime typically results in net deferred tax assets, whereas the comparison of IFRS and tax base typically results in a net DTL position. Furthermore, while both accounting regimes are subject to DTA recognition realization criteria, the statutory regime applies further limitations which leads to a reduced amount of admitted deferred tax assets recognized on the statutory balance sheet.

**Fair value hierarchy**

To operationalize Aegon's fair value hierarchy, individual instruments (both financial and non-financial) are assigned a fair value level based primarily on the type of instrument and the source of the prices (e.g. index, third-party pricing service, broker, internally modeled). Periodically, the logic for assigning fair value levels is reviewed to determine if any modifications are necessary in the context of the current market environment.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**71 Valuation for solvency purposes **Assets**

The table below provides an analysis of the individual instruments by level of the fair value hierarchy.

**Fair value hierarchy of financial assets**

Amounts in EUR millions	Level 1	Level 2	Level 3	Total
<b>Investments (other than assets held for index-linked and unit-linked contracts)<sup>1)</sup></b>	<b>21,509</b>	<b>3,787</b>	<b>10,817</b>	<b>36,113</b>
Property (other than for own use)			2,429	2,429
<b>Equities</b>	<b>1,733</b>	<b>2</b>	<b>11</b>	<b>1,747</b>
Equities - listed	1,733	3		1,736
Equities - unlisted			10	10
<b>Bonds</b>	<b>19,026</b>	<b>2,807</b>	<b>5,431</b>	<b>27,264</b>
Government bonds	18,536	762	202	19,499
Corporate bonds	490	1,506	3,052	5,048
Structured notes				
Collateralised securities		539	2,177	2,716
<b>Collective Investments Undertakings</b>	<b>412</b>	<b>368</b>	<b>1,815</b>	<b>2,595</b>
<b>Derivatives<sup>1)</sup></b>	<b>(24)</b>	<b>429</b>	<b>1,131</b>	<b>1,537</b>
<b>Deposits other than cash equivalents</b>	<b>361</b>	<b>181</b>		<b>542</b>
<b>Other investments</b>				
<b>Assets held for index-linked and unit-linked contracts (section D.1.2)</b>	<b>17,346</b>	<b>36,353</b>	<b>26,905</b>	<b>80,603</b>
<b>Loans and mortgages (section D.1.3)</b>			<b>20,953</b>	<b>20,953</b>
loans on policies			5	5
Loans and mortgages to individuals			20,948	20,948

<sup>1</sup> Note that Investments as shown in the table (EUR 36,113 million) does not include the net asset value of participations as reported in the Solvency II balance sheet (EUR 13,425 million). In addition, there is an amount of EUR 4,085 million of derivatives liability netted in the derivatives amount of EUR 1,537 million.

For details on the valuation of level 3 assets, please refer to section D.4 Alternative methods for valuation.

**D.1.2 Assets held for index- and unit-linked funds****De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**



The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (110,133) million.

### **Method of valuation under Solvency II**

Assets held for index- and unit linked funds, for which the actual return on investments is passed on to the policyholder, are measured at current unit values, which reflects the fair value of the assets of the funds.

### **Material difference in valuation between Solvency II and IFRS**

The differences between the bases, methods and main assumptions used for valuation for solvency purposes do not generate material differences, though reclassification adjustments are required for presentational differences between the bases.

#### Reclassification adjustments

The majority of the EUR (12,883) million reclassification is driven by With-Profit Sub-Funds (WPSF) in Aegon UK. The key drivers of this adjustment are the reclassification of policyholder accounts related assets from Investments (other than assets held for index-and unit-linked funds) to Assets held for index-linked and unit linked funds for an amount of EUR (6,129) million and the reclassification of reinsured External Fund Linked (EFL) for an amount of EUR (5,796) million. This adjustment is required as EFL assets are accounted for as unit-linked investments under IFRS, as opposed to reinsurance assets under Solvency II. There is a further adjustment in relation to the IFRS 10 gross-up of Investments & Technical Provisions to reflect minority interests. Based on IFRS 10, the amount of unit linked investments is presented gross of minority parts in the majority controlled funds. Under Solvency II, only own shares are required to be presented in line with the look-through approach. This results in a decrease to the IFRS value of Assets held for index-linked and unit-linked contracts for an amount of EUR (837) million.

#### Revaluation adjustments

No material revaluation adjustments were required.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

72 Valuation for solvency purposes **Assets**

**D.1.3 Loans and mortgages**

**De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (23,192) million.

**Method of valuation under Solvency II**

Loans and mortgages are valued at Fair Value. For private loans, fixed interest mortgage loans and other loans originated by the Group, the fair value is calculated by discounting expected future cash flows using a current market rate applicable to financial instruments with similar yield and maturity characteristics. For fixed interest mortgage loans, the market rate is adjusted for expenses, prepayment rates, lapse assumptions, liquidity and credit risk (market observable inputs). The fair value of floating interest rate mortgage loans, policy loans and private placements used for disclosure purposes is approximated by their carrying amount, adjusted for credit risk. Credit risk adjustments are based on market observable credit spreads if available, or best estimate if not market observable.

Please refer to section D.4.7 for alternative valuation methods of Loans and mortgages.

**Material difference in valuation between Solvency II and IFRS**

Under IFRS these assets are valued at amortized cost on the balance sheet, except for mortgages for which hedge accounting is applied under IAS 39, while under Solvency II, fair value is applied. The different valuation approach between IFRS and Solvency II therefore requires revaluation of loans and mortgages. By their nature, none of the loans and mortgages included in this category are listed on active markets. Solvency II requires that the fair value should be based on the discounted cash flow valuation method. The Solvency II value is based on the contractual future cash flows discounted with a discount rate representing the time value of money and risk charges.

**Reclassification adjustments**

No material reclassification adjustments were required.

**Revaluation adjustments**

The revaluation adjustments reflect the impact of conversion from amortized cost valuation under IFRS to fair value under Solvency II. Under the amortized cost method, loans and mortgages are valued using the effective interest rate at the inception of the loan, while fair value determination should incorporate current market factors including a risk free rate.

**D.1.4 Reinsurance recoverables**

**De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (10,645) million.

### **Method of valuation under Solvency II**

Reinsurance contracts are contracts entered into by the Group in order to receive compensation for claims/benefits incurred on contracts written by the Group (outgoing reinsurance). Reinsurance assets are also held as part of exiting the business. For contracts transferring sufficient insurance risk, a reinsurance asset is recognized for the expected future benefits, less expected future reinsurance premiums. Reinsurance contracts with insufficient insurance risk transfer are accounted for as investment or service contracts, depending on the nature of the agreement.

For Solvency II, a fair value approach is used for the reinsurance recoverables that is similar to the valuation of insurance liabilities. It does not, however, include a risk margin and the measurement includes an adjustment for counterparty default risk.

### **Material difference in valuation between Solvency II and IFRS**

Under IFRS, reinsurance assets are measured consistently with the assumptions associated with the underlying insurance contracts and in accordance with the terms of each reinsurance contract. They are subject to impairment testing and are derecognized when the contractual rights are extinguished or expire or when the contract is transferred to another party. Under Solvency II, the best estimate valuation principles described above are applied. This generates valuation differences between the two paradigms.

#### Reclassification adjustments

The main drivers of the adjustment are a EUR 5,796 million reclassification for External Fund Linked (EFL) assets deemed to be reinsurance assets for Solvency II purposes and a reclassification of assets held for sale (presented under section D.1.8 Any other assets) as part of Aegon UK's annuity portfolio for an amount of EUR 8,705 million.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### 73 Valuation for solvency purposes **Assets**

#### Revaluation adjustments

The majority of the total revaluation for an amount of EUR 2,565 million was related to Aegon UK. The difference in valuation relates to the underlying reinsured liabilities. There are considerable differences in the valuation of insurance liabilities under IFRS compared to Solvency II and the value of the reinsurance assets covering these liabilities changed as a result. These adjustments included, among others, different valuation of risk margin and different discount rates (IFRS historical rates versus Solvency II current market rates).

#### **D.1.5 Insurance and intermediaries receivables**

##### **De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (3,828) million.

##### **Method of valuation under Solvency II**

The insurance and intermediaries receivables reflect amounts past due for payment by policyholders, (re)insurers, and other linked to insurance business, that are not included in technical provisions. It also includes receivables from reinsurance accepted. Insurance and intermediaries receivables on Aegon's balance sheet are predominantly short-term. The difference between the amortized cost under IFRS and fair value under Solvency II is therefore not material.

##### **Material difference in valuation between Solvency II and IFRS**

Given the short-term nature of these receivables, there is no material measurement difference between amortized cost under IFRS and fair value under Solvency II.

#### Reclassification adjustments

The reclassification for an amount of EUR 326 million mainly resulted from a reclassification for the amount of EUR 347 million between receivables (trade, non-insurance, refer to section D.1.6) and insurance & intermediaries receivables.

#### Revaluation adjustments

Insurance and intermediaries receivables on Aegon's balance sheet are predominantly short-term. The revaluation difference between the amortized cost under IFRS and fair value under Solvency II is therefore not material.

#### **D.1.6 Receivables (trade, not insurance)**

##### **De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (1,898) million.

#### **Method of valuation under Solvency II**

Receivables on Aegon's balance sheet are predominantly short-term. Solvency II value measurement requires a fair value approach to be applied.

#### **Material difference in valuation between Solvency II and IFRS**

##### Reclassification adjustments

The total reclassification adjustment amounted to EUR (455) million and was mainly driven by the EUR (347) million reclassification from Receivables (trade, non-insurance) to Insurance & intermediaries receivables (please see section D.1.5).

##### Revaluation adjustments

No material revaluation adjustments were required.

#### **D.1.7 Cash and cash equivalents**

##### **De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (2,102) million.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**74 Valuation for solvency purposes **Technical provisions****Method of valuation under Solvency II**

Under Solvency II, cash and cash equivalents on the balance sheet refers to notes and coins in circulation that are commonly used to make payments, and deposits exchangeable for currency on demand at par or which are directly usable for making payments without penalty or restriction. Cash equivalents on Aegon's balance sheet are predominantly short-term of nature. The difference between the amortized cost under IFRS and fair value under Solvency II is therefore not material.

**Material difference in valuation between Solvency II and IFRS**

The differences between the bases, methods and main assumptions used for valuation for solvency purposes do not generate material differences, however reclassification adjustments are required for presentational differences between the bases.

## Reclassification adjustments

The reclassification for the amount of EUR (400) million resulted from the reclassification of Cash and cash equivalents into Deposits other than cash equivalents under Investments (other than held for index and unit-linked) .

## Revaluation adjustments

No material revaluation adjustments were required.

**D.1.8 Any other assets****De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (881) million.

**Method of valuation under Solvency II**

The fair value approach is prescribed for the majority of asset 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, insurers should refer to a three level valuation hierarchy. The use of quoted prices is the default method of valuation. Where this is not possible, insurers should use quoted prices of similar assets. Where no quoted prices can be used, the insurer can develop an alternative valuation method that makes maximum use of market inputs.

**Material difference in valuation between Solvency II and IFRS**

Most of these assets are of a short-term character and, as a result, there are no material difference between Solvency II and IFRS values.

### Reclassification adjustments

The adjustment, for an amount of EUR (9,194) million, is mainly driven by the reclassification of assets held for sale related to the divestment of the annuity portfolio within Aegon UK, reclassified to Reinsurance recoverables under Solvency II.

### Revaluation adjustments

The amount of EUR 46 million revaluation resulted from the deferred expenses presented under any other assets under IFRS. Similar to deferred acquisition costs, other deferred expenses are eliminated, as under Solvency II they are captured in the valuation of insurance liabilities.

## **D.2 Technical provisions**

Aegon distinguishes between operations for which the valuation is either based on Solvency II (insurance and reinsurance operations within the European Economic Area as well as third-countries where no (provisional) equivalence is granted) or valuation is based on local regimes when (provisional) equivalence is granted. The latter applies to Aegon's operations in the US, Japan, Mexico and Brazil. For Aegon Group, insurance and reinsurance operations are primarily within the EEA.

This section describes the technical provisions for the EEA legal entities, including the amount of the best estimate and the risk margin, including a description of the bases, methods and main assumptions used. The value of the Solvency II technical provisions are specified in the tables of sections: D.2.1 Technical provisions – non-life; D.2.2 Technical provisions – life; and D.2.3 Technical provisions – index linked and unit linked.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents****75 Valuation for solvency purposes Technical provisions**

Given the materiality of technical provisions, this section also provides relevant information about the technical provisions for the non-EEA entities, in particular with respect to the legal entities of Aegon Americas.

**Bases (different reporting regimes)**

For the EEA legal entities, the Solvency II technical provisions are calculated taking into account the requirements of the Solvency II directive and the Solvency II implementing measures and guidance.

EEA-entities are included in the Group Solvency II position through Accounting Consolidation. Non-EEA legal entities are included in the Group Solvency II position through Deduction & Aggregation in which only these entities own funds and solvency requirements are consolidated. The related technical provisions for these entities are not explicitly consolidated for the Group Solvency II balance sheet reporting.

**EEA legal entities**

The technical provisions consist of the Best Estimate Liability (BEL) and the Risk Margin (RM).

The Best Estimate Liability is calculated using projection models and is the probability-weighted average of projected future cash-flows, taking account of the time value of money, using the relevant risk-free interest rate term structure, with matching adjustment or volatility adjustment where appropriate, prescribed by EIOPA. This liability valuation includes the projection of mortality, lapses, expenses, fund values, charges and other factors that impact future cash flows. In cases where the liabilities do not include material embedded options or guarantees, they are calculated deterministically. In other cases they are calculated using stochastically generated economic scenarios.

Non-hedgeable Solvency Capital Requirements (SCR) 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 SCRs based on a 99.5% confidence level and aggregation is performed by applying diversification benefits factors to each risk type that is applicable to the Solvency II Partial Internal Model (Aegon the Netherlands, Aegon UK) or Standard Formula (other EEA legal entities). Diversification is only applied within the legal entities and only for the non-hedgeable risks.

The matching adjustment is designed for insurers with long-term liabilities to allow for the match between the insurers assets and the liabilities. The matching adjustment is applied by Aegon UK and Aegon Spain. Aegon UK has two separate portfolios of matched assets and liabilities both covering immediate annuity business. The consolidated impact of applying the matching adjustments on the own funds is EUR 107 million. The calculation methodology which was adopted to implement the matching adjustment was approved by their local regulators.

The volatility adjustment is based on a risk-corrected spread using the standard EIOPA VA methodology. The volatility adjustment is applied by Aegon the Netherlands and Aegon Spain for all types of their business while Aegon UK applies the volatility adjustment to all traditional and unitized with-profits business, but only in respect of the period up to the maturity / vesting date. No volatility adjustment is being applied to the valuation of guaranteed options exercisable or payable from vesting.

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.

**Assumptions Best estimate non-economic assumptions (for EEA legal entities)**

Best estimate non-economic assumptions are applied for the Solvency II reporting framework for the EEA entities (for the valuation of the Best Estimate Liability, BEL), but are also applied for the IFRS reporting framework (especially for the liability adequacy test, LAT; this test is also known as DAC recoverability test or loss recognition test).

Non-economic assumptions are proposed by the 1st line actuarial function and then reviewed by the 2nd line risk function while approved by the local board or local management team. This governance also requires the independent opinion and recommendation of the Actuarial Function Holder (AFH).

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**76 Valuation for solvency purposes **Technical provisions**

<b>Unit</b>	Significant Non-Economic Assumptions
NL	Mortality and longevity (base, experience factors and improvements), maintenance expenses, lapses Mortgage: prepayment rates Non-life disability
UK	Lapses and maintenance expenses
Ireland	Mortality, lapses and maintenance expenses
CEE	Lapses and maintenance expenses, loss ratio, index
Spain	Lapses and maintenance expenses

## Blue Square Re Dutch longevity

Best estimate assumptions for key actuarial decrements (like mortality, longevity and lapse) and maintenance expenses are developed through periodic experience studies. The frequency of these studies is determined by the relative significance of the assumption in relation to actuarial calculations, its volatility, and the amount of new experience available.

Mortality assumptions are generally developed based on a blend of company experience and industry wide studies, taking into consideration product characteristics, own risk selection criteria, target market and past experience.

Longevity assumptions are set for annuity business where benefit payments are a function of survivorship status. An important feature of the annuitant longevity as well as the mortality basis is the inclusion of a long-term rate of improvement.

Policyholder behavior (lapse, surrender, withdrawal, annuitization, premium persistency, etc.) assumptions are set where policyholders have options to withdraw funds, cancel their contracts or cease or adjust premium amounts or elect embedded options. Policyholder behavior assumptions depend on product features, policy duration and external circumstances such as the interest rate environment and competitors. Reliable own experience, as well as available industry wide data, are used in establishing assumptions.

Maintenance expense assumptions reflect the cost of administering policyholder contracts and are derived from the cost analysis that forms a key part of each entity's cost management activity. Broadly speaking, cost loadings are derived by identifying the costs that are expected to be incurred in respect of administering policyholder business, and dividing this by the number of relevant contracts at a contract type level, or set as a percentage of premium.

Expert judgment is required throughout this process and is facilitated by selecting the drivers to classify costs as acquisition or renewal; selection of the drivers to allocate costs to products; and classification of expenses as exceptional or recurring project expenses.

For Non-Life, demographic assumptions (e.g. sick leave, disability) and claims payment assumptions (e.g. fire, marine and third-party liability) are based on observed and annually updated statistics in the Aegon portfolio and for the WIA product (a Dutch-specific disability cover) combined with transition rates as provided by the Dutch Association of Insurers.

**Assumptions Economic assumptions (for EEA and Non-EEA legal entities)**

For the EEA units, the key economic assumptions are the EIOPA swap curve for discounting, the UFR and for some units also the matching and volatility adjustment. In addition, risk-neutral economic scenarios are generated that are applied for the valuation of the options and guarantees included in some of the liabilities (i.e. where options and guarantees are material).

The UFR is the risk free interest rate over a one year period that is expected to prevail after a long period. The current EUR-UFR of 4.2% has been set by EIOPA.

**Non-EEA legal entities on (provisional) equivalence**

Non-EEA legal entities which are domiciled in third-countries that are deemed (provisional) equivalent are located in the US, Bermuda, Mexico, Brazil and Japan and are included with the D&A method based on local regulatory requirements.

In the US, technical provisions are generally calculated based on locally prescribed formulas and also locally prescribed assumptions. However, there are several areas where the company has the ability to set non-prescribed assumptions for statutory valuation based on its own experience, subject in all cases to certain limitations and/or approvals (including, for example, required margin for prudence over best estimate assumptions). The most material of these blocks are Variable Annuities (reserving under Actuarial Guideline 43), Universal Life (reserving under Actuarial Guideline 38) and Long Term Care.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

77 Valuation for solvency purposes **Technical provisions**

Most insurance liabilities are also subject to an annual Asset Adequacy Analysis (usually performed via cash flow testing). This analysis assesses the adequacy (appropriateness) of the statutory reserves, using own best estimate actuarial assumptions, plus appropriate margins for prudence, and under specified interest rate scenarios. In general, the prescribed assumptions and methodologies for statutory reserves are quite conservative, and it is usually the case that the asset adequacy analysis, even under the prudent estimates, results in an excess sufficiency that results in minimal additional reserves.

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.

Each of the US legal insurance entities have its own independent Appointed Actuary who is responsible for setting the assumptions, including margins for adverse deviation, and calculating the technical provisions and performing the cash flow testing.

The Actuarial Function Holder (AFH), appointed by the US board, provides at least once a year an independent opinion on adequacy and reliability of the technical provisions, including a summary of concerns and recommendations, if any. This is documented by the AFH in an annual Actuarial Function Report.

**Level of uncertainty associated with the value of the technical provisions (EEA legal entities)**

The main source of uncertainty associated with the technical provisions is in the setting of assumptions where a significant level of judgment may be required about how future experience may differ from past experience. The assessment of uncertainty in this case is addressed by undertaking sensitivity testing of key assumptions so that the governing body can understand how different choices would impact the technical provisions.

The risk margins relate to the cost of holding capital to allow for uncertainty around the best estimate assumptions and are included in the technical provisions as addition to the best-estimate liabilities.

Other sources of uncertainties are associated with the diversification amongst the underwriting risk over time, the run-off pattern of the SCR that is used to calculate the risk margin, as well as the applied UFR.

**Significant simplified methods used to calculate the technical provisions (EEA legal entities)**

For the with-profits fund risk margin derivation of Scottish Equitable plc (UK) a simplified approach is taken, appropriate to the nature of the fund whilst aligning to the regulatory requirements.

**The value of the Solvency II technical provisions (EEA entities)**

The value of the Solvency II technical provisions are specified below while the material difference in valuation between Solvency II and IFRS is described in sections: D.2.1 Technical provisions – non-life; D.2.2 Technical provisions – life; and D.2.3 Technical provisions – index linked and unit linked. The most material Lines of Business for Aegon Group are illustrated in the table below.

	Life	Non-life	Total	
<b>Value of Solvency II technical provisions</b>				
Amounts in EUR millions	Index-linked unit-linked	Life (excluding index-linked and unit-linked) Non-life (excluding health)	Total	
Best estimate	84,710	58,594	270	143,574
Risk margin	1,363	1,901	35	3,299
Technical provision	86,073	60,494	305	146,873
Percentage of total	58.6%	41.2%	0.2%	100.0%

### D.2.1 Technical provisions non-life

#### De-recognition of the IFRS value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (7,849) million.

#### Method of valuation under Solvency II

See above under section D.2 Technical provisions for the base, models, methodology and assumptions applied for the valuation of the Solvency II technical provisions.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### 78 Valuation for solvency purposes **Technical provisions**

#### **Material difference in valuation between Solvency II and IFRS**

Solvency II requires discounting of all the expected future cash flows by current discount rates and adding a risk margin based on the cost of capital ( CoC ) for non-hedgeable risks.

The Solvency II discount rate is based on the prescribed EIOPA curve at the reporting date including the volatility adjustment where applied. The IFRS discount rate is set following local GAAP (general accepted accounting policies).

Finally, presentational differences exist between IFRS and Solvency II, and reclassifications are required to comply with Solvency II requirements (e.g. annuities stemming from non-life contracts).

#### Reclassification adjustments

The reclassification adjustments amounted to EUR (685) million, and represented annuities stemming from non-life. These liabilities are presented under technical provisions life rather than under technical provisions non-life for Solvency II.

#### Revaluation adjustments

The total revaluation adjustment amounted to EUR (227) million, and was mainly due to the application of different discount rates (i.e. use of the Solvency II curve instead of the IFRS curve), and the application of shorter contract boundaries.

#### **D.2.2 Technical provisions life (excluding index-linked and unit-linked)**

#### **De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (92,717) million.

#### **Method of valuation under Solvency II**

See section D.2 Technical provisions above for the base, models, methodology and assumptions applied for the valuation of the Solvency II technical provisions.

#### **Material difference in valuation between Solvency II and IFRS**

Solvency II requires the inclusion of indirect overhead expenses in the expected future cash flows for calculating insurance liabilities (e.g. salaries to general managers, auditing costs, office rent, buying new IT systems, etc.).

Another difference relates to contract boundaries. Under Solvency II, the renewability assumption is required to be supported by legally binding obligations, rather than estimates of policyholder s attrition pattern.

The Solvency II discount rate is based on the EIOPA curve at the reporting date including the volatility adjustment where applied. IFRS, in general, applies a fixed discount rate which is set in accordance with Local GAAP.

Finally, presentational differences exist between IFRS and Solvency II, and reclassifications are required to comply with Solvency II requirements (e.g. annuities stemming from non-life contracts).

#### Reclassification adjustments

Reclassification adjustments amounted to EUR 17,261 million for technical provisions – life (excluding index-linked and unit-linked) included:

EUR 6,443 million related to the reclassification of WPSF technical provisions, classified under IFRS as – for account of policyholder –, from Technical provisions – index-linked and unit-linked to Technical provisions – Life (excluding index-linked and unit-linked);

EUR 8,816 million related to the reclassification of Liabilities held for sale, classified under IFRS as – Any other liabilities – to Technical provisions – Life (excluding index-linked and unit-linked); and

An amount of EUR 2,003 million for annuities stemming from non-life contracts. It consists mainly of a reclassification from technical provisions non-life for an amount of EUR 677 million and a reclassification from (bifurcated) derivatives for an amount of EUR 1,555 million for the guarantee provision of unit-linked contracts. An amount of EUR (229) million has been reclassified from technical Provisions – life (excluding index-linked and unit-linked) to financial liabilities other than debts owed to credit institutions (refer to section D.3.4) as these are not policyholder related.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

79 Valuation for solvency purposes **Technical provisions**

Revaluation adjustments

The total revaluation amount of EUR 5,875 million mainly consists of:

An amount of EUR 4,584 million as a result of following the Solvency II technical provision valuation adjustments, including the present value of future premiums, the present value of future expenses related to the servicing of insurance contracts, and the allocated general overhead expenses and revision of the discount rate to the current market rate; and

An amount of EUR 1,533 million from the incorporation of the Solvency II risk margin. These two items were driven by the fact that IFRS annuity liabilities were valued on a locked-in basis, and therefore the liabilities on an IFRS basis are relatively flat over time. Solvency II liabilities are valued on a current best estimate basis using current yield curves.

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

**De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (110,477) million.

**Method of valuation under Solvency II**

Refer to section D.2 Technical provisions for the base, models, methodology and assumptions applied for the valuation of the Solvency II technical provisions.

**Material difference in valuation between Solvency II and IFRS**

For investment-linked business, the policyholder contributions are invested in units in selected funds and the Solvency II BEL is the market value of the unit funds less the discounted value of the future profit cash flows (assuming best-estimate mortality, lapse and expenses).

In addition, Solvency II requires the inclusion of the entity's general overhead expenses in the total expenses for the determination of the contract cash flows.

Finally, if embedded derivatives are bifurcated under IFRS, this constitutes a difference between IFRS and Solvency II.

Reclassification adjustments



Reclassification adjustments amounted to EUR (7,570) million and included:

An amount of EUR (6,443) million reclassification from technical provisions index-linked and unit linked to technical provision life (excluding index-linked and unit linked) (please refer to section D.2.2); and

An amount of EUR (837) million related to the reversal for IFRS 10 as outlined in section D.1.2 Assets held for unit-linked funds.

Revaluation adjustments

The revaluation adjustment for a total amount of EUR (1,583) million is mainly related to Aegon UK and mostly driven by the inclusion of the Present Value of Future Profits (PVFP) under Solvency II which is partly offset by the inclusion of the Solvency II risk margin.

#### D.2.4 Long term guarantees and transitional measures

The impact of the transitional measure on technical provisions, the volatility adjustment and the matching adjustment on the technical provision, own funds, SCR and minimum consolidated group SCR are shown in the table below. Aegon does not apply the Transitional risk-free interest rate-term structure as described in Article 308c of Directive 2009/138/EC.

Impact of long term guarantees measures and transitionals	Amount with Long Term			
	Guarantee measures and transitionals	Impact of transitional on technical provisions	Impact of volatility adjustment set to zero	Impact of matching adjustment set to zero
Amounts in EUR millions				
Technical provisions	146,873	112	924	130
Basic own funds <sup>1)</sup>	6,552	(84)	(651)	(107)
Eligible own funds to meet Solvency Capital Requirement	18,119	(84)	(651)	(107)
Solvency Capital Requirement	11,563		1,636	105

<sup>1</sup> Note that Basic own funds shown in the table reflects the Basic own funds after deductions, which excludes own funds of OFS and D&A entities, and non-available own funds.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents****80 Valuation for solvency purposes Other liabilities**

The amounts with long term guarantee measures and transitionals in the first column reflect the Aegon technical provisions, basic and eligible own funds and SCR as at December 31, 2016. The impacts in the other columns show the impact of removing the transitional and long term guarantee measures in that specific order. An increase in technical provisions or SCR and a decrease in own funds have a negative impact on Aegon's solvency position.

The transitional measure on technical provisions as described in Article 308d of Directive 2009/138/EC is applied by Aegon Spain. For Aegon Spain, the application of transitional measures for some products with high interest rate guarantees was approved in May 2016. The benefit of this transitional measure on the technical provision amounted to EUR 112 million. The own funds benefit amounted to EUR 84 million and reflects the impact of taxes. The impact on the SCR was immaterial.

The volatility adjustment is based on a risk-corrected spread using the standard EIOPA VA methodology. The volatility adjustment is applied on the liabilities by Aegon the Netherlands, Aegon UK, and Aegon Spain. Next to this, Aegon the Netherlands applies a dynamic volatility adjustment in the SCR calculation, which takes into account movements in the volatility adjustment in stress scenarios. The benefit of the volatility adjustment on the technical provision amounted to EUR 924 million. The own funds benefit amounted to EUR 651 million and reflects impact of taxes. The SCR benefit amounted to EUR 1,636 million and is mainly attributable to the impact of the dynamic volatility adjustment in the SCR calculation. The impacts of the volatility adjustment mainly stem from Aegon the Netherlands.

The matching adjustment is designed for insurers with long-term liabilities to allow for the match between the insurers assets and the liabilities. The matching adjustment is applied by Aegon UK and Aegon Spain. The benefit of the matching adjustment on the technical provision amounts to EUR 130 million. The own funds benefit amounted to EUR 107 million and reflects the impact of tax. The SCR benefit amounted to EUR 105 million and is mainly attributable to the impact of removing the matching adjustment on spread risk in the SCR calculation. All impacts of the matching adjustment resulted mainly from Aegon UK.

**D.2.5 Recoverables from reinsurance contracts and Special Purpose Vehicles**

As technical provisions are reported gross of reinsurance contracts, a reinsurance asset is separately identified. Aegon's recoverables from reinsurance contracts are net of material intra-group reinsurance transactions.

For EEA entities, a Solvency II valuation of the reinsurance contracts is applied, and this is reported separately on the Solvency II balance sheet. The value of a reinsurance contract is also known as the recoverable from a reinsurance contract. Reinsurance contracts are valued using a similar methodology to the technical provisions. The reinsurance cash flows are based on the nature of the reinsurance arrangements. The value of the reinsurance is measured consistently with the assumptions associated with the underlying insurance contracts and in accordance with the terms of each reinsurance contract.

The value of the reinsurance contracts should also allow for a best estimate default provision.

For the Non-EEA entities, reinsurance is reflected in their technical provisions according local statutory requirements.

**D.2.6 Material changes in assumptions made in calculations of technical provisions (for EEA entities)**

Multiple changes were made to the underwriting assumptions and actuarial models in the third quarter of 2016. The most relevant were:

Aegon the Netherlands updated the underwriting assumptions with the most significant change for mortality;

Aegon UK updated the unit linked persistency assumptions. There was a update of underlying statistical experience analysis with a management overlay to reflect expected future experience;

Aegon UK also updated the maintenance expense assumptions. The lower expense assumptions were primary driven by the reduction in per policy cost due to allowing for the benefits from reducing the number of different products and future outsourcing; and

Aegon UK also updated the pension scheme mortality.

### **D.3 Other liabilities**

#### **D.3.1 Pension benefit obligations**

##### **De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (14) million.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### 81 Valuation for solvency purposes **Other liabilities**

#### **Method of valuation under Solvency II**

Under Solvency II Aegon follows IFRS (IAS 19) for valuing the employee benefits and obligations.

The pension benefit obligation is related to the defined benefit pension plans. Under IFRS, the defined benefit obligation is based on the terms and conditions of the plan applicable on the reporting date. In measuring the defined benefit obligation, the Group uses the projected unit credit method and actuarial assumptions that represent the best estimate of future experience. The benefits are discounted using an interest rate based on the market yield for high-quality corporate bonds that are denominated in the currency in which the benefits will be paid and that have terms to maturity that approximate the terms of the related pension liability. Actuarial assumptions used in the measurement of the liability include the discount rate, estimated future salary increases, mortality rates and price inflation.

Plan assets are comprised of qualifying insurance policies and assets held by long-term employee benefit funds that can only be used to pay employee benefits under the plan and are not available to the Group's creditors. They are measured at fair value and are deducted from the defined benefit obligation in determining the amount recognized on the statement of financial position.

The measurement of a net defined benefit liability or asset under IFRS requires the application of an actuarial valuation method, the attribution of benefits to periods of service, and the use of actuarial assumptions. The fair value of any plan assets is deducted from the present value of the defined benefit obligation in determining the net deficit or surplus.

Refer to the IFRS Annual Report on Form 20-F 2016 of Aegon Group, note 41 Defined benefit plans, for more information on pension benefit obligations, especially the parts about Aegon the Netherlands and Aegon UK that are in scope of the pension benefit obligations under Solvency II.

#### **Material difference in valuation between Solvency II and IFRS**

There are no material differences between the bases, methods and main assumptions used for valuation for solvency purposes and its valuation in the financial statements.

#### **D.3.2 Deferred tax liabilities**

#### **De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (2,891) million.

#### **Method of valuation under Solvency II**

The Solvency II methodology for the calculation of deferred tax follows the provisions of International Accounting Standard (IAS) 12 Income Taxes. Deferred Tax Assets (DTA) and Liabilities (DTL) 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 value according to local tax regulations. A deferred tax asset or liability is calculated based on these temporary differences at the current corporate tax rate. Tax losses carried forward are recognized as deferred tax assets if their future benefit is probable. Solvency II does not require discounting of deferred tax assets and liabilities.

### Material difference in valuation between Solvency II and IFRS

There is no material difference in the methods and main assumptions used for valuation of deferred taxes.

### Reclassification adjustments

After performing recoverability testing, Aegon reclassified the net negative DTL balances from liabilities to assets under Solvency II. This presentation is required to allow for appropriate tiering of the DTA in available own funds. A total of EUR 990 million was reclassified and is mainly driven by the inclusion of the US non-regulated entities for an amount of EUR 622 million and the reclassification between DTL into DTA for Aegon the Netherlands for an amount of EUR 453 million.

Deferred tax	Investments	Technical provisions <sup>1)</sup>	Defined	Losses	Non-		Total
			benefit Plans		Debts <sup>2)</sup>	recognized DTA <sup>3)</sup>	
Amounts in EUR millions							
DTAs at December 31, 2016	(12)	3	538	548	(75)	(233)	768
DTLs at December 31, 2016	2,022	(1,478)	(106)	(90)	(257)	32	152

<sup>1</sup> Including reinsurance recoverables and deferred acquisition costs

<sup>2</sup> Debts owed to credit institutions

<sup>3</sup> Not recognized deferred tax assets (valuation allowance) for tax losses, tax credits and deductible timing differences (current year and previous years)

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**82 Valuation for solvency purposes **Other liabilities**

The total DTAs and DTLs amounted to EUR 768 million and EUR 152 million respectively, as reported in the Solvency II balance sheet in section D. Valuation for solvency purposes.

The table below provides an overview, arranged by loss carry forward period, of tax losses and tax credits for which no deferred tax assets is recognized.

<b>Loss carry forward periods of not recognized DTA</b>	<b>Gross amounts</b>	<b>Not recognized deferred tax assets</b>
Amounts in EUR millions	<b>2016<sup>1)</sup></b>	<b>2016</b>
< 5 years	23	11
<sup>3</sup> 5 - 10 years	114	13
<sup>3</sup> 10 - 15 years	2	33
<sup>3</sup> 15 - 20 years		
Indefinitely	196	55
<b>At December 31, 2016</b>	<b>335</b>	<b>112</b>

<sup>1</sup> The gross value of state tax loss carry forward is not summarized in the disclosure, due to the fact that the United States files in different state jurisdictions with various applicable tax rates and apportionment rules.

**Revaluation adjustments**

The difference between the revaluation of the deferred tax liabilities according to IFRS and Solvency II is mainly driven by the valuation of relevant balance sheet elements. Where tax bases do not change, taxable and deductible revaluation adjustments are equal to the revaluation adjustments for the relevant balance sheet elements multiplied by applicable tax rates.

The total revaluation adjustments processed amounted to EUR (237) million, mainly driven by the revaluation of hybrid debt instruments within the Group.

**D.3.3 Derivatives****De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (2,232) million.

**Method of valuation under Solvency II**

Derivatives are presented at fair value based on market prices when available. Fair values for exchange-traded derivatives, principally futures and certain options, are based on quoted market prices in active markets.

When market prices are not available, other valuation techniques, such as option pricing or stochastic modelling, are applied. The valuation techniques incorporate all factors that market participants would consider, and are based on observable market data to the extent possible. Models are validated before they are used and calibrated to ensure that outputs reflect actual experience and comparable market prices. Refer to section D.4.5. for additional detail on derivatives valued using alternative methods.

Aegon normally mitigates counterparty credit risk in derivative contracts by entering into collateral agreements where practical, and into ISDA master netting agreements for each of the Group's legal entities to facilitate Aegon's right to offset credit exposure. Changes in the fair value of derivatives attributable to changes in counterparty credit risk were not significant.

### **Material difference in valuation between Solvency II and IFRS**

Derivatives are financial instruments of which the value changes in response to an underlying variable, that require little or no net initial investment and are settled at a future date. All derivatives recognized on the statement of financial position are carried at fair value. Therefore, there are no material differences between the bases, methods, and main assumptions used for valuation for solvency purposes and its valuation in financial statements.

#### Reclassification adjustments

The total reclassification adjustment of EUR (2,492) million is mainly driven by:

Reclassification of EUR (1,555) million from derivatives to technical provisions – life for the guarantee provision of unit-linked contracts; and

Derivatives netting (movement from derivative liability to derivative asset) in the amount of EUR (1,032) million.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

83 Valuation for solvency purposes **Other liabilities**

Revaluation adjustments

Revaluation adjustments of derivatives for an amount of EUR (68) million relates to the IFRS reserve for guaranteed benefits on unit-linked guaranteed products, which is presented as an embedded derivative under IFRS, but included within the best estimate liability under Solvency II.

**D.3.4 Debts owed to credit institutions**

**De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR 497 million. This is driven by the US non-regulated entities, consolidated using the equity method under IFRS.

**Method of valuation under Solvency II**

With regards to the senior debt issued by Aegon N.V., the Solvency II fair value is calculated using a discounted cash flow model. The curves used to discount the cash flows are zero curves in the respective currencies. These curves are adjusted to take into account the applicable own credit standing at issuance of the senior debt (Article 14 in the Delegated Regulation prescribes that there shall be no adjustment to take account of the change in own credit standing of the insurance or reinsurance undertaking after initial recognition).

**Material difference in valuation between Solvency II and IFRS**

Financial liabilities like debt owed to credit institutions are valued at amortized cost or fair value. If valued at fair value, then the discount rates should also include Aegon's credit spread.

Liabilities measured at amortized costs under IFRS need to be revaluated as part of the reconciliation. For liabilities measured at fair value under IFRS, the impact of movements in Aegon's credit spread between the issuance date and reporting date (own credit gain or loss) are reversed.

Reclassification adjustments

The total reclassification adjustments amounted to EUR 2,627 million, and relates to financial liabilities other than debts owed to credit institutions (please refer to section D.3.5) from Payables (trade, not insurance) to debts owed to credit institutions. These adjustments stem from a different classification of capital funding between Solvency II and IFRS.

Revaluation adjustments

The total revaluation of EUR 386 million was the result of applying the fair value approach under Solvency II as compared with the amortized cost approach under IFRS.



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

#### **De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (11,380) million.

#### **Method of valuation under Solvency II**

A fair value approach is prescribed under Solvency II, excluding the effect of changes in Aegon's credit spread after initial recognition.

#### **Material difference in valuation between Solvency II and IFRS**

For the differences in bases, methods and main assumptions used for valuation for solvency purposes and its valuation in Aegon's IFRS financial statements of the financial liabilities other than debts owed to credit institutions, please refer to section D.3.4 Debts owed to credit institutions.

#### **Reclassification adjustments**

Reclassification adjustments amounted to EUR (1,566) million. This includes an amount of EUR (1,798) million reclassified from payables (trade, not insurance) (refer to section D.3.7), which is partly offset by a reclassification to debt owed to credit institutions for an amount of EUR 232 million, refer to section D.3.4.

#### **Revaluation adjustments**

The revaluation adjustments are not material.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

84 Valuation for solvency purposes **Other liabilities**

**D.3.6 Insurance & intermediaries payables**

**De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (3,670) million.

**Method of valuation under Solvency II**

A fair value approach is prescribed under Solvency II, excluding the effect of changes in Aegon's own credit spread after initial recognition.

**Material difference in valuation between Solvency II and IFRS**

For the differences in bases, methods and main assumptions used for valuation for solvency purposes and its valuation in Aegon's IFRS financial statements of the insurance & intermediaries payables, please refer to section D.3.4 Debts owed to credit institutions.

**Reclassification adjustments**

The total reclassification adjustment of EUR 505 million is related to the movement from the balance sheet account Payables (trade, not insurance) of the US non-regulated entities.

**Revaluation adjustments**

The revaluation adjustments are not material.

**D.3.7 Payables (trade, not insurance)**

**De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (6,770) million.

**Method of valuation under Solvency II**

A fair value approach is prescribed, excluding the effect of changes in Aegon's own credit spread after initial recognition.

**Material difference in valuation between Solvency II and IFRS**

For the differences in bases, methods and main assumptions used for valuation for solvency purposes and its valuation in Aegon's IFRS financial statements of the payables (trade, not insurance), please refer to section D.3.4 Debts owed to credit institutions.

#### Reclassification adjustments

The total amount of EUR (1,197) million, was reclassified to Debt owed to credit institutions (refer to section D.3.4), Financial liabilities other than debts owed to credit institutions (refer to section D.3.5), and Insurance and intermediaries payables (refer to section D.3.6).

#### Revaluation adjustments

The revaluation adjustment are not material.

### **D.3.8 Subordinated liabilities**

#### **De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR (787) million.

#### **Method of valuation under Solvency II**

A fair value approach is prescribed, excluding the effect of changes in Aegon's own credit spread after initial recognition.

#### **Material difference in valuation between Solvency II and IFRS**

Subordinated liabilities presented in the IFRS Annual Report on Form 20-F under subordinated borrowings and trust pass-through securities are considered financial liabilities and valued at amortized cost or fair value. If valued at fair value, the discount rates should also include Aegon's own credit spread.

For the differences in bases, methods and main assumptions used for valuation for solvency purposes and its valuation in Aegon's IFRS financial statements of the subordinated liabilities, please refer to section D.3.4 Debts owed to credit institutions.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

85 Valuation for solvency purposes **Alternative methods for valuation**

Reclassification adjustments

No material reclassification adjustments were required.

Revaluation adjustments

The total revaluation adjustments of EUR 53 million were the result of applying the current interest rate under Solvency II as opposed to the amortized cost approach under IFRS.

**D.3.9 Any other liabilities**

**De-recognition of the IFRS value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS value of legal entities outside of the European Economic Area, Non-regulated entities, Other Financial Sector entities and consolidation of joint ventures under Solvency II (instead of associate under IFRS) generates an aggregation difference of EUR 553 million. This is driven by the fact that under IFRS, joint ventures are recognized using the equity method while for Solvency II they are proportionally consolidated.

**Method of valuation under Solvency II**

A fair value approach is prescribed, excluding the effect of changes in Aegon's credit spread since initial recognition.

**Material difference in valuation between Solvency II and IFRS**

Financial liabilities under IFRS are valued at either amortized cost or fair value. If valued at fair value, then the discount rates also include Aegon's credit spread.

Liabilities recorded under IFRS at amortized cost, need to be revaluated as part of the reconciliation. For items measured under IFRS at fair value, the impact of the movement in Aegon's credit spread between the issuance date and reporting date (own credit gain or loss) needs to be reversed.

In addition, for lease contracts, lessees in financial leases must include the assets leased on their balance sheet based on their fair values. This treatment is consistent with that of Property, Plant & Equipment that were acquired through legal ownership transfers. The presentation and measurement of operational leases does not differ between Solvency II and IFRS.

Reclassification adjustments

The total reclassification adjustment for an amount of EUR (8,848) million was mainly driven by the reclassification of liabilities held for sale for an amount of EUR (8,816) million.

Revaluation adjustments

The total revaluation adjustment for an amount of EUR (44) million was mostly driven by the de-recognition of the IFRS deferred revenue liability and the addition to the claims and premium provision for non-life.

#### **D.4 Alternative methods for valuation**

This section includes information regarding assets for which alternative valuation methods are used. An overview is provided below. Sections D.4.1 until D.4.7 provide more details about the valuation method applied for specific investments.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**86 Valuation for solvency purposes **Alternative methods for valuation****Assets - Alternative valuation methods**

Amounts in EUR millions	Section	Level 3	Total
<b>Investments (other than assets held for index-linked and unit-linked contracts)<sup>1)</sup></b>		<b>10,817</b>	<b>36,113</b>
Property (other than for own use)	<b>D.4.1</b>	2,429	2,429
<b>Equities</b>		<b>11</b>	<b>1,747</b>
Equities - listed			1,735
Equities - unlisted		11	12
<b>Bonds</b>		<b>5,431</b>	<b>27,264</b>
Government bonds		202	19,499
Corporate bonds	<b>D.4.2</b>	3,052	5,048
Structured notes			
Collateralised securities	<b>D.4.3</b>	2,177	2,716
<b>Collective Investments Undertakings</b>	<b>D.4.4</b>	<b>1,815</b>	<b>2,595</b>
<b>Derivatives<sup>1)</sup></b>	<b>D.4.5</b>	<b>1,131</b>	<b>1,537</b>
<b>Deposits other than cash equivalents</b>			<b>542</b>
<b>Other investments</b>			
<b>Assets held for index-linked and unit-linked contracts (section D.1.2)</b>	<b>D.4.6</b>	<b>26,905</b>	<b>80,603</b>
<b>Loans and mortgages (section D.1.3)</b>	<b>D.4.7</b>	<b>20,953</b>	<b>20,953</b>
loans on policies		5	5
Loans and mortgages to individuals		20,948	20,948

<sup>1</sup> Note that Investments as shown in the table (EUR 36,113 million) does not include the net asset value of participations as reported in the Solvency II balance sheet (EUR 13,425 million). In addition, there is an amount of EUR 4,085 million of derivatives liability netted in the derivatives amount of EUR 1,537 million.

**D.4.1 Property (other than for own use)**

Valuations of both investments in real estate and real estate held for own use are conducted in full by independent external appraisers at least every three to five years, and reviewed at least once a year by qualified internal appraisers to ensure the value correctly reflects the fair value at the reporting date. Appraisals are different for each specific local market, and are based on market guidelines such as International Valuation Standards, Uniform Standards of Professional Appraisal Practice or guidelines issued by the Investment Property Databank. Valuations are mostly based on active market prices, adjusted for any difference in the nature, location or condition of the specific property. If such information is not available, other valuation methods are applied, taking into consideration the value that the property's net earning power will support, the value indicated by recent sales of comparable properties and the current

cost of reproducing or replacing the property. Discount rates used in the valuation of real estate reflect the risk embedded in the projected cash flows for the asset being valued. Capitalization rates represent the income rate for a real estate property that reflects the relationship between a single year's net operating income expectancy and the total property price or value. For property held for own use, appraisers consider the present value of the future rental income cash flows that could be achieved had the real estate been rented to a third party.

#### **D.4.2 Corporate bonds**

Valuations of corporate bonds are monitored and reviewed on a monthly basis. The pricing hierarchy is dependent on the possibility of corroboration of available market prices. If no market prices are available, valuations are determined by a discounted cash flow methodology using an internally calculated yield. The yield is comprised of a credit spread over a given benchmark. In all cases the benchmark is an observable input. The credit spread contains both observable and unobservable inputs. Aegon starts by deriving an observable credit spread from a similar bond of the given issuer, and subsequently adjusts this spread based on unobservable inputs. These unobservable inputs may include subordination, liquidity and maturity differences.

#### **D.4.3 Collateralized securities**

Valuations of RMBS, CMBS and ABS are monitored and reviewed on a monthly basis. Valuations per asset type are based on a pricing hierarchy using a waterfall approach that starts with market prices from indices, and follows with third-party pricing services or brokers. The pricing hierarchy is dependent on the possibilities of corroboration of the market prices. If no market prices are available, Aegon uses internal models to determine fair value. Significant inputs included in the internal models are generally determined based on relative value analyses, which incorporate comparisons to instruments with similar collateral and risk profiles. Market standard models may be used to model the specific collateral composition and cash flow structure of each transaction. The most significant unobservable input is the liquidity premium, which is embedded in the discount rate.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents****87 Valuation for solvency purposes Alternative methods for valuation****D.4.4 Collective investment undertakings**

The fair value of investments held in non-quoted investment funds are determined by management after taking into consideration information provided by the fund managers. Aegon reviews the valuations each month, and performs analytical procedures and trend analyses to ensure the fair values are appropriate. The net asset value is considered the most prudent valuation method in approximating the fair value of the funds.

**D.4.5 Derivatives**

Fair values for over-the-counter (OTC) derivative financial instruments represent amounts estimated to be received from or paid to a third party in a settlement. These derivatives are valued using pricing models based on the net present value of estimated future cash flows, directly observed prices from exchange-traded derivatives, other OTC trades, or external pricing services. Most valuations are derived from swap and volatility matrices, which are constructed for applicable indices and currencies using current market data from many industry standard sources. Option pricing is based on industry standard valuation models and current market levels, where applicable. The pricing of complex or illiquid instruments is based on internal models or an independent third party. For long-dated illiquid contracts, extrapolation methods are applied to observed market data in order to estimate inputs and assumptions that are not directly observable. To value OTC derivatives, management uses observed market information, other trades in the market and dealer prices.

Some OTC derivatives are so-called longevity derivatives. The payout of longevity derivatives is linked to publicly available mortality tables. The derivatives are measured using the present value of the best estimate of expected payouts of the derivative plus a risk margin. The best estimate of expected payouts is determined using a best estimate of mortality developments. Aegon determines the risk margin by stressing the best estimate mortality developments to quantify the risk and applying a cost-of-capital methodology. Depending on the duration of the longevity swaps, either the projected mortality development or discount rate are the most significant unobservable inputs.

**D.4.6 Assets held for indexed-linked and unit-linked contracts**

Given the nature of the underlying assets, the valuation of assets held for indexed-linked and unit-linked contracts are similar to the valuation of Collective investment undertakings as described in section D.4.4. Collective investment undertakings.

**D.4.7 Loans and mortgages****Mortgages**

The valuation of methodology for mortgages includes the following procedures:

I Projection of future cash flows of mortgages loans;



II Determination of the interest rate curve to use for discounting; and

III Net present value (NPV) calculation.

In this approach, cash flows for each mortgage loan part in Aegon's portfolio are projected separately, based on product characteristics, mortgage rates and interest reset dates. Aegon's methodology recognizes 4 mortgage cash flow profile types: Interest only, Annuity, Linear and Savings. Cash flows are corrected for expected early repayments (also known as prepayments). The rate of early repayments is based on historical analyses and an assessment of market conditions.

The interest rate curve used for discounting is determined by applying a spread over the risk free yield curve, which is constant over the maturity of the term structure. The spread for each mortgage loan part is dependent on the Loan to Value and remaining time until the next interest reset date.

The spread is derived from the most recent, most competitive consumer mortgage rates observed in the market, after deduction of a Margin Earned that serves to cover the expense of originating and servicing the mortgage portfolio. The consumer rate minus the Margin Earned reflects the yield that an external investor would be able to obtain when investing in mortgage loans. This method of obtaining the spread is also known as a top-down approach. The prevailing consumer rate is taken as the single average of the mortgage rates offered by the top-3 providers in the market (excluding Aegon), for a particular Loan to Value and duration.

For the purpose of valuation, it is assumed that each mortgage will be redeemed at the next interest reset date of that mortgage. This is the date at which the mortgage provider can reset the interest rate and the mortgagee can terminate the contract without a penalty. The assumption that all mortgages will be terminated at the first interest reset date will, generally speaking, lead to some degree of underestimation of the value of a portfolio. As interest rates can be set or reset to a profitable level at the interest reset date, profits occurring after this date are not included in the valuation. This assumption is made nonetheless, as mortgagees do not have a contractual obligation to continue their mortgage after the interest reset date and can exit without a penalty.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

88 Valuation for solvency purposes **Alternative methods for valuation**

The estimated rate of repayment is compared annually with actual repayment rates for verification, and the prepayment rate in the valuation is updated accordingly. Prevailing consumer rates are collected by an external party on a weekly basis. The mortgage valuation spreads are updated monthly on the basis of the latest consumer rates.

The Margin Earned, which is deducted from the consumer rate to derive the discount rate, is benchmarked against Mortgage portfolio transactions conducted by Aegon Asset Management as well as other transactions. The margin is verified annually on the basis of the most recently completed transactions.

The valuation of the mortgage portfolio is based on a number of factors that are not known precisely or may change over time, creating a degree of uncertainty. Main uncertainties relate to the rate of early repayments, and the dependence of the valuation on mortgage rates offered by other providers in the market.

**Loans**

Fair value of private loans is based on an internal valuation model. On a monthly basis, the Dutch government curve and additional spreads are received and used as input for matrix pricing. The curves per sector are uploaded in the system. Based on private loan characteristics and classifications, the system selects the appropriate curve and yield per security. In applying the net present value (NPV) component combining yields and security cash flows, the system calculates prices via interpolation where bid, mid and ask are populated with the same price.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

**89 Capital management Maintaining adequate solvency capital**

**E. Capital management**

Aegon's overall capital management strategy is based on adequate solvency capital and capital quality (as illustrated below), and the use of leverage.

Management of capital and liquidity is of vital importance for Aegon Group, for its customers, investors in Aegon securities and for Aegon's other stakeholders. In line with its risk tolerance, the goal of Aegon's capital and liquidity management is to promote strong and stable capital adequacy levels for its businesses, together with maintaining adequate liquidity to ensure that the Company is able to meet its obligations.

Aegon follows a number of guiding principles in terms of capital and liquidity management:

Promoting strong capital adequacy in Aegon's businesses and operating units;

Managing and allocating capital efficiently in support of the strategy and in line with its risk tolerance;

Maintaining an efficient capital structure, with an emphasis on optimizing Aegon's cost of capital;

Maintaining adequate liquidity in the operating units and at the holding to ensure that the Company is able to meet its obligations by enforcing stringent liquidity risk policies; and

Maintaining continued access to international capital markets on competitive terms.

Aegon believes these guiding principles collectively strengthen the Company's ability to withstand adverse market conditions, enhance its financial flexibility, and serve both the short-term and the long-term interests of the Company, its customers and its other stakeholders.

Management and monitoring of capital and liquidity is firmly embedded in Aegon's Enterprise Risk Management (ERM) framework, and is in line with Aegon's risk tolerance. Aegon's risk tolerance focuses on financial strength, continuity, steering the risk balance and the desired risk culture. Its core aim is to assist management in carrying out Aegon's strategy within the Group's capital and liquidity resources.

**Maintaining adequate solvency capital**

The aim of Aegon's latest Capital Management Policy, which became effective on January 1, 2016, is to enhance transparency and accountability around capital management throughout Aegon Group. The policy therefore applies to the business units and to Aegon Group.

The capitalization of Aegon Group and its business units is based on the most stringent of local regulatory requirements, rating agency requirements (if applicable) and self-imposed criteria. The capitalization of Aegon Group per December 31, 2016, is shown below:

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents****90 Capital management Maintaining adequate solvency capital**

The Capital Management Policy sets five capitalization zones for local regulatory capital positions of business units and for Aegon Group as shown below.

<b>Aegon Group</b>	Capital management zones	European Economic Area entities	US Life entities	Capital management actions
> 170% SCR	Opportunity	> 150% SCR	> 450% RBC	Accelerate capital redeployment and/or additional dividends.
140% - 170% SCR	Target	130% - 150% SCR	350% - 450% RBC	Execute capital deployment and remittances according to capital plan.
120% - 140% SCR	Caution	120% - 130% SCR	300% - 350% RBC	Re-assess capital plan and risk positions.
100% - 120% SCR	Recovery	100% - 120% SCR	100% - 300% RBC	Re-assess capital plan and risk positions. Reduce or suspend remittances.
< 100% SCR	Regulatory plan	< 100% SCR	< 100% RBC	Suspension of dividends. Regulatory plan required.

The Capital Management Policy provides guidance for financial strength and continuity that, together with culture and risk balance, are the risk tolerance statements set in Aegon's ERM framework. Aegon aims to maintain the capital ratio within the target zone.

The Capital Management Policy also provides actions that need to be performed as soon as the capital ratio falls, or is projected to fall within a particular capitalization zone. This is primarily monitored based on Aegon's regular internal reporting cycle and the Budget/MTP. In addition, the policy provides escalation procedures as well. The Group Risk and Capital Committee (GRCC) and the Management Board are notified as soon as the actual or projected capitalization ratio drops below the target range.

With the application of the Solvency II regime on January 1, 2016, the regulatory capital requirements in EU-domiciled legal entities changed accordingly. The US life insurance companies are monitored based on the Risk-Based Capital (RBC) framework as defined by the National Association of Insurance Commissioners (NAIC).

As a holding company, Aegon N.V. plays a central role in capitalizing the business units. Aegon has attracted funding through equity and various types of debt issuances. These debt issuances are referred to as financial leverage. The proceeds have subsequently been invested in business units although some of the funds are retained by holding companies as excess capital in the holding in order to maintain financial flexibility.

The Dividend policy is also embedded in Aegon's Capital Management Policy. Aegon aims to pay out a sustainable dividend to enable equity investors to share in its performance. After investment in new business to generate organic growth, capital generation in the business units is generally available for distribution to Aegon N.V., while maintaining a capital and liquidity position in the business units in line with Aegon's Capital Management and Liquidity Risk Policies.

Cash flows from business units are used to pay Aegon Group's expenses, including funding costs. The remaining cash flow is available to execute Aegon's strategy and to fund dividends. When determining whether to declare or propose a dividend, the Executive Board balances prudence with offering an attractive return to shareholders. This is particularly important during adverse economic or financial market conditions (see section C. Risk profile for sensitivities on Aegon's solvency position). In addition, the business units are subject to local insurance regulations which could restrict dividends to be paid to Aegon Group. There is no formal requirement for Aegon to declare or pay any dividends.

The excess capital in the holding is also key in measuring Aegon's dividend capacity and capacity to execute strategic priorities. The Capital Management Policy therefore defines capitalization zones based on excess capital in the holding. Aegon targets excess capital in the holding of EUR 1 billion – EUR 1.5 billion as the level that Aegon believes provides sufficient financial flexibility.

The Capital Management Policy is reviewed on a regular basis, taking into account the latest insights into the development of the solvency position of Aegon Group and the business units. Such reviews also take into consideration the comments and guidance received from regulators.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents****91 Capital management Capital quality****Capital quality**

Total own funds are comprised of Unrestricted Tier 1, Restricted Tier 1, Tier 2 and Tier 3 capital. Under the Solvency II regime, a distinction between available and eligible own funds is made, which are both split into the tiers as shown in the table below:

<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>
<b>Unrestricted Tier 1</b>		
Equity (Share capital and share premium). Reconciliation Reserve.	Dated or perpetual subordinated capital instruments. With an original maturity of at least 10 years. Limited loss absorption.	Dated or perpetual subordinated capital instruments. With an original maturity of at least 5 years. Limited loss absorption.
<b>Restricted Tier 1</b>		
Perpetual subordinated capital instruments with loss absorption.	With suspension of payments and deferral of interest.	With suspension of payments and deferral of interest. Net deferred tax assets.

In addition to the general features shown in the table, Solvency II has set detailed requirements on the admissibility of restricted Tier 1 and Tier 2 capital instruments. Aegon's capital instruments do not meet all of these requirements but have been grandfathered as eligible capital for 10 years, as of January 1, 2016. The components of Aegon's capital are described below:

**Unrestricted Tier 1 own funds**

Unrestricted Tier 1 capital consists of share capital, share premium and the reconciliation reserve. The reconciliation reserve includes deductions of foreseeable dividends, which are dividends that have been approved by the Executive Board but have not yet been distributed to shareholders. The reconciliation reserve also includes a restriction related to the With-Profit Sub Fund in the United Kingdom for which the excess of own funds over its capital requirement is at the discretion of the policyholder.

**Grandfathered Restricted Tier 1 own funds**

Restricted Tier 1 capital consists of junior perpetual capital securities and perpetual cumulative subordinated bonds, which are grandfathered securities as described in the section E.1.5 Transitional arrangements.

The junior perpetual capital securities have subordination provisions, rank junior to all other liabilities and senior to shareholders only. The conditions of the securities contain certain provisions for optional and required coupon payment deferral and mandatory coupon payment events. Although the securities have no stated maturity, Aegon has the right to call the securities for redemption at par for the first time on the coupon date in the years as specified in the table below, or on any coupon payment date thereafter.

Edgar Filing: AEGON NV - Form 6-K

Junior perpetual capital securities	Issue date	Year of next call
USD 500 million	November 23, 2005	September 15, 2017 and quarterly thereafter
USD 250 million	November 23, 2005	September 15, 2017 and quarterly thereafter
USD 500 million	July 15, 2004-October 15, 2004	July 15, 2017 and quarterly thereafter
USD 1 billion	June 1, 2005	September 15, 2017 and quarterly thereafter
EUR 950 million	July 15, 2004-October 15, 2004	July 15, 2017 and quarterly thereafter
EUR 200 million	July 21, 2006	July 21, 2017 and annually thereafter

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



**Table of Contents****92 Capital management Use of leverage**

The perpetual cumulative subordinated bonds have the same ranking as dated subordinated debt. In addition, the conditions of the bonds contain provisions for interest deferral. The call date of the perpetual cumulative subordinated bonds are as shown in the table below:

Perpetual cumulative subordinated bonds	Issue date	Year of next call
EUR 136 million	October 14, 1996	October 14, 2018
EUR 203 million	March 4, 1996	March 4, 2021
EUR 114 million	June 8, 1995	June 8, 2025

**Grandfathered Tier 2 own funds**

Aegon's Tier 2 capital consists of its dated subordinated notes, which are also grandfathered as own funds under Solvency II. On February 7, 2012, Aegon issued USD 525 million in aggregate principal amount of 8.00% non-cumulative subordinated notes, due 2042, in an underwritten public offering in the United States registered with the US Securities and Exchange Commission. Any cancelled interest payments will not be cumulative.

The securities are subordinated and rank senior to the junior perpetual capital securities, equally with the perpetual cumulative subordinated bonds and fixed-floating subordinated notes, and junior to all other liabilities. The conditions of the securities contain certain provisions for optional and required cancellation of interest payments. The securities have a stated maturity of 30 years, although, Aegon has the right to call the securities for redemption at par for the first time on the first coupon date on August 15, 2017, or on any coupon payment date thereafter.

On April 25, 2014, Aegon issued EUR 700 million of fixed-floating subordinated notes, first callable on April 25, 2024, and maturing on April 25, 2044. The coupon is fixed at 4% until the first call date and floating thereafter. These securities are subordinated and rank senior to the junior perpetual capital securities, equally with the perpetual cumulative subordinated bonds and non-cumulative subordinated notes, and junior to all other liabilities. The conditions of the securities contain certain provisions for optional and required deferral of interest payments.

For more information on Aegon's capital securities, reference is made to the [debt programs](#) or review the [base prospectus](#).

**Tier 3 own funds**

Aegon's Tier 3 capital under Solvency II consists of Aegon's net deferred tax asset position under Solvency II (as outlined in section D.3.2 Deferred tax liabilities).

**Use of leverage**

The use of financial leverage by Aegon Group is subject to limits defined in Aegon's Capital Management Policy. The following metrics are used to measure and manage Aegon's use of financial leverage:

Gross financial leverage ratio: the proportion of the total capitalization that is financed by financial leverage. Financial leverage transactions are typically capital markets transactions and include hybrid securities, subordinated securities and senior debt used for general corporate purposes and for capitalizing business units; and

Fixed charge coverage ratio: a metric that is calculated as the sum of underlying earnings before tax and interest expenses on financial leverage divided by interest payments on financial leverage. The fixed charge coverage ratio is a measure of Aegon's ability to service its financial leverage.

Aegon targets a gross financial leverage ratio of 26-30% and a fixed charge coverage ratio of between 6 and 8 times interest on financial leverage.

### **G-SII designation**

On November 3, 2015, Aegon 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 annually reviews the G-SII designation and Aegon continues to be designated at the time of publication of the Solvency and Financial Condition Report.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**
**93 Capital management Own funds**

As a result of the G-SII designation, Aegon is subject to an additional layer of direct supervision at Group level. Aegon 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 are 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 submitted these plans to DNB and to the G-SII crisis management group (CMG), which was established for Aegon. The CMG is to be established within 6 months of G-SII designation and is required to enter into a cross-border cooperation agreement; to develop a resolution plan based on a resolution strategy (within 18 months); and to undertake a resolvability assessment (within 24 months).

As of 2016, G-SIIs have calculated and reported a Basic Capital Requirement (BCR) and Higher Loss Absorbing Capacity (HLA) on a confidential basis pursuant to IAIS guidelines. Furthermore, the IAIS is, at the time of publication of Aegon's 2016 SFCR, consulting on an International Capital Standard (ICS).

**E.1 Own funds****E.1.1 Aggregation methods**

For the purpose of determining Aegon's Group solvency position, the solvency position of each related entity belonging to Aegon Group is calculated on a legal entity level. For each legal entity, the aggregation method is based on its nature and characteristics.

The illustration below provides an overview of the aggregation methods applied by Aegon to calculate Aegon's Group Solvency II ratio.

**Aggregation methods**

Aegon calculates its Group Solvency II ratio using the combination of two methods:

1. Accounting Consolidation (AC) or Method 1; and

2. Deduction & Aggregation (D&A) or Method 2.

Both methods are permitted under the Solvency II regime, either exclusively or in combination with each other. Method 1 is the default method for calculating Aegon Group's Solvency II ratio and method 2 is used in specific cases.

The entities aggregated by using the AC method are referred to as AC entities. Aegon includes Solvency II entities, Other Financial Sector (OFS) entities and Other entities in Aegon's Group Solvency II ratio calculation by applying the AC method. Solvency II entities consist of European Economic Area (EEA) insurance entities as well as mixed

financial holding entities and insurance holding entities. The EEA insurance entities of Aegon are domiciled in the Netherlands, United Kingdom, Ireland, Spain, Portugal, Hungary, Poland, Czech Republic and Slovakia.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents****94 Capital management Own funds**

Aegon aggregates Non-EEA (re)insurance entities, also referred to as D&A entities on a D&A basis. The aggregation of D&A entities is performed at the level of the top regulated entity. The value and the required capital of these entities is based on local solvency requirements where those insurance entities are domiciled in third countries deemed to be equivalent or provisionally equivalent. The US life insurance entities, as listed in section A.1.5 List of material undertakings, are the most material entities for which D&A is applied. Aegon also includes certain (re)insurance entities domiciled in non-equivalent third countries through the D&A method on a Solvency II basis. Please refer to column C0260 in QRT S.32.01 - Undertakings in scope of the group, for a full list of the aggregation methods applied for each related undertaking (reported as an appendix to the 2016 SFCR of Aegon Group).

No material changes were made to the aggregation method during 2016.

Aegon Group's own funds are calculated net of material intra-group transactions.

**Accounting Consolidation**

The following applies in regard to the consolidation of own funds based on the AC method:

Aggregated with the benefit of diversification, which applies to Solvency II entities: The assets and liabilities of all entities for which full consolidation applies are consolidated on a line-by-line basis into Aegon's Group balance sheet. The majority of Aegon's European legal entities are reported in this category. The most significant legal entities are domiciled in the Netherlands and the United Kingdom. Joint ventures are proportionally included based on Aegon's share of ownership. The calculation of the related capital requirement can be either on a Solvency II Partial Internal Model (PIM) basis or on a standard formula basis (please see section E.4 for more details on the difference between standard formula and partial internal model used).

Aggregated without the benefit of diversification: This aggregation covers three types of entities:

Non-controlling entities (ownership percentage smaller than 20%): Proportional value of the participation is included in the consolidated data. The value is calculated in accordance with the adjusted equity method;

Entities in Other Financial Sectors: Proportional share of own funds according to relevant sectorial rules is included in the consolidated data. This is for instance applicable to entities active in asset management; and

Other entities: Value of participation is included in the consolidated data. Preferably using market value, but alternatively using the adjusted equity method.

**Deduction & Aggregation (D&A) method**

For consolidation of own funds using the D&A method (method 2), the following is applicable:

Local regulatory rules: The proportional share of own funds according to local regulatory rules is included in the Group own funds. This is applicable for entities in (provisional) equivalent regimes and includes the US life insurance entities as well as operations in Bermuda, Japan, Mexico and Brazil; and

Adoption of Solvency II: The proportional share of own funds according to Solvency II requirements is included in the Group own funds. This is applicable for life insurance entities in non-equivalent regimes and includes Aegon's operations in China, India and Turkey.

Diversification is not allowed between Accounting Consolidation and Deduction & Aggregation methods.

### **E.1.2 Tiering of own funds**

Under the Solvency II regime, restrictions apply to the eligibility of Restricted Tier 1, Tier 2 and Tier 3 capital. Restricted Tier 1 may not exceed 20% of total Tier 1 own funds and Tier 2 cannot exceed 50% of the SCR. In addition, the total of Tier 2 and Tier 3 own funds may not exceed 50% of the SCR, while the eligibility of Tier 3 own funds is limited to 15% of the SCR.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents****95 Capital management Own funds**

The tiering of Aegon Group's 2016 own funds, based on the Solvency II PIM SCR, is visualized in the chart below.

**Tiering of Aegon's Eligible Own Funds**

(based on Solvency II PIM SCR)

Aegon has historically applied a centralized funding structure. Grandfathered Restricted Tier 1 and Restricted Tier 2 capital instruments were issued by Aegon N.V. and the proceeds were invested as Unrestricted Tier 1 capital in the insurance operations or held as excess capital at the holding. The European Insurance and Occupational Pensions Authority (EIOPA) has recognized that the use of a combination of the AC method and the D&A method for the calculation of tiering restrictions in the group solvency may lead to unintended consequences if used by groups, such as Aegon, that organize their funding through a central holding company.

As a result, EIOPA issued an opinion on January 27, 2016 (EIOPA-BoS-16-008) that addresses this issue. In that opinion, EIOPA acknowledges that in such circumstances, the group supervisor may need to allow specific solutions to avoid unjustified disadvantages in such a way that, in relation to intra-group funding transactions, the own funds are assessed as if the group had chosen a different funding solution.

For the part of Aegon Group covered by the AC method, tiering limits are based on the own funds and SCR of the consolidated AC entities. For the part of Aegon Group covered by the D&A method, the tiering limits are based on the own funds and SCR of the consolidated D&A entities.

To reflect the different funding solution, as suggested by the EIOPA opinion, the SCR as brought in through Deduction & Aggregation is first divided by Aegon's total SCR. The resultant percentage is then used to proportionally allocate Aegon's grandfathered Restricted Tier 1 and Restricted Tier 2 capital securities to the part of Aegon Group that is covered by D&A. Tiering restrictions are then calculated separately for the part of Aegon Group covered by AC and D&A methods. The total restriction for Aegon Group is the sum of both AC and D&A restrictions.

Tier 3 capital is also split between AC entities and D&A entities. This is based on the classification of the legal entity carrying the deferred tax asset on its balance sheet to either of these groups. Due to the provisional equivalence of the US NAIC Risk-Based Capital framework, no Solvency II Tier 3 restrictions are applied to deferred tax assets of US Life insurance entities that are eligible locally following admissibility restrictions in the provisionally equivalent US regime. As a result, to the extent that Solvency II Tier 3 restrictions impact such deferred tax assets, these are reclassified as Tier 2 capital as agreed upon with DNB.

**E.1.3 Composition of eligible own funds**

Solvency II defines several measurements of own funds. The broadest measure is called "basic own funds". Certain own fund items are not considered available capital under Solvency II and deducting such items from basic own funds gives what is referred to as "available own funds".

The tiering restrictions described in section E.1.2 Tiering of own funds can further limit the use of own funds in the Group Solvency II ratio, resulting in what is referred to as eligible own funds .

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



**Table of Contents****96 Capital management Own funds**

The split of eligible own funds into the own funds of AC entities, D&A entities and Other Financial Sector entities is visualized in the below illustration.

**Split of Eligible Own Funds into****Eligible Own Funds of AC entities and D&A entities**

(in EUR million)

Most of Aegon's eligible own funds are held by D&A entities, which primarily consist of the US Life insurance business. In addition, the D&A entities include operations in Japan and Bermuda based on (provisional) equivalence and China, India and Turkey (on a Solvency II basis). The majority of the AC entities' own funds is related to the own funds of Aegon the Netherlands and Aegon UK.

The Other Financial Sector (OFS) entities consist mainly of Aegon Hypotheken and Aegon Asset Management. It also consists of non-regulated entities carrying out financial activities – mainly pension fund management activities in Poland, Romania and Hungary. Aegon Bank is excluded from the Group Solvency II ratio, as prescribed by the Group Solvency II supervisor in accordance with Article 228 of Directive 2009/138/EC.

The table below shows the Solvency II own funds per Tier for Aegon Group as of December 31, 2016:

**Solvency II Group own funds as at 31 December 2016**

<u>Amounts in EUR million</u>	<u>Tiers Total</u>	<u>Tier 1 unrestricted</u>	<u>Tier 1 restricted</u>	<u>Tier 2</u>	<u>Tier 3</u>
<b>Basic own funds</b>					
Ordinary share capital	319	319			
Share premium account	7,873	7,873			
Reconciliation reserve	3,082	3,082			
<b>Subordinated liabilities</b>					
Amount equal to the value of net deferred tax assets	1,638				1,638
Other basic own funds approved by supervisory authority	5,826		3,817	2,008	
<b>Total basic own funds before adjustments</b>	<b>18,739</b>	<b>11,275</b>	<b>3,817</b>	<b>2,008</b>	<b>1,638</b>
<b>Non-available own funds</b>					
Deductions deducted according to art 228 of the Directive 2009/138/EC	147	147			
	472	472			
<b>Available own funds</b>	<b>18,119</b>	<b>10,656</b>	<b>3,817</b>	<b>2,008</b>	<b>1,638</b>

AC entities excluding OFS	6,552	3,236	1,904	644	768
D&A entities	10,981	6,832	1,914	1,365	870
Other Financial Sector entities	587	587			
<b>Eligible own funds SCR</b>	<b>18,119</b>	<b>10,656</b>	<b>2,517</b>	<b>3,309</b>	<b>1,638</b>
Eligible own funds MCR	4,417	3,236	809	371	
<b>Consolidated Group SCR</b>	<b>11,563</b>	<b>11,563</b>			
Consolidated Group MCR	1,856	1,856			
<b>Solvency II ratio</b>		<b>157%</b>			

In the remainder of this section, the own funds items as of year-end 2016 are discussed in more detail.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents****97 Capital management Own funds****Ordinary share capital**

Ordinary share capital (gross of own shares) consists of 2,075 million common shares and 585 million common shares B. Both share classes have a par value of 12 cents per share.

**Share premium account**

Share premium account related to ordinary share capital is comprised of common shares for an amount of EUR 6,220 million, and common shares B for an amount of EUR 1,653 million.

**Reconciliation reserve**

The reconciliation reserve is calculated as follows:

Amounts in EUR million	
<b>Excess of Assets over Liabilities</b>	<b>19,100</b>
Own shares (held directly and indirectly)	(186)
Foreseeable dividends, distributions and charges	
Other basic own fund items	(15,656)
Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fence funds	(173)
Other non-available own funds	(2)
<b>Reconciliation reserve</b>	<b>3,083</b>

The ring-fenced restriction for an amount of EUR 173 million is related to the UK With-Profit Sub-Fund (WPSF) of Scottish Equitable plc. The surplus is restricted as these funds are not available to the Company but are a benefit for the policyholders.

**Amount equal to the value of net deferred tax assets**

The amount of EUR 1,638 million is mainly related to Aegon Americas and is the result of differences between statutory and tax reserve valuation methodologies and the tax deferral of various statutory expenses, most notably acquisition costs and securities impairments. In addition to the EUR 1,638 million, an amount of EUR 717 million of deferred tax assets was reclassified from Tier 3 to Tier 2 capital. This is explained by the treatment of deferred tax assets under US NAIC Risk-Based Capital framework described in section E.1.2 Tiering of own funds.

**Other basic own funds approved by the supervisory authority before application of tiering restrictions**

The total amount mainly consists of junior perpetual capital securities included in Tier 1, perpetual capital subordinated bonds included in Tier 1, fixed-floating subordinated notes and non-cumulative subordinated notes both included in Tier 2. In addition, Tier 2 includes the aforementioned reclassified deferred tax assets.

The following basic own funds items do not meet the criteria to be classified as available own funds:

**Non-available own funds**

The amount of EUR 147 million of non-available own funds is related to certain receivables and restricted charitable trust assets in the US non-regulated entities.

**Deductions based on Article 228 of Directive 2009/138/EC**

The amount of EUR 472 million relates to Aegon Bank and was deducted from Aegon Group's basic own funds in accordance with Article 228 of the Directive 2009/138/EC.

The following restrictions are applied to available own funds to determine the eligible own funds:

The eligibility of the Restricted Tier 1 capital is limited by the regulatory requirement to the extent that Tier 1 restricted capital cannot exceed 20% of total Tier 1. This resulted in a EUR 1,300 million reclassification from Restricted Tier 1 to Tier 2 and represents the difference between available (EUR 3,817 million) and eligible Tier 1 own funds of EUR 2,517 million.

Taking the aforementioned restrictions into consideration, the total eligible own funds of Aegon Group on December 31, 2016, amounted to EUR 18,119 million and consisted of:

EUR 10,656 million of Unrestricted Tier 1;

EUR 2,517 million of Restricted Tier 1, consisting of junior perpetual capital securities and perpetual cumulative subordinated bonds after overflow to Tier 2;

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents****98 Capital management Own funds**

EUR 3,309 million of Tier 2, mainly consisting of fixed-floating subordinated notes, non-cumulative subordinated notes, Restricted Tier 1 and certain deferred tax assets being reclassified as Tier 2; and

EUR 1,638 million of Tier 3, related to deferred tax assets.

**Eligible own funds to meet MCR**

The minimum consolidated Aegon Group SCR consists of the sum of all individual Solvency II insurance entities MCRs and amounted to EUR 1,856 million at year-end 2016.

The total eligible own funds to meet the minimum consolidated Aegon Group MCR of EUR 4,417 million at year-end 2016, does not include the capital from D&A entities or the non-insurance entities. In addition, it cannot be covered by Tier 3 own funds. For these reasons, the eligible own funds to meet the minimum consolidated Aegon Group SCR is EUR 13,702 million lower than the own funds available to meet the SCR.

**Significant developments own funds throughout 2016**

As of December 31, 2016, the total eligible own funds amounted to EUR 18,119 million. During the year, Unrestricted Tier 1 developments included capital generation from the operating units which was more than offset by less favorable markets and capital returns to shareholders by means of:

External cash dividend payments for an amount of EUR 306 million. During 2016, Aegon paid a 2015 final dividend of EUR 0.13 per share and a 2016 interim dividend of EUR 0.13 per share; and

Share buybacks for a total amount of EUR 623 million, of which EUR 400 million to neutralize the dilutive effect of the cancellation of the preferred shares in 2013, and EUR 223 million to offset the dilutive effect of newly issued common shares during the year.

During 2016, no Restricted Tier 1 and Tier 2 capital instruments were issued or redeemed. The EUR value of the USD denominated subordinated debt changed due to the appreciation of the USD versus the EUR. Tier 3 capital increased primarily due to taxable losses on hedging and the strengthening of the US dollar versus the Euro. This was partly offset by a higher overflow of Tier 3 to Tier 2.

**E.1.4 Difference between Solvency II own funds and IFRS shareholders equity****Reconciliation shareholders equity - own funds**

<u>Amounts in EUR million</u>	<b>December 31, 2016</b>
<b>Shareholders equity in accordance with IFRS</b>	<b>20,520</b>
Adjustment of EU IAS 39 carve-out	393

<b>Shareholders equity in accordance with IFRS-EU</b>	<b>20,913</b>
IFRS adjustments for other equity instruments and non-controlling interest	3,821
<b>Group equity</b>	<b>24,734</b>
<i>Differences in aggregation related to D&amp;A entities</i>	(5,828)
<i>Differences in recognition basis for i.e. DPAC and Goodwill</i>	2,118
<i>Valuation difference between IFRS and Solvency II</i>	(1,924)
<b>Solvency II revaluations</b>	<b>(5,634)</b>
<b>Excess of Assets over Liabilities</b>	<b>19,100</b>
<i>Adjustments for restricted own funds (Ring-fenced funds)</i>	(175)
<i>Foreseeable dividends</i>	
<i>Treasury shares</i>	(186)
<b>Availability adjustments</b>	<b>(361)</b>
<i>Non-available own funds related to charitable trusts</i>	(147)
<i>Deductions according to art. 228 of the Directive 2009/138/EC related to Aegon Bank</i>	(472)
<b>Fungibility adjustments</b>	<b>(619)</b>
<b>Available own funds</b>	<b>18,119</b>

Quantitative and qualitative explanations of the material differences between Solvency II own funds (EUR 18,119 million) and IFRS Shareholders equity (EUR 20,520 million) as shown in the financial statements and the excess of assets over liabilities as calculated for solvency purposes is provided in chapter D. Valuation for solvency purposes.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### **99 Capital management Solvency Capital Requirement and Minimum Capital Requirement**

#### **E.1.5 Transitional arrangements**

Restricted Tier 1 capital consists of Aegon's junior perpetual capital securities and perpetual cumulative subordinated bonds, which are both grandfathered for up to 10 years as of January 1, 2016.

Aegon will use the grandfathering period until January 1, 2026, to gradually replace grandfathered capital securities by Solvency II compliant own funds. The timing of this replacement will be subject to market circumstances, including but not limited to pricing, investor demand and investor preferences. Furthermore, Aegon will take into account the projections of its Solvency II position, unrestricted Tier 1 and SCR positions, and the expected impact on eligible own funds and tiering capacity, both under normal and stressed market conditions.

In Spain, a transitional arrangement related to technical provisions is used, that compares the technical provisions on a Solvency I and a Solvency II basis, with this difference being amortized over a period of 16 years (please refer to section D.2.4 Long term guarantees and transitional measures).

Excluding the impact of the grandfathered capital instruments described in section E.1.3 Composition of eligible own funds, the transitional arrangements had an estimated positive impact of 0.7% on the Aegon Group 2016 Solvency II ratio.

#### **E.1.6 Ancillary own funds**

The year-end 2016 Solvency II position of Aegon Group did not include any ancillary own funds as defined in Article 89(1) of Directive 2009/138/EC).

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

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

With the introduction of the Solvency II regulatory framework on January 1, 2016, the capital requirement for EU-domiciled insurance and reinsurance entities and Aegon Group is based on Solvency II.

In Aegon's Non-EEA regions, (re)insurance entities domiciled in third-countries deemed (provisional) equivalent (US, Bermuda, Japan, Mexico and Brazil) the capital requirement is based on local capital requirements. For other Non-EEA (re)insurance entities domiciled in China, India and Turkey, the capital requirement is based on Solvency II.

#### **Group calculation method**

Aegon applies a combination of the group consolidation methods available under Solvency II, being the Accounting Consolidation and Deduction & Aggregation based methods. Solvency II capital requirements are mainly used for the EEA-based insurance and reinsurance entities, applying the Accounting and Consolidation method. Local requirements are used for insurance and reinsurance entities in (provisionally) equivalent third-country jurisdictions. Aegon Bank is excluded from the Group Solvency ratio, as required by the Group Solvency II supervisor, DNB.

**SCR methodology based on the Solvency II PIM**

Aegon uses a Solvency II PIM to calculate the solvency position of most of its EEA insurance activities under Solvency II. Aegon's internal model was approved by the College of Supervisors as part of the Internal Model Application Process. For Aegon, a (partial) internal model is a better representation of the actual risk since this contains Aegon specific modelling and sensitivities as opposed to industry-wide approximations included in the standard formula methodology. The purpose of the internal model is to better reflect the actual risk profile of Aegon in the SCR. The most material risk types for Aegon are therefore covered by the internal model as part of the Solvency II PIM, and less material risk types and business units are covered by the standard formula part of the Solvency II PIM.

Additional purposes for which Aegon uses the Solvency II PIM include:

Quantification of risk exposures in order to set adequate capital buffers;

Monitoring of these exposures against the stated risk appetite and risk tolerance;

Product pricing, where the cost of capital has a significant impact on overall costs;

Assessment of the value of new business sold, in particular the value of options and guarantees contained therein;  
and

Budgeting of capital requirements, Dividend Policy & Contingency Planning.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



**Table of Contents**

**100 Capital management Solvency Capital Requirement and Minimum Capital Requirement**

**Scope of the internal model parts of Solvency II PIM SCR**

The internal model of Aegon covers the following legal entities:

Aegon N.V.;

Aegon Levensverzekering N.V. (part of Aegon the Netherlands);

OPTAS Pensioenen N.V. (part of Aegon the Netherlands);

Spaarkas N.V. (part of Aegon the Netherlands); and

Scottish Equitable plc (part of Aegon UK)

All other legal entities within Aegon that are subject to a Solvency II SCR calculation use the standard formula. There are no differences between the PIM used locally, and the PIM that is used to calculate the Solvency II PIM SCR of Aegon Group.

The following risk types are modelled under the internal model component of the Solvency II PIM:

Within the mismatch risk category:

Interest rate risk and interest rate volatility risk.

Within the Investment and counterparty risk category:

Equity risk and equity volatility risk;

Credit risk for fixed income securities including mortgages (both spread risk and default/migration risk); and

Property risk (only for Aegon the Netherlands).

Within the underwriting risk category:

Mortality and longevity risk;

Mortgage prepayment risk (only for Aegon the Netherlands);

Policyholder behavior (only for Aegon UK); and

Expense risk (only for Aegon UK)

All risk types that are not covered by the internal model are covered under the standard formula component of the Solvency II PIM. The risk measure used in all components of the Solvency II PIM is the 99.5% value at risk applied over a one-year time horizon. The standard formula SCRs and internal model SCRs are combined to calculate the Solvency II PIM SCR using Integration Technique 3 (IT3) as listed in annex XVIII.D of Commission Delegated Regulation (EU) 2015/35 (Delegated Acts).

### **Diversification within the Solvency II PIM SCR**

Under Solvency II PIM, Aegon calculates the diversification benefit across country units and risk types. Within the standard formula components, diversification is determined following the prescribed SF correlation matrices.

Within the internal model component, diversification is calculated as follows: For each risk type a worst case shock is calibrated at the 99.5% confidence level over a one-year time horizon. These shocks reflect the adverse value change of the assets and liabilities over the time horizon including the amounts paid during the one year time horizon, as well as the change in present value of cash flows projections at the end of the projected time horizon. The combination of these adverse value changes are the own funds losses.

To calculate the total SCR and diversification, the own funds losses are determined not only at the 99.5% confidence level of the risk types, but at two million equally likely scenarios. This approach is also referred to as a Monte Carlo simulation. The scenarios are generated using a scenario generator and a dependency structure, defining the dependency (correlation) between risk drivers based on market data and expert judgment. Each scenario contains values for risk drivers such as interest rates, equity returns and mortality levels.

Aegon uses loss functions to calculate the own funds losses in all these scenarios. These loss functions are fitted using full valuations at several points (percentiles) of the distribution of the applicable risk type. For each of the two million scenarios, the own funds losses are summed between the risk types and business units that apply internal model, resulting in the total loss in own funds for the scenario. By ordering these scenarios based on their aggregated losses, the 99.5 percentile of the losses is determined. The total net SCR (after diversification) is then determined by the average loss in own funds for the 5,001 scenarios around the 99.5 percentile. Diversification is defined as the difference between the sum of the standalone SCRs of the risk types and the total net SCR.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

## **Table of Contents**

### **101 Capital management Solvency Capital Requirement and Minimum Capital Requirement**

Diversification between the internal model and the standard formula components of the Solvency II PIM are calculated using Integration Technique 3 (IT3) in accordance with Solvency II regulation. IT3 describes how an implied linear correlation coefficient between the internal model and standard formula components is calculated. This correlation coefficient is subsequently used to calculate the total Solvency II PIM SCR using a square root formula.

#### **Data quality**

Aegon has implemented a group wide Data Quality policy for the Solvency II reporting processes, including a required data directory and a description of the criteria regarding data completeness, accurateness and appropriateness respectively. Data used in the internal model originates from internal as well as external sources, for example:

Policy data level detailing characteristics and coverage of individual insurance policies;

Data specifying the portfolio of assets, e.g. type of asset, amount, and maturity date; and

Data from external sources such as population mortality tables and prices of traded securities.

The internal model design aims to make optimal use of all available data in the stages of model design and execution. An assessment of the appropriateness of data usage forms part of the model validation process.

#### **Other**

Aegon does not apply simplified calculations for calculating the SCR of the business units using the standard formula.

Subject to approval by the supervisory authorities, Aegon may, within the design of the standard formula, replace a subset of its parameters by parameters specific to Aegon Group when calculating the life, non-life and health underwriting risk modules (Article 104(7) of the Directive 2009/138/EC). Aegon does not apply such specific parameters as defined for calculating the standard formula SCR.

#### **Aegon Americas**

In the United States, regulation of the insurance business is principally at the state level. State insurance regulators and the National Association of Insurance Commissioners have adopted risk-based capital (RBC) requirements for insurance companies. RBC calculations measure the ratio of a company's statutory capital, which is measured on a prudent regulatory accounting basis, to a minimum capital amount determined by the risk-based capital formula. The RBC formula measures exposures to investment risk, insurance risk, market risk, and general business risk. The formula, as used for calculating the solvency ratio, applies a covariance diversification offset to determine the appropriate risk-based capital. Life reinsurance is treated as life insurance. The most pertinent RBC measure is the Company Action Level (CAL) risk-based capital requirement. This is the regulatory intervention level at which a company has to submit a plan to its state regulators. The domiciliary state regulator has the authority to require additional capital depending on the type, volume and nature of the business being conducted. The domiciliary state

regulator also has the ability to require corrective actions if a company is deemed by the commissioner to pose a Hazardous Financial Condition. The CAL is 200% of the Authorized Control Level (ACL), the level at which regulators are permitted to seize control of the Company. Aegon uses 250% of the local RBC Company Action Level as the SCR equivalent for including the US life insurance and reinsurance entities into the group solvency calculation. The non-regulated US entities and the US holding companies are included in the Aegon Group Solvency II results through application of the Accounting Consolidation method under Solvency II, using Solvency II valuation and capital requirement calculations for these entities.

#### **Solvency II PIM SCR at December 31, 2016**

On December 31, 2016, Aegon's consolidated group SCR based on the Solvency II PIM amounted to EUR 11,563 million. Note that assumptions underlying Aegon's factor for the loss absorbing capacity of deferred taxes will be reviewed following new guidance from the Dutch Central Bank issued in February 2017. At December 31, 2016, the worst case tax factor of LAC-DT was assumed 75%.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents****102 Capital management Solvency Capital Requirement and Minimum Capital Requirement**

The table below shows the breakdown of the Solvency II PIM SCR for Aegon Group at year-end 2016:

<b>Solvency Capital Requirement</b>	<b>Before diversification and LAC-DT</b>	<b>After diversification and LAC-DT</b>
<u>Amounts in EUR millions</u>		
Investment & counterparty risk (IM)	4,146	2,730
Mismatch risk (IM)	918	81
Underwriting risk (IM)	3,542	1,127
Standard formula risk (SF)	4,793	2,892
Diversification between SF and IM		(463)
LAC-DT		(839)
Other capital requirement	6,036	6,036
<b>Group PIM SCR</b>	<b>19,435</b>	<b>11,563</b>

The main risk types contributing to PIM SCR are spread and longevity risk, which are included in investment and counterparty risk, and underwriting risk respectively.

The SCR before diversification amounted to EUR 19,435 million. The SCR after diversification of the Solvency II risk types of EEA entities is EUR 11,563 million. The material sources of diversification in the PIM SCR include:

Within the Internal Model (IM) the diversification is split into the following risk categories:

Diversification of Investment and Counterparty Risks (IR) amounted to EUR 1,416 million, mainly due to diversification between spread and equity risk (within IR). The remainder represents diversification between IR and other risk types. Diversification benefits for spread risk are relatively small as spread risk (exposure to spread widening) is the largest risk category for Aegon in terms of SCR and therefore drives the aggregated own funds losses in the scenarios around the 99.5th percentile. Note that all these figures are after applying the dynamic volatility adjustment;

Mismatch risks (MR) diversification benefits of EUR 838 million mainly result from diversification between interest rate level risk and other risk types, and in particular spread risk (which is included in IR). Diversification benefits for interest rate level risk are relatively large as Aegon is exposed to an increase in interest rates, which has a low correlation with the spread widening scenarios that drive the aggregated own funds losses around the 99.5th percentile; and

Underwriting risks (UR) diversification benefits of EUR 2,416 million and, as such, the largest contributor to overall diversification. Underwriting risks are driven by longevity risk which has a relatively low correlation with other underwriting risk types, such as lapse risk. Furthermore, underwriting risks typically have a low correlation with IR risk types, like spread risk, that drive the aggregated own funds losses around the 99.5th percentile.

The standard formula (SF) diversification benefits amounted to EUR 1,901 million and follow from the SF correlation matrices;

The integration between the SF and IM parts of the PIM SCR added EUR 463 million diversification;

The LAC-DT is calculated after diversification and lowered the net PIM SCR by EUR 839 million. The LAC-DT benefit mainly stemmed from Aegon the Netherlands, for which a LAC-DT percentage of 75% is assumed; and

Other capital requirements include capital requirements for entities under D&A (mainly Aegon Americas) in addition to OFS entities (excluding Aegon Bank). There is no diversification benefit from these capital requirements.

The PIM SCR includes the SCR for AC entities, the D&A entities and the Other Financial Sector entities (excluding Aegon Bank). The geographical composition of Aegon Group's consolidated SCR based on Solvency II PIM as per year-end 2016 is illustrated in the figure below. The illustration shows that the D&A entities, which mainly consist of the US Life insurance entities on a D&A basis, make up for more than half of the SCR.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents****103 Capital management Use of the duration-based equity risk sum-module****Overview of the composition by geography of the****Solvency II PIM SCR of Aegon Group per Q4 2016**

(in EUR million)

**E.2.2 Solvency II ratio**

The solvency position is calculated as a ratio between own funds and 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 metric, while the SCR is the level of own funds at which regulators will formally require management to provide regulatory recovery plans. The Group Solvency II ratio uses the SCR as the denominator.

The SCR amount (or 100% Solvency II ratio) reflects a level of eligible own funds that enables insurance and reinsurance entities to absorb significant losses and gives reasonable assurance to policyholders and beneficiaries that payments will be made as they fall due.

**Solvency II key figures**

	<b>December 31, 2016</b>
Amounts in EUR millions	
Eligible own funds	18,119
Consolidated Group SCR	11,563
<b>Solvency II ratio</b>	<b>157%</b>

**E.2.3 Minimum Capital Requirement**

The minimum consolidated Aegon Group SCR consists of the sum of all individual Solvency II insurance entities, and amounted to EUR 1,856 million at year-end 2016. During 2016, the MCR reduced as a result of the sale of Aegon's annuity business in the United Kingdom.

**E.3 Use of the duration-based equity risk sum-module**

Aegon 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 partial internal model used**

The main differences between the methodologies and assumptions of the Solvency II PIM and the standard formula are discussed by risk type below.

**Market risk**

The fixed income risk for bonds differs from standard formula because the Solvency II PIM shocks are calibrated on Aegon's fixed income portfolio. In contrast to the standard formula, government bonds are shocked in the internal model calculations. Furthermore, the Solvency II PIM applies a dynamic volatility adjustment approach within Aegon the Netherlands, while the standard formula does not.

For mortgages, the Solvency II PIM contains a spread shock, while the standard formula implies a counterparty default risk shock.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB



**Table of Contents**

**104 Capital management Non-compliance with capital requirements**

Equity risk shocks are calibrated based on Aegon's own portfolio. In addition, the equity exposures are also shocked for equity volatility risks.

Within Aegon the Netherlands, property risk shocks on the real estate portfolio are specifically calibrated on the portfolio as opposed to a 25% shock in the standard formula.

The Solvency II PIM results for interest rate risks differ from the standard formula results for the following reasons:

The standard formula interest rate shock only considers a parallel shift in the interest rate curve, whereas the Solvency II PIM considers not only a parallel shift, but also a flattening and twisting of the interest rate curve;

The Solvency II PIM interest rate curve shocks are calibrated based on historical market data relevant for Aegon's portfolio;

The Solvency II PIM assumes that the Ultimate Forward Rate (UFR) does not change in a shock scenario, while the standard formula interest rate shock assumes that the whole curve moves, including the UFR;

In addition, the Solvency II PIM includes a capital requirement for interest rate volatility risk; and

For Aegon UK, the interest rate risk under the Solvency II PIM also includes an inflation shock on benefit payments and expenses, while the inflation shock on expenses is included in life expense risk under standard formula.

**Underwriting risk**

The Solvency II PIM for longevity and mortality risk differs from the standard formula as follows:

The Solvency II PIM distinguishes between a population mortality shock and an experience factor shock while the standard formula assumes a fixed decrease in all mortality rates; and

The Solvency II PIM projects mortality rates by age and gender, while the standard formula assumes the same shock for all ages and both genders.

For Aegon the Netherlands, the Solvency II PIM includes pre-payment (lapse) risk on the mortgage portfolio.

Policyholder behavior (lapse) risk for Aegon UK under the Solvency II PIM is the aggregate of a parameter and a contagion shock, while under standard formula it is the greater of a parameter and a contagion stress. Furthermore, the

shocks are calibrated on the Aegon UK portfolio, resulting in a larger shock size than under the standard formula, which leads to a higher SCR before diversification.

The aggregate Solvency II PIM expense risk shock for Aegon UK is higher than the standard formula stress as the Solvency II PIM stress covers expense level, trend and volatility stress. This leads to a higher SCR before diversification. Under Solvency II PIM, the inflation on expenses is shocked in the interest rate risk module, while under standard formula it is shocked in the expense risk module.

### **Diversification**

Diversification between the internal model and the standard formula components of the Solvency II PIM are calculated using Integration Technique 3 (IT3). This EIOPA prescribed integration technique describes how an implied linear correlation coefficient between the internal model and standard formula components is calculated. This correlation coefficient is subsequently used to calculate the total Solvency II PIM SCR using a square root formula. The standard formula makes use of correlation matrices to calculate the diversifications by risk module and on a total level.

### **E.5 Non-compliance with capital requirements**

During 2016, there were no instances in which the estimated Aegon Group Solvency II ratio was below the MCR and the SCR level. To ensure that Aegon maintains adequate solvency levels, actual and expected capital positions are monitored against capitalization zones that are defined in Aegon's Capital Management Policy. Several activities are performed to monitor and assess the future development of Aegon's solvency position, such as the annual Budget/MTP process and periodic management reporting. Decisions to return capital to shareholders are based on solvency assessments that consider the impact of the decisions on the current and projected solvency position.

Any solvency position is subject to risks, and Aegon continuously monitors such risks. These are quantified to determine the impact 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.

The Hague, the Netherlands, June 30, 2017

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

---

**Table of Contents**

**105 Additional information Glossary**

**Additional information**

**Glossary**

**Accounting Consolidation** is the default method for calculating the Group solvency position. With this consolidation method, diversification benefits in the calculation of capital requirements is allowed for Solvency II entities. In addition, Accounting Consolidation method is applied to non-controlling participations, Other Financial Sector entities and Other entities. For these three types of entities diversification benefits in the calculations of capital requirements is not allowed.

**Aggregation** is the methodology by which capital requirements are calculated across different risk groupings, allowing for diversification benefit between the groupings.

**Amortized cost** is the amount at which the financial asset or liability is measured at initial recognition minus principal repayments, plus or minus the cumulative amortization using the effective interest rate method of any difference between that initial amount and the maturity amount and minus any reduction (directly or through the use of an allowance account) for impairment or uncollectability.

**Asset-Backed Securities (ABS)** are securities whose value and income payments are derived from and collateralized (or backed ) by a specified pool of underlying assets.

**Assets held by long-term employee benefit funds** are part of plan assets. These are assets (other than non-transferable financial instruments issued by the reporting entity) that:

Are held by an entity that is legally separate from the reporting entity and exists solely to pay or fund employee benefits; and

Are available to be used only to pay or fund employee benefits and are not available to the reporting entity's own creditors.

**Business combination** is the bringing together of separate entities or operations of entities into one reporting entity. This can be realized through a purchase transaction or by means of a merger. A business combination involving entities (or operations of entities) under common control is a business combination in which all of the combining entities (or operations of entities) ultimately are controlled by the same party or parties both before and after the combination, and that control is not transitory.

**Capital funding** includes debt securities that are issued for general corporate purposes and for capitalizing our business units. Capital funding is part of the Company's total capitalization that is used for financing Aegon's subsidiaries and the cash held at the holding company.

**Capitalization** is the recognition of a cost as part of the cost of an asset on the statement of financial position.

**Cedant** is the policyholder under a reinsurance contract.

**Collateral** is an asset pledged by a borrower to secure a loan and is subject to seizure in the case of default.

**Collateralized Debt Obligation (CDO)** is a type of asset-backed security which provides investors exposure to the credit risk of a pool of fixed income assets.

**Commercial Mortgage-Backed Securities (CMBS)** is a type of mortgage-backed security that is secured by the loan on a commercial property.

**Credit risk** is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss.

**Currency exchange rate risk** is a market risk, namely the risk that the value of a financial instrument will fluctuate due to changes in foreign exchange rates.

**Debt securities** are interest-paying bonds, debentures, notes, or money market instruments that are issued by governments or corporations. Debt securities are issued with a promise of repayment on a certain date at a specified rate of interest.

**Deduction & Aggregation** is the alternate method for calculating group solvency that aggregates an entity without allowing for diversification between the entity that is aggregated using D&A and those that are aggregated using Accounting Consolidation.

**Deferred tax assets** are amounts of income taxes recoverable in future periods in respect of deductible temporary differences; the carryforward of unused tax losses; and the carryforward of unused tax credits.

**Deferred tax liabilities** are amounts of income taxes payable in future periods in respect of taxable temporary differences.

**Defined benefit obligation** is the present value, without deducting any plan assets, of expected future payments required to settle the obligation resulting from employee service in the current and prior periods.

**Defined benefit plans** are post-employment benefit plans other than defined contribution plans.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

**106** Additional information **Glossary**

**Defined contribution plans** are post-employment benefit plans under which an entity pays fixed contributions into a separate entity (a fund) and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods.

**Deferred Policy Acquisition Cost (DPAC)** - are the variable costs related to the acquisition or renewal of insurance contracts and investment contracts with discretionary participation features.

**De-recognition** is the removal of a previously recognized asset or financial liability from an entity's statement of financial position.

**Derivatives** are financial instruments whose value changes in response to an underlying variable, that require little or no net initial investment and are settled at a future date.

**Discretionary participation feature** is a contractual right to receive, as a supplement to guaranteed benefits, additional benefits:

That are likely to be a significant portion of the total contractual benefits;

Whose amount or timing is contractually at the discretion of the issuer; and  
That are contractually based on:

The performance of a specified pool of contracts or a specified type of contract;

Realized and/or unrealized investment returns on a specified pool of assets held by the issuer; or

The profit or loss of the Company, fund or other entity that issues the contract.

**Diversification** is the general concept of reducing the total risk of a portfolio of assets and/or liabilities by spreading it across a mix of different risk exposures. Risk reduction occurs due to the less than perfect correlation among the individual risk exposures in the portfolio, meaning risks will not materialize all at the same time.

**Effective interest rate method** is a method of calculating the amortized cost of a financial asset or liability and of allocating the interest income or expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or liability.

**Embedded derivative** is a component of a hybrid instrument that also includes a non-derivative host contract, with the effect that some of the cash flows of the combined instrument vary in a way similar to a derivative.

**Equity instruments** are financial instruments issued by the Group that are classified as equity if they evidence a residual interest in the assets of the Group after deducting all of its liabilities.

**Equity method** is a method of accounting whereby the investment is initially recognized at cost and adjusted thereafter for the post-acquisition change in the investor's share of net assets of the investee. The profit or loss of the investor includes the investor's share of the profit or loss of the investee.

**Equity volatility** is the relative rate at which the price of equity changes.

**Exchange differences** are differences resulting from translating a given number of units of one currency into another currency at different exchange rates.

**Financial asset** is any asset that is:

Cash;

An equity instrument of another entity;

A contractual right to receive cash or another financial asset from another entity or to exchange financial instruments with another party under conditions that are potentially favorable; or

A contract that will or may be settled in the entity's own equity instruments; and is

A non-derivative for which the entity is or may be obliged to receive a variable number of the entity's own equity instruments; or

A derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments.

**Financial instrument** is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity.

**Financial liability** is any liability that is:

A contractual obligation to deliver cash or another financial asset to another entity or to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavorable to the entity; or

A contract that will or may be settled in the entity's own equity instruments; and is

A non-derivative for which the entity is or may be obliged to deliver a variable number of the entity's own equity instruments; or

A derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments.

**Financial risks** are risks of a possible future change in one or more of the following variables: a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index or prices or rates, credit rating or credit index or other variable, provided in the case of a non-financial variable, that the variable is not specific to a party to the contract.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

**107** Additional information **Glossary**

**Fixed charge coverage** is a measure of Aegon's ability to service its debt and is measuring the ratio of underlying earnings before tax to Fixed Charges (interest expenses, coupons on perpetual securities and preferred dividend).

**Foreign currency** is a currency other than the functional currency of an entity within the Group.

**Functional currency** is the currency of the primary economic environment in which an entity within the Group operates.

**Fungibility & Transferrability** is the ability to up-stream and transfer capital between jurisdictions. This ability differs between jurisdictions as it depends on the legal framework of each jurisdiction.

**General account investments** are investments of which the financial risks are not borne by the policyholder.

**Goodwill** is the amount of future economic benefits arising from assets that are not capable of being individually identified and separately recognized as an asset in a business combination.

**Government exposures** relates to government issued securities including Dutch Government bonds and US Treasury, agency and state bonds.

**Guaranteed benefits** are payments or other benefits to which a particular policyholder or investor has an unconditional right that is not subject to the contractual discretion of the issuer.

**Insurance asset** is an insurer's contractual right under an insurance contract.

**Insurance contract** is a contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder.

**Insurance liability** is an insurer's contractual obligation under an insurance contract.

**Insurance risk** is a risk, other than financial risk, transferred from the holder of a contract to the issuer.

**Interest rate risk** is a market risk, namely the risk that the value of a financial instrument will fluctuate due to changes in market interest rates.

**Joint control** is the contractually agreed sharing of control over an economic activity, which exists when the strategic and operating decisions relating to the activity require the unanimous consent of the parties sharing control.

**Liability adequacy testing** is an assessment of whether the carrying amount of an insurance liability needs to be increased (or the carrying amount of related deferred policy acquisition costs or related intangible assets decreased) based on a review of future cash flows.

**Liquidity risk** is the risk that an entity will encounter difficulty in raising funds to meet commitments associated with financial instruments.



**Loss absorbing capacity of deferred taxes** is a loss compensating effect of taxes taken into account in the solvency capital requirement.

**Master netting agreement** is an agreement providing for an entity that undertakes a number of financial instrument transactions with a single counterparty to make a single net settlement of all financial instruments covered by the agreement in the event of default on, or termination of, any contract.

**Matching adjustment** will adjust the discount rate applied in the valuation of predictable liabilities which are cashflow matched using fixed income assets. The predictability of the portfolio means that matching assets can be held to maturity and that the insurer is consequently not exposed to price movements, only to the risk of default.

**Minimum capital requirement** is the absolute minimum level of capital an insurance company must hold in excess of its Technical Provisions under Solvency II.

**Operating expenses** are all expenses associated with selling and administrative activities (excluding commissions) after reallocation of claim handling expenses to benefits paid.

**Partial Internal Model** is a combination of a Standard Formula and Internal Model, used to calculate the Solvency II capital requirement.

**Plan assets** are assets held by a long-term employee benefit fund and qualifying insurance policies.

**Policyholder** is a party that has a right to compensation under an insurance contract if an insured event occurs.

**Price risk** is a market risk, namely the risk that the value of a financial instrument will fluctuate as a result of changes in market prices.

**Private loan** is a non-derivative financial asset with a fixed interest rate and a maturity date, which is not bought in an active market but negotiated between the two parties involved. Private loans are not embodied in securities. When a private loan takes the form of a private placement of bonds or other investments directly to an institutional investor like an insurance company, it has more the character of a bond loan and such financial instruments are classified as available-for-sale investments rather than as loans and receivables.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

**108** Additional information **Glossary**

**Projected unit credit method** is an actuarial valuation method that sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation.

**Qualifying insurance policies** are a component of plan assets. These are insurance policies issued by an insurer that is not a related party of the reporting entity, if the proceeds of the policies:

Can be used only to pay or fund employee benefits under a defined benefit plan; and

Are not available to the reporting entity's own creditors.

**Recognition** is the process of incorporating in the statement of financial position or income statement an item that meets the definition of an element and satisfies the following criteria for recognition:

It is probable that any future economic benefit associated with the item will flow to or from the entity; and

The item has a cost or value that can be measured with reliability.

**Reinsurance assets** are a cedant's net contractual rights under a reinsurance contract.

**Reinsurance contract** is an insurance contract issued by one insurer to compensate another insurer for losses on one or more contracts issued by the cedant.

**Renewal of a contract** is when a policyholder takes whatever action is required, typically payment of a premium, in order to maintain benefits under the contract.

**Repurchase agreement** is a sale of securities with an agreement to buy back the securities at a specified time and price.

**Residential Mortgage Backed Security (RMBS)** is an asset-backed security that is secured by a mortgage or collection of mortgages.

**Reverse repurchase agreement** is a purchase of securities with the agreement to resell them at a later specified date and price.

**Risk Based Capital Company Action Level** is designed primarily for US regulators to identify poorly capitalized companies whose continued operations may be hazardous to policyholders. The insurer's RBC solvency ratio is determined as its total adjusted capital divided by authorized control level risk based capital. (ACL) However, it is industry and rating agency convention to complete and communicate the RBC solvency ratio relative to the Company Action Level Risk Based Capital, which is twice the authorized control level.

**Security lending** involves a loan of a security from one party to another.

**Settlement date** is the date that a financial asset is delivered to the entity that purchased it.

**Solvency II** is the fundamental reform of European insurance legislation.

**Solvency capital requirement** is the level of capital an insurance company must hold in excess of its Technical Provisions under Solvency II.

**Spread** is the difference between the current bid and the current ask or offered price of a given security.

**Standard Formula** is a risk-based approach to the calculation of an insurer's solvency capital requirement, prescribed by the regulator.

**Stochastic modeling** is a statistical process that uses probability and random variables to predict a range of probable investment performances.

**Temporary differences** are differences between the carrying amount of an asset or liability in the statement of financial position and its tax base that will reverse over time.

**Trade date** is the date that an entity commits itself to purchase or sell an asset.

**Transaction costs** are incremental costs that are directly attributable to the acquisition, issue or disposal of a financial asset or liability.

**Transitional measures** allow EEA entities to gradually move to a full implementation of Solvency II over a period of time.

**Trust Pass-Through securities** are securities through which the holders participate in a trust. The assets of these trusts consist of debentures issued by an Aegon Group company.

**Volatility adjustment** is a volatility adjustment to the discount rates for calculating technical provisions aims at avoiding pro-cyclical investment behavior of insurers when bond prices deteriorate owing to low liquidity of bond markets or exceptional expansion of credit spreads. The adjustment has the effect of stabilizing the capital resources of insurers and will be calculated by EIOPA.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

**109 Additional information Cautionary notes**

**Cautionary notes**

**Intended use of the Group SFCR**

This Group Solvency and Financial Condition Report is prepared and published in accordance with the requirements of the Solvency II regulations and EIOPA guidelines and follows a prescribed format. The Group SFCR is primarily prepared for prudential considerations, which includes informing policyholders and other beneficiaries of Aegon's insurance products. While the document is made available to the public in general and may be of interest to stakeholders such as investors in Aegon shares and other financial instruments, it is not specifically aimed at them.

**Statement pursuant to article 297 (2) of the Solvency II Delegated Regulation**

The Netherlands, as a Member State, uses the option that the capital add-on or the impact of the specific parameters, that Aegon is required to use, do not need to be separately disclosed during a transitional period ending no later than December 31, 2020 (third subparagraph of Article 51(2) of Directive 2009/138/EC).

**Currency exchange rates**

This document contains certain information about Aegon's results, financial condition and revenue generating investments presented in USD for the Americas and Asia, and in GBP for the United Kingdom, because those businesses operate and are managed primarily in those currencies. None of this information is a substitute for or superior to financial information about Aegon presented in EUR, which is the currency of Aegon's primary financial statements.

**Non-audited information**

PricewaterhouseCoopers Accounting N.V. is the external auditor of Aegon. The external auditor's mandate does not cover an audit on the information disclosed in this SFCR.

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

**110 Additional information Contact**

**Contact**

**Headquarters**

Aegon N.V.

Aegonplein 50

2591 TV The Hague

The Netherlands

Telephone: +31 (0) 70 344 32 10

aegon.com

**Investor Relations**

Telephone: +31 (0) 70 344 83 05

or toll free (US only): 877-548 96 68

E-mail: [ir@aegon.com](mailto:ir@aegon.com)

**Media Relations**

Telephone: +31 (0) 70 344 89 56

E-mail: [gcc@aegon.com](mailto:gcc@aegon.com)

Solvency and Financial Condition Report Group 2016 based on IFRS as issued by the IASB

**Table of Contents**

[aegon.com](http://aegon.com)