

# Solvency and Financial Condition Report 2019



# Table of contents

## Introduction

Scope of the report	3
Summary	4
A. Business and performance	4
B. System of governance	6
C. Risk profile	7
D. Valuation for solvency purposes	9
E. Capital management	10

## A. Business and performance

A.1 Business	12
A.2 Underwriting performance	24
A.3 Investment performance	25
A.4 Performance of other activities	29
A.5 Any other information	30

## B. System of governance

B.1 General information on the system of governance	31
B.2 Fit and proper requirements	37
B.3 Risk management system including the Own Risk and Solvency Assessment	40
B.4 Internal control system	47
B.5 Internal Audit function	51
B.6 Actuarial function	52
B.7 Outsourcing	53
B.8 Any other information	54

## C. Risk profile

General	55
Prudent person principle	57
Off-balance positions and special purpose vehicles	57
C.1 Underwriting risk	59
C.2 Market risk	62
C.3 Credit risk	68
C.4 Liquidity risk	69
C.5 Operational risk	71
C.6 Other material risks	73
C.7 Any other information	73

## D. Valuation for solvency purposes

Solvency II valuation principles	75
Approach balance sheet reconciliation	77
D.1 Assets	80
D.2 Technical provisions	86
D.3 Other liabilities	92
D.4 Alternative methods for valuation	98
D.5 Any other information	100

## E. Capital management

Material development throughout 2019	102
Maintaining adequate solvency capital	102
Capital quality	104
Aegon's use of leverage	106
Globally systemically important insurer (G-SII) designation	106
E.1 Own funds	107
E.2 Solvency Capital Requirement and Minimum Capital Requirement	116
E.3 Use of the duration-based equity risk sub-module	121
E.4 Differences between standard formula and partial internal model used	121
E.5 Non-compliance with capital requirements	123
E.6 Any other information	123

## Additional information

Glossary	124
Cautionary notes	131
Contact	133

# Scope of the report

This report is Aegon N.V.'s Group Solvency and Financial Condition Report (SFCR) for the year 2019 and is designed to inform Aegon N.V.'s stakeholders about the Group's:

- Business and performance;
- System of governance;
- Risk profile;
- Valuation for solvency purposes; and
- Capital management.

The valuation differences between the scope of Aegon Group used for the consolidated financial statements based on IFRS-EU and the scope of Aegon Group for the consolidated data determined in accordance with Article 335 of the Solvency II Delegated Regulation, are discussed in more detail in section 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 290-298 and articles 359 – 371 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.

Aegon is required to submit the Quantitative Reporting Templates ('QRTs') to its supervisor Dutch Central Bank ('DNB'). A subset of these QRTs, which are required to be publicly disclosed and which provide quantitative information in accordance with Solvency II as at 31 December 2019, are available on Aegon's website.

The figures reflecting monetary amounts in the SFCR are presented in euro (unless stated otherwise). Aegon discloses monetary amounts in millions of units. 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 cases in which IFRS figures are disclosed, the figures are prepared in accordance with the International Financial Reporting Standards as adopted by the European Union (IFRS-EU).

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 ratio. 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 (US Life insurance entities, Bermuda, Japan, Mexico and Brazil). 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 sectoral rules, whereas, when OFS are controlled entities, such are consolidated under IFRS.

The consolidation under Solvency II is set out in more detail in section D. Valuation for solvency purposes and E. Capital management; both are sections of this SFCR report.

The 2019 SFCR of Aegon Group has been prepared and disclosed under the responsibility of Aegon's Executive Board. This document was approved on May 15, 2020 by the Executive Board.

# Summary

The 2019 Solvency Financial Condition Report provides Aegon's stakeholders insight in:

## A. Business and performance

Aegon is an international financial services group. We provide life insurance, pensions and asset management. Its listed holding company, Aegon N.V., is a public limited liability company with its corporate seat and head office in the Netherlands. Aegon employs over 23,000 people worldwide. Aegon's common shares are listed on stock exchanges in Amsterdam (Euronext) and New York (NYSE).

Aegon has the following operating segments: the Americas, which includes the United States, Mexico and Brazil; the Netherlands; the United Kingdom; Southern and Eastern Europe; Asia; Aegon Asset Management and Holdings.

Aegon has changed the grouping of the operating segments included in the performance measure as of 2019. Previously, the operating segments 'Spain and Portugal' and 'Central and Eastern Europe' were disclosed separately in the segment information whilst as of 2019 these are disclosed combined under the operating segment 'Southern and Eastern Europe'.

As of January 1, 2020, a new reportable segment, Aegon International has been established to bring together our activities in Southern and Eastern Europe (SEE), and all our Asian businesses to focus on growth.

Aegon's business model focuses on the following items:

- **Solutions development and pricing:** Aegon begins with customers – Aegon assesses the customer's needs and develop products and services that meet those needs. Next to this, Aegon estimates and prices the risk involved for Aegon as a financial services provider.
- **Distribution:** Aegon's products and services are then branded, marketed and sold. Aegon offers products and services via intermediaries, like brokers and banks or financial advisors, and also sells directly to customers.
- **Investments:** In exchange for products and services, customers pay fees or regular premiums. On certain pension products, savings and investments, customers make deposits. Aegon invests the money received to make an attractive return on the money invested.
- **Claims & Benefits:** From the premiums, deposits and investment returns on the general account investments Aegon receives, Aegon pays customer claims and benefits, covers its expenses and makes profits for Aegon's shareholders. Customers also make regular withdrawals from pensions and saving products.

For more information on Aegon's strategy, please see the [Integrated Annual Report 2019 of Aegon Group](#).

In 2019, Aegon continued its realignment for growth, launched new propositions, further improved customer service, and made important executive management appointments to guide us into our next phase of development. We set ambitious financial 3-year targets. Milestone moments included:

- February: Aegon set new financial targets for 2019-2021 focused on growing capital generation and dividends.
- March: Transamerica announced agreement with LTCG for administration of long-term care insurance.
- March: Transamerica designated as a Best Place to Work for LGBTQ equality and received perfect score from Human Rights Campaign.
- April: Transamerica launched fifth Deltashares Managed Risk ETF.
- April: Aegon issues EUR 500 million of Solvency II Restricted Tier 1 Perpetual Contingent Convertible Securities to replace USD 500 million of grandfathered Restricted Tier 1 in June 2019.
- April: Transamerica organized itself for further growth by establishing two dedicated business lines - Workplace Solutions and Individual Solutions.
- May: Aegon signed the deal to divest its stake in its Japan-based joint ventures with Sony Life.
- May: Bas NieuweWeme appointed CEO of Aegon Asset Management, succeeding Sarah Russell.
- August: Announcement that Lard Friese will succeed Alex Wynaendts as Aegon's CEO at the AGM in May 2020.
- August: Transamerica reduced fees for multiple investments, helping to maximize overall value for customers.
- September: Announcement that Mike Holliday-Williams will succeed Adrian Grace as CEO of Aegon UK.
- September: Aegon announced it will establish an International division encompassing its Asian and Southern and Eastern Europe businesses.
- September: Maarten Edixhoven appointed to the Management Board as of October 2019.

- September: Transamerica named one of the best 100 companies in the US for working mothers and enters Diversity Best Practices Inclusion Index.
- October: Aegon the Netherlands reorganized itself to become a more agile company to improve effectiveness and efficiency of service delivery.
- October: Announcement that Thomas Wellauer will be proposed to join Aegon's Supervisory Board at the AGM in May 2020, succeeding Robert Dineen.
- October: Aegon issues USD 925 million of Solvency II Tier 2 Subordinated Notes to replace USD 1 billion of grandfathered Restricted Tier 1 in December 2019.
- November: Aegon celebrated its 175th anniversary.
- December: Aegon Asset Management announced realignment of its organization as a truly global asset manager set up for future growth.
- December: Aegon reinsured about one quarter of its longevity exposure in the Netherlands with Canada Life Reinsurance.

	2019	2018
<b>Results of operations and performance</b>		
Amounts in EUR millions	<b>Group</b>	<b>Group</b>
Net income	1,528	744
Underlying earnings before tax	1,973	2,074
Investment income	7,531	7,035
Premium income	18,138	19,316
Commissions and expenses	6,153	6,224
Policyholder claims and benefits	56,797	10,557
Results from financial transactions	35,761	(11,670)

Net income amounted to EUR 1,528 million in 2019, as underlying earnings before tax of EUR 1,973 million, gains on investments and gains from run-off businesses were partly offset by fair value losses, other charges, net impairments and income taxes. The effective tax rate amounted to 18%, mainly as a result of tax exempt income items and the use of tax credits in the United States and in the United Kingdom the own employee pension plan moving into surplus.

Aegon's underlying earnings before tax decreased to EUR 1,973 million in 2019 (EUR 2,074 million in 2018). This was mainly driven by the Americas as a result of lower fee revenues in Variable Annuities, the negative impacts from lower rates and developments in portfolios on intangibles in the Life business, and investments in the US businesses to support growth. The other main contributor to the decrease in underlying earnings before tax was Holdings and other activities, primarily due to more interest expenses being recorded via the income statement instead of directly through equity. Europe was the main offsetting reporting segment, with a 4% increase of underlying earnings before tax in 2019 compared with 2018, as a result of growth in the Netherlands and the United Kingdom, more than offsetting the lower earnings from Southern and Eastern Europe due to the divestments of Aegon's businesses in the Czech Republic and Slovakia.

Investment income increased to EUR 7.5 billion in 2019 compared to EUR 7.0 billion in 2018. The increase is mainly driven by higher dividend income in 2019. Interest income is the largest contributor (EUR 5.8 billion), followed by dividend income (EUR 1.6 billion), from the subsidiaries.

Premium income amounted to EUR 18.1 billion, down by 6% from 2018 (EUR 19.3 billion). This decrease was mainly driven by a reduction of upgraded Life insurance policies to the retirement platform in the UK, which represents EUR 1.8 billion (2018: EUR 3.4 billion) of total premium income Life insurance.

Commissions and expenses decreased by 1% compared with 2018 to EUR 6.2 billion in 2019. Operating expenses which are part of commissions and expenses, increased by 4% compared with 2018 to EUR 3.9 billion in 2019. This increase primarily reflects lower restructuring expenses being more than offset by investments to support growth and customer experiences in addition to higher IFRS 9/17 implementation expenses.

Total policyholder claims and benefits amounted to EUR 56.8 billion in 2019 compared to EUR 10.6 billion in 2018. The increase of EUR 46.2 billion is mainly attributable to changes in the valuation of liabilities of insurance contracts and investment contracts. The changes in valuation of liabilities for insurance contracts and investment contracts reflect changes in technical provisions resulting from net fair value changes on financial assets for account of policyholders included in results from financial transactions of EUR 33.2 billion positive (2018: EUR 11.3 billion negative). In addition, the change in valuation of liabilities for insurance contracts includes an increase in technical provisions for life insurance contracts of EUR 2.4 billion (2018: increase of EUR 1.4 billion).

Total claims and benefits paid amounted to EUR 20.5 billion (2018: EUR 21.3 billion) and is comprised of claims and benefits paid for Aegon's life business amounting to EUR 18.8 billion (2018: EUR 19.7 billion) and claims and benefits paid for Aegon's non-life business amounting to EUR 1.6 billion (2018: EUR 1.7 billion).

Results from financial transactions amounted to EUR 35.8 billion positive in 2019 compared to EUR 11.7 billion negative in 2018. The main contributor is the net fair value change on for account of policyholder financial assets of EUR 33.2 billion positive in 2019 and is mainly driven by favorable equity markets and decreasing interest rates.

Full details on the Aegon's business and performance are described in section 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, such as the provisions of Book 2 of the Dutch Civil Code. In addition, Aegon is subject to the Dutch Corporate Governance Code.

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, which provides vital support and expertise in safeguarding Aegon's strategic goals. There were no material changes in the system of governance during the reporting period.

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 Aegon's earnings.

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.

Aegon's Management Board is comprised of the members of the Executive Board, the Chief Executive Officers (CEOs) of the Americas, the Netherlands, United Kingdom, Aegon International, Asset Management and the following global functions: Group Chief Risk Officer, Group General Counsel, Global Head of HR and the Global Chief Technology Officer.

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, comprising six members as per December 31, 2019, are appointed by the shareholders at the General Meeting of Shareholders. Aegon aims for the Supervisory Board to be well-balanced in terms of professional background, geography and gender. The Supervisory Board has the following committees:

- Audit Committee;
- Risk Committee;
- Remuneration Committee; and
- Nomination and Governance Committee.

These committees are exclusively comprised of Supervisory Board members and deal with specific issues related to Aegon's financial accounts, risk management, executive remuneration and appointments.

In addition to the corporate bodies, described above, Aegon has in place a number of key functions, as required under Solvency II. These key functions are described below, in the section 'control environment'.

For the composition of and changes in the Supervisory Board, Executive Board and Management Board, refer to section B. System of governance.

### 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. In addition to the Supervisory, Management and Executive Boards, the risk governance structure includes the following committees:

- Group Risk & Capital Committee and its sub-committees; and
- Regional Risk & Capital Committees.

### Control environment

Aegon's Solvency II control system consists, as required, of appropriate administrative and accounting procedures, an internal control framework, appropriate reporting arrangements and a compliance function. Furthermore, Aegon's control environment consists of a risk management function, 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 from operational functions, including 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 section 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, Aegon's preference for this risk, and whether there is sufficient capacity to take the risk. Aegon currently targets a balance between financial market, credit risks and underwriting risks. The targeted risk profile is set at Aegon Group level and developed in more detail within the subsidiaries where business is written. Aegon's risk strategy provides direction for the targeted Aegon risk profile while supporting Aegon's business strategy. Aegon is exposed to a range of underwriting, market, credit, liquidity and operational risks.

Material movements in Aegon's risk profile during 2019 mainly include the following:

- A new longevity reinsurance contract of Aegon the Netherlands with Canada Life Re;
- Changes in the fixed income portfolio of Aegon the Netherlands;
- The Asset-Quality Review (AQR) mortgage modelling update and the treatments of illiquid assets in Aegon the Netherlands;
- The TLIC – TALIC Merger in the Americas;
- The sale of the Czech and Slovakia Life entities;
- Framework, model and assumption changes in Aegon the Netherlands and Aegon UK;
- Market movements, mainly influencing market risks, but also underwriting risks.

The following table provides a quantitative representation of the key risks of the AC (Accounting Consolidation) part of Aegon Group on the basis of the Solvency II framework, split between risks determined using the SF (Standard Formula) and IM (Internal Model) and the D&A (Deduction & Aggregation) and OFS (Other Financial Sector) SCR as one amount:

### Composition of Group SCR

Amounts in EUR millions

	QRT 5.25.02.22	2019	2018
<b>SFCR section</b>			
C.2 Market risk	Market Risk (SF)	1,349	898
	Market Risk (IM)	2,760	2,714
C.3 Credit risk <sup>1)</sup>	Counterparty default risk (SF)	287	368
	Counterparty default risk (IM)	16	22
C.1 Underwriting risk	Life underwriting risk (SF)	1,080	1,009
	Life underwriting risk (IM)	2,287	2,341
	Health underwriting risk (SF)	322	332
	Health underwriting risk (IM)	-	-
	Non-life underwriting risk (SF)	140	138
	Non-life underwriting risk (IM)	-	-
C.5 Operational risk	Operational risk (SF)	320	288
	Operational risk (IM)	308	299
E.2.1 Solvency Capital Requirement	LAC-DT	(782)	(756)
	<b>Total undiversified components</b>	<b>8,086</b>	<b>7,653</b>
	Diversification	(3,050)	(3,000)
	<b>PIM SCR after diversification (AC only) <sup>2)</sup></b>	<b>5,036</b>	<b>4,654</b>
	Capital requirements for D&A and OFS	4,137	3,695
	<b>Group PIM SCR</b>	<b>9,173</b>	<b>8,349</b>

<sup>1</sup> To align with the SCR in QRT s.25.02.22 and section E, Aegon will only discuss Counterparty Default Risk (as defined in the Delegated Regulation) in section C3.3. More generally, Aegon considers the term 'credit risk' to also include spread risk, migration risk and default (market risk concentration) risk relating to financial investments. To keep this alignment with QRT s.25.02.22 consistent throughout the SFCR, these other components of credit risk are discussed instead in section C.2 Market risk. AC stands for Accounting Consolidation method for the calculation of the Solvency II group solvency ratio.

<sup>2</sup> Excluding Aegon Bank in line with Group supervisory requirement.

Aegon Group's Partial Internal Model (PIM) SCR (net - after diversification) amounted to EUR 9,173 million on December 31, 2019, which was an increase of EUR 824 million compared to the SCR on December 31, 2018 of EUR 8,349 million. This net SCR increase was mainly driven by the following movements in gross SCR risks:

- SF Market risk increased by EUR 451 million mainly due to a model change regarding the treatment of fixed income illiquid assets as SF Equity instead of Fixed income within Aegon the Netherlands;
- IM Market Risk increased by EUR 46 million mainly due to increased equity risk, caused by the increased equity market in Aegon UK and due to the annual pay-out of the buffer in the separate account for policyholders with profit sharing;
- IM Life Underwriting risk decreased by EUR 54 million, mainly due to the new longevity insurance contract of Aegon the Netherlands with Canada Life Re, partly offset by the decreased interest rates
- The diversification benefit amount increased by EUR 50 million (which decreased net SCR with EUR 50 million). This was mainly driven by the increase in gross SCR;
- The loss absorbing capacity of deferred taxes (LAC DT) increased by EUR 26 million, driven by the increase of the other SCR components, partly offset by the LAC-DT factor change in the Netherlands from 75% to 65% as a consequence of lower interest rates; and
- The SCR for D&A and OFS increased by EUR 442 million, mainly due to increased required capital in the Americas as a result of the appreciation of the US dollar compared with the Euro in the beginning of 2019. Decreased interest rates resulted in a further increase of the required capital of the Americas, partly offset by the adoption of the Variable Annuity Reform framework in the Americas.

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

Since January 2020, the Coronavirus disease (COVID-19) outbreak is causing significant disruption to society, impacting Aegon, its employees, suppliers and customers worldwide. Financial markets have been severely impacted by significant decreases in interest rates, equity markets and commodity prices, and by credit spreads widening. Governments and central banks worldwide are responding to this crisis with aid packages and further quantitative easing. At the date of this report the depth and length of this crisis is unknown.



The Company is continuously monitoring the market and economic turbulence that has arisen as a consequence of the COVID-19 outbreak, and its impact on Aegon. The most significant risks Aegon faces are related to financial markets (particularly credit, equity and interest rates), and underwriting risks (particularly related to mortality, morbidity and policyholder behavior). Section C. Risk profile include elaborate descriptions and related financial market and underwriting sensitivities.

As per March 31, 2020, the capital positions of the Group, and in each of our main units remain in or above the bottom-end of their respective target ranges. The Solvency II ratio of Aegon increased from 201% as per December 31, 2019 to 208% as per March 31, 2020, as the negative impact of market movements, predominantly affecting the capital position in the United States, was more than offset by the benefit of a higher EIOPA volatility adjustment in the Netherlands and by normalized capital generation. The Solvency II capital ratio as per March 31, 2020, reflects Aegon's interpretation of Solvency II requirements and are not final until filed with the regulators. The Solvency II capital calculation is subject to supervisory review on an ongoing basis.

On April 3, 2020 Aegon announced that it will comply with the call of DNB to postpone paying dividends following the statements published by the European Insurance and Occupational Pensions Authority and DNB, our principal regulator, urging insurers to temporarily postpone all dividend distributions. As a result of this, Aegon did forego its 2019 final dividend.

Aegon continues to monitor claim activity, including mortality and morbidity claims, and policyholder behavior. At the date of this report it is too early to tell what the impact of the COVID-19 crisis is on Aegon's underwriting results and Aegon's long term underwriting and economic assumptions, if any. Based on the specific market movements as result of the COVID-19 crisis, in section C. Risk profile, updated sensitivities as per March 31, 2020, have been included for the longevity risk, financial market risks and other material risks.

Aegon has invoked its business continuity plans to help ensure the safety and well-being of its staff, as well as its capability to support its customers and maintain its business operations, while maintaining our financial and operational resilience.

## D. Valuation for solvency purposes

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

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

- Revaluation differences mainly on assets and liabilities using a method other than fair value in the IFRS-EU 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 are represented in the line Participation on Aegon's Solvency II economic balance sheet; and
- De-recognition of items presented on the Solvency II economic balance sheet which are admissible on the IFRS-EU statement of financial position but not under Solvency II, for instance deferred policy acquisition costs, goodwill and other intangible assets.

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

## E. Capital management

Aegon's target Solvency II capital ratio is between 150% - 200%. At December 31, 2019, the Solvency II ratio of 201% was in excess of this target range.

In the following tables the Solvency II key figures for Aegon are presented as at December 31, 2019:

### Aegon Group capital position

Amounts in EUR millions

	December 31, 2019	December 31, 2018
Group own funds	18,470	17,602
Group PIM SCR	9,173	8,349
Group Solvency II ratio	201%	211%
Group Solvency II ratio (Matching Adjustment set to zero)	200%	209%
Group Solvency II ratio (Volatility Adjustment set to zero)	179%	176%
Group Solvency II ratio (excluding transitional measures)	201%	210%
Group Solvency II ratio (excluding Long term guarantees and transitional measures)	178%	174%
Group eligible own funds to meet minimum consolidated group SCR	7,108	7,335
Minimum consolidated Group SCR	2,244	1,965
Group MCR ratio <sup>1)</sup>	317%	373%

<sup>1)</sup> Ratio of Group eligible own funds over minimum consolidated Group SCR.

Solvency II Group own funds Amounts in EUR millions	December 31, 2019			December 31, 2018		
	Available own funds	Eligible own funds	Eligible own funds to meet minimum consolidated Group SCR	Available own funds	Eligible own funds	Eligible own funds to meet minimum consolidated Group SCR
Unrestricted Tier 1	12,724	12,724	5,402	12,205	12,205	5,555
Restricted Tier 1	2,614	2,614	1,257	3,406	2,889	1,389
Tier 2 own funds	2,370	2,370	449	1,487	2,004	391
Tier 3 own funds	762	762	-	504	504	-
<b>Total Tiers</b>	<b>18,470</b>	<b>18,470</b>	<b>7,108</b>	<b>17,602</b>	<b>17,602</b>	<b>7,335</b>

Aegon uses a combination of Accounting Consolidation (method 1) and Deduction & Aggregation (method 2) for the calculation of the Solvency II Group Solvency ratio. In addition, Aegon uses a Partial Internal Model (PIM) to calculate the solvency position of Aegon Levensverzekering N.V., Scottish Equitable Plc, Aegon Spaarkas N.V. and Aegon N.V. (which is a mixed financial holding company). Other entities included via the Accounting Consolidation method, excluding Other Financial Sector entities, use the Solvency II Standard Formula approach. The capital requirements of Other Financial Sector entities are based on relevant sectoral capital requirements. Aegon Bank is excluded from the Group Solvency II ratio, as required by the Group Solvency II supervisor, DNB.

In Aegon's Non-EEA regions, (re)insurance entities domiciled in third countries deemed (provisional) equivalent (US life insurance entities, Bermuda, Japan, Mexico and Brazil), the capital requirement is based on local capital requirements.

Aegon's internal model was approved by the College of Supervisors as part of the Internal Model Application Process. Aegon is of the opinion 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.

Aegon applies a method to allocate centrally issued subordinated debt between the AC and D&A parts of the group on an available Own Funds basis. The Solvency II contribution of the Aegon Americas insurance and reinsurance entities (US regulated entities) under Deduction & Aggregation (D&A) involves converting 150% Risk-Based Capital Company Action Level into Solvency Required Capital (SCR) and reducing own funds by a 100% RBC Company Action Level requirement to reflect transferability restrictions. The methodology is subject to annual review.

Aegon Group Own Funds amounted to EUR 18,470 million on December 31, 2019 (2018: EUR 17,602 million). The increase of EUR 868 million in Own Funds since December 31, 2018, is mostly driven by the positive expected return on Aegon's inforce insurance portfolio, positive return from equity markets and the impact of declining interest rates on assets and hedges. This increase was partly

offset by the negative market impact primarily from the EIOPA VA narrowing from 24 bps to 7 bps, negative impact from model and assumption changes, and the payment of external dividend. Furthermore, the lowering of the UFR from 4.05% to 3.90% led to a decrease in Own Funds as well.

The Solvency II capital ratios of the Group and Aegon the Netherlands 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 any potential liability cannot be reliably quantified at this point.

The Group solvency capital requirement includes the benefit from the LAC-DT. The LAC-DT is calculated after diversification and it lowered the net PIM SCR by EUR 782 million (2018: EUR 756 million). The LAC-DT benefit mainly stemmed from Aegon the Netherlands. The increase in the LAC-DT is mainly driven by the increase of the other SCR components, partly offset by the LAC-DT factor change in the Netherlands from 75% to 65% as a consequence of the lower interest rates.

Aegon applies the matching adjustment in Aegon UK, which has a positive impact to the Group own funds of EUR 37 million as of December 31, 2019 (2018: EUR 32 million) and an impact of EUR (58) million (2018: EUR (46) million) on the Group solvency capital requirement. The matching adjustment methodology has been approved by the UK regulator.

In addition, Aegon applies a volatility adjustment in Aegon the Netherlands, Aegon UK and Aegon Spain, which has a positive impact to the Group own funds of EUR 408 million (2018: EUR 1,284 million) and a reduction of the Group solvency capital requirement of EUR 904 million (2018: EUR 930 million).

Aegon Spain used to apply a transitional arrangement related to its technical provisions and used to apply the Solvency II matching adjustment. At the instruction of the Spanish Insurance Regulator (DGSFP), Aegon Spain no longer applies the matching adjustment and the transitional arrangements. As a consequence of this, the Solvency II ratio of Aegon Spain dropped below the 100% and Aegon Group contributed a capital injection into Aegon Spain to restore the Solvency II position.

The combined positive impact of the matching adjustment and the volatility adjustment on the Group Solvency II ratio is 23% (2018: 37%).

During 2019, the Aegon Group and all of the EEA (re)insurance entities within the Aegon Group that are subject to Solvency II capital requirements on a solo-level continued to comply with the MCR and SCR requirements, except for Aegon España, S.A.U. de Seguros y Reaseguros, that experienced a significant breach of its Solvency Capital Requirement upon the withdrawal of the approval of the DGSFP to apply the matching adjustment and for the application of a transitional arrangement with respect to its technical provisions.

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

# A. Business and performance

## A.1 Business

### A.1.1 Overview

Aegon is an integrated, diversified financial services group that offers innovative and effective savings and protection solutions for customers worldwide. The legal predecessors of Aegon were founded in the 19th century. We now serve more than 20 countries, with 29.9 million customers and EUR 898 billion of revenue-generating investments. Our holding company, Aegon N.V., is headquartered in The Hague, the Netherlands, and through its subsidiaries and joint ventures it employs over 23,000 people worldwide.

Aegon's common shares are listed on stock exchanges in Amsterdam (Euronext) and New York (NYSE). Aegon's main operating units are separate legal entities that operate under the laws of their respective countries. 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's financial results are impacted by a number of external factors, including demographic trends, market conditions and regulation. Furthermore, the business is affected by corporate actions taken by the Group, including acquisitions, disposals and other actions in order to achieve Aegon's strategy. The key significant business events or other events that have occurred over the reporting period that have had a material impact on Aegon are mentioned in the summary of section A on page 4 and 5.

### 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: Spaklerweg 4, 1096 BA 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 SFCR. 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 Aegon N.V. 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 Aegon N.V.. Only Vereniging Aegon qualifies based on this definition.

Vereniging Aegon, is a Dutch association located in The Hague, the Netherlands, with a special purpose to protect the broader interests of Aegon N.V. and its stakeholders. On December 31, 2019 Vereniging Aegon, Aegon's largest shareholder, held a total of 288,702,769 common shares and 559,712,240 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, 2019, the voting power of Vereniging Aegon under normal circumstances amounted to approximately 14.75%, 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

We have four main reporting segments: Americas, Europe, Asia and Asset Management. Of these, the Americas is by far the largest, accounting for nearly 60% of our annual earnings. Our holding company, Aegon N.V., is headquartered in The Hague, the Netherlands. Aegon Asset Management manages assets on behalf of third parties and Aegon's own businesses, covering all major asset classes, including fixed income, equity and real estate. Our reporting segments include businesses, associates and joint ventures in:

- Americas (US, Brazil and Mexico);
- Europe (the Netherlands, UK, Hungary, Poland, Turkey, Romania, Spain and Portugal);
- Asia (Singapore, Hong Kong, Japan (till January 2020), China, Indonesia, Malaysia, Thailand, Vietnam, Philippines, Australia and Bermuda);
- Asset management (AAM businesses and joint ventures in the US, the UK, the Netherlands, Hungary, Spain, Germany, France, China, Hong Kong and Japan).

As of January 1, 2020, a new reportable segment, Aegon International has been established to bring together our activities in Southern and Eastern Europe (SEE), and all our Asian businesses to focus on growth.

Our businesses operate locally through two main brands: Aegon (mainly in Europe and Asia) and Transamerica (mainly in the US).

For more information on Aegon's governance structure, please see section B.1.1. Corporate Governance.

### 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, pensions, asset management or services related to these activities. The voting power in these undertakings held by Aegon is equal to the shareholdings unless otherwise specified.

For information on the material differences between the scope of the group used for the consolidated financial statements and the scope for the consolidated data used for the Group Solvency calculation, see section D, Valuation of Solvency Purposes, and section E.1.4, Difference between Solvency II own funds and IFRS-EU shareholders' equity.

## Americas

- Transamerica Casualty Insurance Company, Columbus, Ohio (United States);
- Transamerica Corporation, Wilmington, Delaware (United States);
- Transamerica Financial Life Insurance Company, Harrison, New York (United States);
- Transamerica Life Insurance Company, Cedar Rapids, Iowa (United States);
- Transamerica Premier Life Insurance Company, Cedar Rapids, Iowa (United States);
- Akaan-Aegon, S.A.P.I. de C.V., Mexico City (Mexico), (50% voting rights); 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 Schadeverzekering N.V., The Hague;
- Aegon Spaarkas N.V., The Hague;
- Aegon Cappital B.V., Groningen;
- TKP Pensioen B.V., Groningen;
- Nedasco B.V., Amersfoort;
- Salus Holding B.V., Zaandam;
- AMVEST Vastgoed B.V., Utrecht (50%).

### Southern and Eastern Europe

- Aegon Magyarország Általános Biztosító Zártkörűen Működő Részvénytársaság, Budapest (Aegon Hungary Composite Insurance Co.);
- Aegon Towarzystwo Ubezpieczeń na Życie Spółka Akcyjna, Warsaw (Aegon Poland Life);
- Aegon Powszechnie Towarzystwo Emerytalne Spółka Akcyjna, Warsaw (Aegon Poland Pension Fund Management Co.);
- Aegon Emeklilik ve Hayat A.Ş., Istanbul (Aegon Turkey);
- Aegon Pensii Societate de Administrare a Fondurilor de Pensii Private S.A., Cluj (Aegon Romania Pension Administrator Co.);
- Aegon España S.A.U. de Seguros y Reaseguros, Madrid (Spain);
- Aegon Administracion y Servicios A.I.E., Madrid (Spain);
- Aegon Activos A.V., S.A., Madrid (Spain);
- Aegon Mediacion, S.L.U, Madrid (Spain);
- Santander Generales Seguros y Reaseguros, S.A., Madrid (Spain), (51%);
- Aegon Santander Portugal Vida – Companhia de Seguros de Vida S.A., Lisbon (Portugal), (51%);
- Aegon Santander Portugal Não Vida – Companhia de Seguros S.A., Lisbon (Portugal), (51%);
- Santander Vida Seguros y Reaseguros, S.A., Madrid (Spain), (51%); and
- Liberbank Vida y Pensiones, Seguros y Reaseguros, S.A., Oviedo (Spain), (50%).

### United Kingdom

- Aegon Investment Solutions Ltd., Edinburgh;
- Aegon Investments Ltd, London;
- Scottish Equitable plc, Edinburgh; and
- Cofunds Limited, London.

## Asia

- Transamerica Life (Bermuda) Ltd., Hamilton (Bermuda);
- Aegon Sony Life Insurance Co., Tokyo (Japan), (50%) (until January, 2020);
- Aegon Life Insurance Co. Ltd (India) (49%)
- Aegon THTF Life Insurance Co., Ltd., Shanghai (China), (50%); and
- SA Reinsurance Ltd, Hamilton (Bermuda), (50%) (until January, 2020).

### Asset Management

- Aegon Asset Management Holding B.V., The Hague (the Netherlands);
- Aegon Custody B.V., The Hague (the Netherlands);
- Aegon Asset Management Pan-Europe B.V., The Hague (the Netherlands);
- Kames Capital plc, Edinburgh (United Kingdom);
- TKP Investments B.V., Groningen (The Netherlands), (Merged with Aegon Investment Management B.V. as per January 1, 2019);
- Aegon USA Investment Management, LLC, Cedar Rapids (United States);
- Aegon USA Realty Advisors, LLC, Des Moines (United States);
- Aegon Magyarország Befektetési Alapkezelő Zártkörűen Működő Részvénytársaság (Aegon Hungary Asset Management Company ZrtA), Budapest (Hungary);
- Aegon Investment Management B.V, The Hague (the Netherlands);
- Aegon Industrial Fund Management Co., Ltd, 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:

Aegon's branches	Ownership	Trading at town/city	Country
<b>Company name</b>			
Aegon Asia B.V. - Hong Kong Branch	100%	Hong Kong	Hong Kong
Aegon Asset Management Pan-Europe B.V. - Germany Branch	100%	Frankfurt	Germany
Aegon Asset Management Pan-Europe B.V. - Japan Branch	100%	Tokyo	Japan
Aegon Asset Management Pan-Europe B.V. - Spain Branch	100%	Madrid	Spain
AEGON Asset Management Value Hub B. V., Hungarian Branch	100%	Budapest	Hungary
Aegon CEE B.V., Hungarian Branch Office	100%	Budapest	Hungary
Aegon Industrial Fund Management Co., LTD, Beijing Branch	49%	Beijing	China
Aegon Industrial Fund Management Co., LTD, ShenZhen Branch	49%	ShenZhen	China
Aegon Industrial Fund Management Co., LTD, Xiamen Branch	49%	Xiamen	China
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%	Hong Kong	Hong Kong
AEGON Industrial Fund Management Co., LTD, Shanghai Branch	49%	Shanghai	Shanghai
Transamerica Life (Bermuda) Ltd. - Singapore Branch	100%	Singapore	Singapore

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

Below is an overview, region by region, of Aegon's different business units and the material lines of business that they provide.

### Americas

#### Life

Aegon Americas offers a comprehensive portfolio of protection solutions to customers in a broad range of market segments. Products offered include term life, universal life, variable universal life, index universal life and whole life insurance.

#### Accident & health

Aegon Americas offers supplemental health insurance and long-term care insurance.

#### Mutual funds and ETFs (Exchange-traded funds)

Mutual funds are professionally managed investment vehicles comprised of pooled money invested by numerous and different individuals or institutions. Such funds are invested in various underlying security types such as stocks, bonds, money market instruments and other securities.

ETFs are a pooled investment vehicle for individual and institutional investors that combine some of the features of a mutual fund with the flexibility of allowing investors to trade throughout the day on an exchange.

#### Variable annuities

Variable annuities allow the policyholder to accumulate assets for retirement on a tax-deferred basis and to participate in equity or bond market performance. Additional insurance guarantees, also referred to as riders, can be added to variable annuities, including guaranteed minimum death benefits (GMDBs) and guaranteed living benefits (GLBs).

#### Fixed annuities

Fixed annuities allow the policyholder to accumulate assets for retirement on a tax-deferred basis through periodic interest crediting and principal protection.

#### Retirement plans and IRAs

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

#### Stable value solutions

Stable Value Solutions are Synthetic Guaranteed Investment Contracts (GICs) which are offered primarily to tax-qualified institutional entities such as 401(k) plans and other retirement plans. A synthetic GIC 'wrapper' is offered around fixed-income invested assets, which are owned by the plan and managed by the plan or a third-party money manager hired by the plan. A synthetic GIC is typically issued with an evergreen maturity and may be terminated under certain conditions. Such a contract helps to reduce fluctuations in the value of the wrapped assets and provides book value withdrawals for plan participants, while ensuring that investment fund conditions are met.

### Latin America

Aegon's businesses in Latin America are comprised of a 50% interest in Mongeral Aegon Seguros e Previdência S.A., a Brazilian independent life insurer, and a joint venture with Administradora Akaan S.A. de C.V., which created and operates Akaan Transamerica in Mexico.

In 2019, Transamerica made the strategic decision to wind down the joint venture in Mexico as the business had not performed according to expectations. The wind down of the joint venture is expected to be completed in 2020.



## Europe

### The Netherlands

Within the organization structure, Aegon is aiming for less complexity with two mergers in 2019. Aegon PPI B.V. merged into CAPPITAL Premiepensioeninstelling B.V. as per January 1, 2019 (subsequently changed its name into Aegon Cappital B.V.) and OPTAS Pensioenen N.V. has been legally merged into Aegon Levensverzekering N.V. as per April 1, 2019. In addition, Robijn Participaties B.V. was acquired through Salus Holding B.V., a private limited liability company incorporated by Aegon Nederland N.V. in 2018. Robijn Participaties B.V. has been merged into Salus Holding B.V. as per January 2, 2019, which owns the Robidus brand.

### Life

Products with mortality, morbidity, and longevity risks, including traditional and universal life, in addition to pension products (Defined Benefit and Defined Contribution plans), endowment, term, whole life insurance products and annuity products.

As per March 2020, the sale of the new individual life policies in the Netherlands will stop; this includes term life and individual annuities.

### Non-life

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

### Banking

In 2019, Aegon Bank N.V. announced to integrate the Aegon Bank and Knab operations under the Knab brand. By integrating both operations and rationalizing product offerings costs will be reduced, operations will be more efficient and governance unified and simplified. The coming period will be used to migrate the Aegon bank label products and customers towards the Knab label. Aegon Bank N.V. will continue to reinforce the Aegon Netherlands wide pension offering with its banking (savings, bank savings and investments) products, but under the Knab brand.

### Services Business

Services business consist of offering mortgage loans, Aegon Cappital (PPI), Knab Advies & Bemiddeling, TKP, Stap, Robidus and Nedasco.

With the integration of the Aegon Bank and Knab, the strategic choice was made to phase out the non-bank (i.e. adviser and broker) activities in Knab Advies en Bemiddeling N.V. (KAB), and therewith stop the online advice and comparison of car-insurance and home-related insurances, as well as the mortgage broker business, effective from October 1, 2019. The KAB entity will be liquidated as soon as the remaining activities are sold to third parties or transferred to other Aegon entities.

### Southern and Eastern Europe

At the start of 2019, Aegon had operations in the Southern and Eastern European (SEE) countries of the Czech Republic, Hungary, Poland, Portugal, Romania, Slovakia, Spain and Turkey.

Aegon first entered the Spanish insurance market in 1980. This was followed in 1992 by the purchase of a majority stake in Hungary's former state-owned insurance company, Állami Biztosító. To strengthen its presence, Aegon further expanded in Central & Eastern Europe in the early 2000s.

Aegon's activities in Spain have developed largely through distribution partnerships with Spanish banks. Aegon Spain Holding B.V. (hereafter referred to as Aegon Spain) operates in Spain through Aegon España S.A.U. de Seguros y Reaseguros. In 2013, Aegon Spain entered into a long-term partnership with Banco Santander S.A., offering both life and general insurance products through the bank's branch network, both in Spain and Portugal. Similarly, Aegon Spain also entered into a long-term partnership with Liberbank, S.A., offering life and pension products in Spain.

In line with its strategic objective to optimize its portfolio and capital allocation across its businesses, Aegon sold its subsidiaries in the Czech Republic and Slovakia on January 8, 2019. It also expanded its partnership with Banco Santander in Spain and Portugal on the back of the acquisition of Banco Popular by Banco Santander.

## United Kingdom

Aegon UK is organized into Digital Solutions and Existing Business:

- The Digital Solutions business is responsible for Aegon UK's platform propositions sold through Financial Adviser and workplace channels, together with protection products and an institutional trading platform business. The financial adviser and workplace channels are supported by an investment solutions capability which allows customers to invest in Aegon funds. This capability is well established within the workplace channel with plans to significantly grow within the financial adviser channel.
- The Existing Business is managed for value and is responsible for older products that are no longer actively marketed to new customers. However, new assets are accumulated as customers pay into existing policies, or as new employees join older workplace schemes. In July 2019, Aegon UK completed the outsourcing of service and operations tasks to Atos with a 15-year contract to service and administer the Existing Business, thereby improving the profitability of this business line.

## Asia

### High-net-worth businesses

TLB's main products consist of USD denominated Universal Life and USD denominated Term Life Insurance solutions for the high-net-worth market segment. Universal Life products are TLB's key products to meet the needs of high-net-worth individuals, supporting estate planning by providing life protection, while also helping to preserve and accumulate wealth. In addition to the Universal Life products, Term Life products are also offered with financial protection at a guaranteed level rate for up to thirty years.

### Aegon Insights

Aegon Insights primarily worked with local insurers to develop marketing, distribution and administration solutions tailored to the needs of specific markets and customers. Revenue is primarily generated through reinsurance arrangements and fee income from marketing services, product distribution and administration. With changes in consumer preferences, Aegon made the strategic decision in 2017 to discontinue Aegon Insights' new business while continuing to provide services to existing customers.

### Strategic partnerships

In China and India, Aegon provides a broad range of life insurance products including unit-linked, universal life, and traditional life products. Aegon also offers variable annuities in Japan through Aegon Sony Life (till January 2020).

## Aegon Asset Management

Aegon Asset Management has three distinct business lines.

- The general account business consists of funds held on the balance sheet of Aegon insurance companies to meet policyholder liabilities typically when the insurer has given the policyholder a guarantee. These assets are managed to match the insurers' liabilities. As a rule, general account assets are managed in a closed architecture structure, and the main asset classes are fixed income and mortgage loans. Furthermore, Aegon Asset Management manages the general account derivatives book of Aegon the Netherlands.
- Third-party business sourced through affiliates for the majority consists of funds sold by Aegon insurers through which the policyholder's return is determined by the investment return of the fund. These funds have various legal structures, and are usually managed against a benchmark or peer group target. The main asset classes include fixed income, equities, real estate, mortgage loans and alternatives. In the United States and the United Kingdom, a significant element of Affiliate Sales is conducted on an open architecture basis.
- 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. The institutional businesses typically sell tailored services to large corporations or pension funds. Aegon Asset Management employs a full range of asset classes, and manages the funds against objectives, targets and risk profiles agreed with clients. Aegon Asset Management offers both absolute and relative return products. Via its brand TKPI, Aegon Asset Management offers fiduciary services and manager selection propositions targeted at institutional investors. In December 2019, it was decided to retire the Kames Capital and TKP Investments brand and move to the globally recognized Aegon Asset Management brand.

### A.1.7 Results of operations

The following table includes our operating results for the year ended December 31, 2019, including certain comparative discussion on our operating results for the year ended December 31, 2018. The information on the following tables also includes the non-IFRS-EU financial measure net underlying earnings. This is the after-tax equivalent of underlying earnings before tax.

The reconciliation from underlying earnings before tax to income before tax, being the most comparable IFRS-EU measure, is presented in the table. Aegon believes that these non-IFRS-EU measures provides meaningful supplemental information about the underlying operating results of Aegon's businesses, including insight into the financial measures that senior management uses in managing the businesses.

#### Results 2019 (IFRS-EU)

##### Underlying earnings geographically

Amounts in EUR millions

	2019	2018	%
<b>Net underlying earnings</b>	<b>1,651</b>	<b>1,754</b>	<b>(6)</b>
Tax on underlying earnings	322	320	1
<b>Underlying earnings before tax geographically</b>			
Americas	1,124	1,216	(8)
The Netherlands	648	615	5
United Kingdom	139	128	9
Southern and Eastern Europe	88	96	(8)
<i>Europe</i>	875	839	4
Asia	62	55	13
Asset Management	139	151	(8)
Holding and other activities	(227)	(188)	(21)
<b>Underlying earnings before tax</b>	<b>1,973</b>	<b>2,074</b>	<b>(5)</b>
Fair value items	(226)	(260)	13
Gains / (losses) on investments	405	(77)	626
Net impairments	(22)	(19)	15
Other income / (charges)	(281)	(875)	68
Run-off businesses	23	(14)	269
<b>Income before tax (excluding income tax from certain proportionately consolidated joint ventures and associates)</b>	<b>1,872</b>	<b>829</b>	<b>126</b>
<i>Income tax from certain proportionately consolidated joint ventures and associates included in income before tax</i>	40	47	(15)
Income tax	(344)	(84)	(308)
<i>Of which Income tax from certain proportionately consolidated joint ventures and associates included in income before tax</i>	(40)	(47)	15
<b>Net income</b>	<b>1,528</b>	<b>744</b>	<b>105</b>
Commissions and expenses	6,601	6,673	(1)
of which operating expenses	3,929	3,786	4

##### New life sales

Amounts in EUR millions

	2019	2018	%
Americas	419	420	-
The Netherlands	136	101	35
United Kingdom	41	40	3
Southern and Eastern Europe	133	137	(3)
<i>Europe</i>	311	278	12
Asia	131	122	7
<b>Total recurring plus 1/10 single</b>	<b>861</b>	<b>820</b>	<b>5</b>

Amounts in EUR millions

	2019	2018	%
New premium production accident and health insurance	230	308	(25)
New premium production general insurance	129	121	6

**Gross deposits (on and off balance)**

Amounts in EUR millions	2019	2018	%
Americas	40,406	38,279	6
The Netherlands	13,207	10,169	30
United Kingdom	9,749	13,223	(26)
Southern and Eastern Europe	351	406	(13)
<i>Europe</i>	23,307	23,798	(2)
Asia	7	128	(94)
Asset Management	80,939	59,495	36
<b>Total gross deposits</b>	<b>144,660</b>	<b>121,700</b>	<b>19</b>

**Net deposits (on and off balance)**

Amounts in EUR millions	2019	2018	%
Americas	(29,371)	(14,734)	(99)
The Netherlands	1,445	1,411	2
United Kingdom	(3,487)	1,225	(385)
Southern and Eastern Europe	19	143	(87)
<i>Europe</i>	(2,023)	2,779	(173)
Asia	1	7	(83)
Asset Management	6,841	7,526	(9)
<b>Total net deposits excluding run-off businesses</b>	<b>(24,551)</b>	<b>(4,421)</b>	<b>(455)</b>
Run-off businesses	(578)	(234)	(147)
<b>Total net deposits / (outflows)</b>	<b>(25,130)</b>	<b>(4,656)</b>	<b>(440)</b>

**Worldwide revenues geographically 2019**

Amounts in EUR millions	Americas	The Netherlands	United Kingdom	Southern and Eastern Europe	Europe	Asia	Asset Management	Holding, other activities and eliminations	Segment total	Associates and Joint Ventures eliminations	Consolidated
Total life insurance gross premiums	7,279	1,765	6,282	552	8,598	737	-	3	16,617	(691)	15,926
Accident and health insurance premiums	1,416	228	28	110	366	91	-	-	1,872	(50)	1,823
General insurance premiums	-	130	-	382	512	-	-	-	512	(122)	390
<b>Total gross premiums</b>	<b>8,694</b>	<b>2,123</b>	<b>6,309</b>	<b>1,044</b>	<b>9,476</b>	<b>828</b>	<b>-</b>	<b>3</b>	<b>19,002</b>	<b>(864)</b>	<b>18,138</b>
Investment income	3,172	2,224	1,830	76	4,130	303	5	(15)	7,595	(64)	7,531
Fees and commission income	1,757	237	197	50	484	59	627	(187)	2,740	(218)	2,523
Other revenue	8	-	-	-	-	1	1	5	16	(10)	6
<b>Total revenues</b>	<b>13,631</b>	<b>4,583</b>	<b>8,337</b>	<b>1,171</b>	<b>14,091</b>	<b>1,191</b>	<b>633</b>	<b>(194)</b>	<b>29,352</b>	<b>(1,155)</b>	<b>28,197</b>
Number of employees, including agent employees	8,570	3,582	2,261	2,853	8,696	4,540	1,535	416	23,757		

### Net income

Net income amounted to EUR 1,528 million in 2019, as underlying earnings before tax of EUR 1,973 million were partly offset by fair value losses, other charges, net impairments and income taxes. These items in turn offset gains on investments and gains from run-off businesses. The effective tax rate amounted to 18%, mainly as a result of tax exempt income items and the use of tax credits in the United States and in the United Kingdom the own employee pension plan moving into surplus.

### Underlying earnings before tax

Aegon's underlying earnings before tax decreased compared with 2018 to EUR 1,973 million in 2019. This was mainly driven by the Americas as a result of lower fee revenues in Variable Annuities, the negative impacts from lower rates and portfolios on intangibles in the Life business, and investments in the US businesses to support growth. The other main contributor to the decrease in underlying earnings before tax was Holdings and other activities, primarily due to more interest expenses being recorded via the income statement instead of directly through equity. Europe was the main offsetting reporting segment, with a 4% increase of underlying earnings before tax in 2019 compared with 2018.

- In the Americas, underlying earnings before tax in 2019 decreased by 8% compared with 2018 to EUR 1,124 million caused by lower fee revenues in Variable Annuities, negative impacts from lower interest rates, tighter credit spreads and portfolios on intangibles in the Life business, and investments in the business to support growth. These more than offset the effect of favorable currency movements.
- In Europe, underlying earnings before tax in 2019 increased by 4% compared with 2018 to EUR 875 million as a result of growth in the Netherlands and the United Kingdom, more than offsetting the lower earnings from Southern and Eastern Europe due to the divestment of Aegon's businesses in the Czech Republic and Slovakia.
- In Asia, underlying earnings before tax improved by 13% compared with 2018 to EUR 62 million in 2019. This was mainly driven by Aegon Insights, reflecting expense savings and favorable claims experience.
- Underlying earnings before tax from Asset Management decreased by 8% in 2019 compared with 2018 to EUR 139 million. This decrease was mainly driven by Europe and the Americas, more than offsetting an increase of underlying earnings before tax in the Rest of World.
- Total Holdings costs amounted to EUR 227 million in 2019 compared with EUR 188 million in 2018. This is mainly due to the refinancing of debt. Aegon redeemed perpetual securities, for which the interest expense was recorded directly through equity, and issued dated (Tier 2) instruments, for which the interest expense is recorded through the profit & loss statement.

### Fair value items

The loss from fair value items amounted to EUR 226 million in 2019. Fair value losses in Europe were the main driver, totaling EUR 490 million in 2019. This was primarily related to the Netherlands, where the liability adequacy test (LAT) showed a shortfall during 2019 which in turn was partly offset by gains on derivatives and the guarantee provision. The United Kingdom also recorded fair value losses, mainly because of hedging results. Fair value gains in the Americas amounted to EUR 272 million in 2019, and mainly related to positive real estate revaluations and favorable equity markets leading to gains on the macro hedge, net of reserve movements. Losses on fair value items in Asia and at the Holding totaled EUR 8 million in 2019.

### Realized gains on investments

Realized gains on investments amounted to EUR 405 million in 2019, driven by Europe and the Americas. In Europe these related largely to optimization of the investment portfolio in the Netherlands. In the Americas, the realized gains on investments were driven by bond calls and prepayments, mortgage loan gains, and normal trading activity.

### Impairment charges

Net impairments of EUR 22 million in 2019 mainly related to the impairments of corporate bonds resulting from bankruptcy filings in the United States and the impairment of consumer loans in the Netherlands. These were partly offset by recoveries for structured assets in the Americas, all of which were originally impaired between 2008 and 2013.

### Other income/charges

Other charges amounted to EUR 281 million in 2019. The Americas recorded Other charges of EUR 156 million in 2019 mainly due to unfavorable impacts from model and assumption changes. Furthermore, Other charges were recorded in relation to the operations administration partnerships with TCS and LTCG, as well as following the decision to exit the Akaan Transamerica joint venture in Mexico. For Europe, the Other charges totaled EUR 5 million. The main negative elements were unfavorable impacts from model and assumption changes and restructuring charges, both in the Netherlands and the United Kingdom. The main positive items were a provision release in the Netherlands following the change in pension scheme for own employees and a gain resulting from the sale of Aegon's Czech and Slovak operations. For the Holdings, Other charges amounted to EUR 95 million and resulted primarily from IFRS 9 / 17 implementation expenses. The Other charges for Asset Management and Asia totaled EUR 25 million.

### Run-off businesses

The results of run-off businesses increased compared with 2018 to a gain of EUR 23 million in 2019, driven mainly by higher income from the retained individual life reinsurance business.

### Income tax

The effective tax rate amounted to 18%, mainly as a result of regular tax exempt income items and the use of tax credits in the United States, and the one-time benefits from the own employee pension plan moving into surplus. The effective tax rate on underlying earnings before tax amounted to 16%.

### Commissions and expenses

Commissions and expenses decreased by 1% compared with 2018 to EUR 6.6 billion in 2019. Operating expenses increased by 4% compared with 2018 to EUR 3.9 billion in 2019. This increase primarily reflects lower restructuring expenses being more than offset by investments to support growth and customer experience in addition to higher IFRS 9 /17 implementation expenses.

### Production

Compared with 2018, gross deposits were up by 19% to EUR 144.7 billion in 2019, driven by higher Asset Management deposits, driven by Aegon's Chinese joint venture Aegon Industrial Fund Management Company (AIFMC). Net outflows during 2019 amounted to EUR 25.1 billion and were primarily due to outflows in the Americas in the Retirement Plan business following contract discontinuances and higher participant withdrawals. Europe exhibited net outflows resulting from the United Kingdom, more than offsetting net inflows in the Netherlands. Asset Management also recorded net inflows, primarily driven by the strategic partnership AIFMC. New life sales improved by 5% compared with 2018 to EUR 861 million in 2019, mainly driven by Europe, primarily as a result of a buy-out deal and a purchase of additional yearly pension increases by an existing customer, both in the Netherlands. New premium production for accident & health and property & casual insurance decreased by 16% in 2019 compared with 2018 to EUR 359 million in 2018, mainly driven by the previously announced strategic decision to exit the travel insurance, affinity and stop loss insurance segments in the United States.

### 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, i.e. members of the Executive, Management or Supervisory board. The second part of this section provides information on relevant operations and transactions within the Group.

Referring to section A.1.3 Holders of qualifying holdings, Aegon's largest and only material holder of qualifying holdings is Vereniging Aegon. All other qualifying holdings in Aegon are less than 10% and are considered not to have significant influence over the management of the company. The transactions with Vereniging Aegon during the financial years 2019 and 2018 were:

- On December 23, 2019 Aegon N.V. repurchased 13,227,120 common shares B from Vereniging Aegon for the amount of EUR 1,384,046.16 based on 1/40th of the Value Weight Average Price of the common shares of the five 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%
- On May 17, 2019, Vereniging Aegon exercised its options rights to purchase in aggregate 1,773,680 common shares B at fair value of a common share B (being 1/40th of the market value of a common share in the capital of the Company at the time of issuance) to mitigate dilution caused the issuance of shares on May 17, 2019, in connection with the Long Term Incentive Plans for senior management.
- On May 18, 2018, Vereniging Aegon exercised its options rights to purchase in aggregate 1,489,200 common shares B at fair value of a common share B (being 1/40th of the market value of a common share in the capital of the Company at the time of issuance) to mitigate dilution caused the issuance of shares on May 18, 2018, in connection with the Long Term Incentive Plans for senior management.

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

The transactions during 2019 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 2019, the Executive Board consisted of Mr. Wynaendts and Mr. Rider. The total IFRS-EU remuneration expenses in 2019, consisting of the fixed compensation, conditional variable compensation awards, pension contributions and other benefits, for Mr. Wynaendts was EUR 3.8 million and for Mr. Rider EUR 2.0 million. At the reporting date, Mr. Wynaendts and Mr. Rider had no loans with Aegon. No other outstanding balances such as guarantees or advanced payments exist.

### Management Board

The total IFRS-EU remuneration expenses for the members of the Management Board (including Executive Board members) in relation to the 2019 performance year was EUR 26.4 million, consisting of EUR 14.5 million in fixed compensation, EUR 6.8 million in variable compensation awards for the 2019 performance year, EUR 3.9 million in pension contributions and 1.2 million in other benefits.

### Supervisory Board

The total IFRS-EU remuneration expenses for active and retired members of the Supervisory Board amounted to EUR 865 thousand (excluding 21% VAT) in 2019. Members of the Supervisory Board were entitled to the following in 2019:

- 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;
- An attendance fee for each extra Board meeting attended, be it in person or by video and/or telephone conference;
- A committee fee for members on each of the Supervisory Board's Committees;
- An attendance fee for each Committee meeting attended, be it in person or through video and/or telephone conference; and
- An additional fee for attending meetings that require intercontinental, continental or US interstate travel between the Supervisory Board member's home location and the meeting location.

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. 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 intercompany loans, derivatives, guarantees, internal reinsurance and capital injections. 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:

- A loan granted by Aegon Global Investment Fund B.V. to Aegon Nederland N.V. for an amount of EUR 2,500 million (2018: EUR 2,500 million);
- A loan granted by Aegon Funding Company LLC to Transamerica Corporation, for an amount of EUR 1,269 million (2018: EUR 437 million), to finance activities in the US.
- A loan granted by Aegon Levensverzekering N.V. to Aegon Nederland N.V. for an amount of EUR 970 million (2018: EUR 135 million);
- A loan granted by Aegon N.V. to Transamerica Corporation, for an amount of EUR 951 million (2018: EUR 2,122 million), to finance activities in the US;
- A loan granted by Aegon Bank N.V. to Orange loans B.V. for an amount of EUR 702 million (2018: EUR 660 million), to fund investments in consumer loans;
- A subordinated loan granted by Aegon Nederland N.V. to Aegon Levensverzekering N.V. for an amount of EUR 600 million (2018: EUR 600 million) to provide Aegon Levensverzekering N.V. with capital.

### 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 the 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, 2019, the net (credit) exposure on the abovementioned internal arrangements was 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 maintenance agreements. 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.

## Internal reinsurance

Subsidiaries of Aegon N.V. enter into reinsurance agreements in the normal course of business to (among other reasons), pool risks, improve group diversification, facilitate higher group risk retention for smaller units and efficiently manage capital. All transactions are executed with the arm's length principle and in accordance with the Aegon Global Transfer Pricing Framework. In many cases, the reinsurance is supported by trusts, funds withheld and/or letters of credit. Any exposure above these amounts are assessed based on Aegon N.V.'s IGT policy to ensure the exposure is within policy limits. As of December 31, 2019, there are no exposures greater than the policy levels set for affiliated reinsurance.

## Capital injections

Capital injections are done to strengthen the capital position of the legal entities making the request, if deemed necessary, and are typically provided by the centrally-managed Dutch holding companies.

## A.2 Underwriting performance

Underwriting performance by geographical area Amounts in EUR millions	2019					2018				
	Group	Americas	The Netherlands	United Kingdom	Other <sup>1)</sup>	Group	Americas	The Netherlands	United Kingdom	Other <sup>1)</sup>
<b>Premium income</b>	<b>18,138</b>	<b>8,515</b>	<b>2,123</b>	<b>6,309</b>	<b>1,191</b>	19,316	8,403	1,987	7,539	1,387
<b>Premiums paid to reinsurers</b>	<b>2,434</b>	<b>2,155</b>	<b>32</b>	<b>190</b>	<b>57</b>	2,663	2,335	27	240	62
<b>Policyholder claims and benefits</b>	<b>56,797</b>	<b>27,299</b>	<b>9,043</b>	<b>19,208</b>	<b>1,248</b>	10,557	4,604	2,328	2,491	1,134
<b>Commissions and expenses</b>										
Commissions	2,423	2,242	72	127	(18)	2,445	2,219	107	130	(11)
Operating expenses	3,686	1,519	809	531	827	3,538	1,513	703	521	801
Deferred expenses	(832)	(684)	(2)	(69)	(77)	(831)	(645)	(10)	(66)	(110)
Amortization of intangibles	876	685	4	117	70	1,072	852	25	119	76
<b>Total Commissions and expenses</b>	<b>6,153</b>	<b>3,762</b>	<b>883</b>	<b>706</b>	<b>802</b>	<b>6,224</b>	<b>3,939</b>	<b>826</b>	<b>704</b>	<b>755</b>

<sup>1)</sup> Includes all other businesses other than Americas, NL and UK.

## Premium income

Aegon Americas' total premium income for the year 2019 amounted to EUR 8.5 billion (2018: EUR 8.4 billion) and is comprised of recurring premiums for an amount of EUR 6.9 billion (2018: EUR 6.6 billion) and single premiums for an amount of EUR 0.2 billion (2018: EUR 0.2 billion). The main lines of businesses contributing to Aegon Americas' total premium income are Life for EUR 7.1 billion (2018: EUR 6.8 billion) and Non-life (Accident & Health) for EUR 1.4 billion (2018: EUR 1.6 billion). The decrease in Non-life premiums is mainly from product exits in the US.

Total premium income of Aegon the Netherlands amounted to EUR 2.1 billion (2018: EUR 2.0 billion) of which EUR 0.8 billion relates to recurring premiums and EUR 0.9 billion to single premiums. Premium income in Aegon the Netherlands relates to the Life EUR 1.8 billion (2018: EUR 1.6 billion), and the Non-life segment with EUR 0.4 billion (2018: EUR 0.4 billion). The increase in the life segment relates mostly to a buy-out deal.

Total premium income of Aegon UK amounted to EUR 6.3 billion (2018: EUR 7.5 billion) of which EUR 2.2 billion (2018: EUR 2.2 billion) related to recurring premiums and EUR 4.1 billion (2018: EUR 5.3 billion) to single premiums. The decrease in single premium income compared to 2018 is driven by a reduction of upgraded Life insurance policies to the platform in Aegon UK. Most of Aegon UK's premium income relates to the Life business (2019: EUR 6.3 billion, 2018: EUR 7.5 billion).



### Commissions and expenses

In 2019, commissions and expenses in Aegon Americas decreased by 4% compared with 2018 to EUR 3.8 billion (2018: EUR 3.9 billion), reflecting lower restructuring expenses associated with the operations administration partnerships, and lower employee expenses. This was partly offset by expenses for modernization initiatives focused on digital and architectural capabilities as well as contractual increases in fees from the operations administration partnerships.

Commissions and expenses in Aegon the Netherlands increased by 7% compared with 2018 (2018: EUR 826 million) to EUR 883 million in 2019. Operating expenses in Aegon the Netherlands were up by 15% compared with 2018 to EUR 809 million (2018: EUR 703 million) in 2019, mainly due to the impact of the acquisition of Robidus.

Commissions and expenses in Aegon UK remained stable compared with 2018 at EUR 706 million (2018: EUR 704 million) in 2019. Operating expenses in Aegon UK increased by 2% compared with 2018 (2018: EUR 521 million) to EUR 531 million in 2019, mainly due to investments in the Aegon platform to further increase its functionality and ease of use.

### Policyholder claims and benefits

Total policyholder claims and benefits amounted to EUR 56.8 billion in 2019 compared to EUR 10.6 billion in 2018. The increase of EUR 46.2 billion is mainly attributable to changes in the valuation of liabilities of insurance contracts and investment contracts. The changes in valuation of liabilities for insurance contracts and investment contracts reflect movements in technical provisions resulting from net fair value changes on financial assets for account of policyholders included in results from financial transactions of EUR 33.2 billion positive (2018: EUR 11.3 billion negative). In addition, the change in valuation of liabilities for insurance contracts includes an increase in technical provisions for life insurance contracts of EUR 2.4 billion (2018: increase of EUR 1.4 billion).

Total claims and benefits paid amounted to EUR 20.5 billion (2018: EUR 21.3 billion) and is comprised of claims and benefits paid for Aegon's life business amounting to EUR 18.8 billion (2018: EUR 19.7 billion) and claims and benefits paid for Aegon's non-life business amounting to EUR 1.6 billion (2018: EUR 1.7 billion).

Of the total policyholder claims and benefits of EUR 56.8 billion (2018: EUR 10.6 billion), EUR 27.3 billion (2018: EUR 4.6 billion) relates to Aegon Americas, EUR 9.0 billion (2018: EUR 2.3 billion) to Aegon the Netherlands and EUR 19.2 billion (2018: EUR 2.5 billion) to Aegon UK.

## A.3 Investment performance

### Investment performance recognized in income statement

Amounts in EUR millions	Note	2019	2018
Investment income	<b>A.3.1</b>	7,531	7,035
Gains/(losses) on investments <sup>1)</sup>	<b>A.3.2</b>	405	(77)
Results from financial transactions	<b>A.3.2</b>	35,761	(11,670)
Net impairments	<b>A.3.2</b>	(22)	(19)

<sup>1)</sup> This relates to realized gains/(losses) on investments which are included in the line Results from financial transactions.

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

Aegon Americas is the largest contributor to the investment income with EUR 3,166 million (2018: EUR 3,121 million) followed by Aegon the Netherlands with EUR 2,224 million (2018: EUR 2,265 million), and Aegon UK with EUR 1,830 million (2018: EUR 1,346 million).

### 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.

Investment Income by asset class	2019				2018			
	Interest income	Dividend income	Rental income	Total	Interest income	Dividend income	Rental income	Total
Amounts in EUR millions								
Shares	-	1,571	-	1,571	-	1,124	-	1,124
Debt securities and money market instruments	3,959	-	-	3,959	3,899	-	-	3,899
Loans	1,779	-	-	1,779	1,704	-	-	1,704
Real estate	-	-	125	125	-	-	129	129
Other	97	-	-	97	181	-	-	181
<b>Total</b>	<b>5,835</b>	<b>1,571</b>	<b>125</b>	<b>7,531</b>	<b>5,783</b>	<b>1,124</b>	<b>129</b>	<b>7,035</b>

Most of Aegon's investment income relates to debt securities and money market instruments, namely EUR 3,959 million (2018: EUR 3,899 million), which represents 53% (2018: 55%) 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 gains/(losses) on investments amounting to EUR 405 million (2018: EUR 77 million negative), followed by its results from financial transactions amounting to EUR 35,761 million (2018: EUR (11,670) million). Finally, information about Aegon's net impairments is provided, which amounted to EUR 22 million negative (2018: EUR 19 million negative).

#### Realized gains/(losses) on investments

Realized losses on investments amounted to EUR 405 million in 2019 (2018: EUR 77 million gains) driven by Europe and the Americas. In Europe these related largely to optimization of the investment portfolio in the Netherlands. In the Americas, the realized gains on investments were driven by bond calls and prepayments, mortgage loan gains, and normal trading activity.

#### Results from financial transactions

The income arising from financial transactions during the years 2019 and 2018 comprises of:

Results from financial transactions	2019	2018
Amounts in EUR millions		
Net fair value change of General Account investments at FVtPL other than derivatives	279	(79)
Realized gains and losses on financial investments	399	(92)
Gains and (losses) on investments in real estate	317	261
Net fair value change of derivatives	1,505	(514)
Net fair value change of policyholder' assets at FVtPL	33,188	(11,326)
Net fair value change of investments in real estate for policyholder	(18)	5
Net foreign currency gains and (losses)	77	44
Net fair value change on borrowing and other financial liabilities	15	29
Realized gains and (losses) on repurchased debt	-	1
<b>Total results from financial transactions</b>	<b>35,761</b>	<b>(11,670)</b>

The income arising from financial transactions during the years 2019 and 2018 comprises mainly the net fair value change on account of policyholder financial assets at FVtPL, which amounted to EUR 33,188 million in 2019 (2018: EUR 11,326 million negative) and is mainly driven by favorable equity markets and decreasing interest rates. This was offset by changes in technical provisions reported as part of the lines Change in valuation of liabilities for insurance contracts and Change in valuation of liabilities for investment contracts, in Policyholder claims and benefits.

### Net impairments

Net impairments of EUR 22 million in 2019 mainly related to the impairments of corporate bonds resulting from bankruptcy filings in the United States and the impairment of consumer loans in the Netherlands. These were partly offset by recoveries for structured assets in the Americas, all of which were originally impaired between 2008 and 2013.

### 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.

#### Items that may be reclassified subsequently to profit and loss

Amounts in EUR millions	2019	2018
Gains/(losses) on revaluation of available-for-sale investments	3,471	(2,142)
(Gains)/losses transferred to income statement on disposal and impairment of available-for-sale investments	(412)	66

Gain on revaluation of available-for-sale investments amounted to EUR 3,471 million (2018: EUR 2,142 million losses) reflecting decreasing interest rates resulting in higher bond values.

### A.3.4 Investments in securitization

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

#### Residential mortgage-backed securities

Aegon Americas and Aegon the Netherlands hold EUR 2,533 million (December 31, 2018: EUR 2,497 million) of available-for-sale Residential mortgage backed securities (RMBS), of which EUR 2,222 million (December 31, 2018: EUR 2,102 million) is held by Aegon Americas and EUR 311 million (December 31, 2018: EUR 395 million) by Aegon the Netherlands. 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 table shows the breakdown of Aegon America's RMBS available-for-sale (AFS) portfolio.

AFS RMBS by quality Amounts in EUR millions	2019					Total amortized cost	Total fair value
	AAA	AA	A	BBB	<BBB		
GSE guaranteed	735	43	-	-	-	778	782
Prime jumbo	6	16	1	2	32	56	62
Alt-A	48	59	15	10	242	373	462
Negative amortization floaters	-	2	-	9	382	394	468
Other housing	2	9	2	7	317	337	449
<b>At December 31, 2019</b>	<b>790</b>	<b>129</b>	<b>18</b>	<b>28</b>	<b>973</b>	<b>1,938</b>	<b>2,222</b>
Of which insured	-	-	16	4	88	109	100

AFS RMBS by quality Amounts in EUR millions	2018					Total amortized cost	Total fair value
	AAA	AA	A	BBB	<BBB		
GSE guaranteed	450	149	-	-	-	599	599
Prime jumbo	-	16	1	5	98	120	124
Alt-A	-	59	17	5	221	301	397
Negative amortization floaters	-	1	-	11	438	450	533
Other housing	-	13	4	16	333	366	450
<b>At December 31, 2018</b>	<b>450</b>	<b>238</b>	<b>22</b>	<b>36</b>	<b>1,089</b>	<b>1,836</b>	<b>2,102</b>
Of which insured	-	-	20	5	99	124	113

A significant part of Aegon America's RMBS holdings are rated below BBB, as the issuances took place before the United States housing downturn that started in 2007.

Additionally, Aegon Americas has investments in RMBS of EUR 67 million (December 31, 2018: EUR 35 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 200 - 201 of the [Integrated Annual Report 2019 of Aegon Group](#).

### Commercial mortgage-backed securities

As of December 31, 2019, Aegon Americas and Aegon the Netherlands hold EUR 3,440 million (December 31, 2018: EUR 3,349 million) of AFS commercial mortgage-backed securities (CMBS), of which EUR 3,427 million (December 31, 2018: EUR 3,314 million) is held by Aegon Americas and EUR 13 million (December 31, 2018: EUR 35 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 6 million as of December 31, 2019 (December 31, 2018: EUR 44 million). The total net unrealized gain on the available-for-sale CMBS as of December 31, 2019, is EUR 157 million (December 31, 2018: EUR 17 million), of which EUR 104 million (December 31, 2018: EUR 17 million) relates to positions of Aegon Americas. CMBS fundamentals remain stable. The delinquency rate continues to fall, led by distressed legacy loan resolutions. Despite modest spread widening during the 2<sup>nd</sup> half of 2019, U.S. CMBS prices continue to be supported by lower interest rates.

The credit quality of Aegon Americas is AAA for the majority of its ' available-for-sale (AFS) CMBS portfolio. Additionally, as of December 31, 2019, Aegon Americas has no investments in CMBS (December 31, 2018: EUR nil), which are classified as fair value through profit or loss.

CMBS by quality Amounts in EUR millions	2019					Total amortized cost	Total fair value
	AAA	AA	A	BBB	<BBB		
CMBS	2,540	639	109	7	29	3,323	3,427
CMBS and CRE CDOs	-	-	-	-	-	-	-
<b>At December 31, 2019</b>	<b>2,540</b>	<b>639</b>	<b>109</b>	<b>7</b>	<b>29</b>	<b>3,323</b>	<b>3,427</b>

CMBS by quality Amounts in EUR millions	2018					Total amortized cost	Total fair value
	AAA	AA	A	BBB	<BBB		
CMBS	2,635	567	65	3	57	3,326	3,310
CMBS and CRE CDOs	-	-	-	-	5	5	4
<b>At December 31, 2018</b>	<b>2,635</b>	<b>567</b>	<b>65</b>	<b>3</b>	<b>62</b>	<b>3,331</b>	<b>3,314</b>

For more information about Aegon's commercial mortgage-backed securities, reference is made to pages 201 - 202 of the [Integrated Annual Report 2019 of Aegon Group](#).

### Asset-backed securities

Aegon Americas and Aegon the Netherlands hold EUR 3,332 million (December 31, 2018: EUR 4,503 million) of AFS ABS instruments of which EUR 2,239 million (December 31, 2018: EUR 2,626 million) is held by Aegon Americas and EUR 1,093 million (December 31, 2018: EUR 1,877 million) by Aegon the Netherlands. Additionally, as of December 31, 2019, Aegon Americas has investments in ABS of EUR 3 million (December 31, 2018: EUR 6 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.

The total gross unrealized loss on available-for-sale ABS of Aegon Americas and Aegon the Netherlands amounted to EUR 9 million as of December 31, 2019 (December 31, 2018: EUR 52 million). Aegon Americas has EUR 5 million (December 31, 2018: EUR 18 million) of this gross unrealized loss and Aegon the Netherlands EUR 3 million (December 31, 2018: EUR 34 million).

In the United States, increasing investor demand has been met with new issuance in the asset-backed sector. Spreads in the asset-backed sector tightened in 2019. In the second half of 2019, the European ABS market showed a positive performance. Spreads declined in most of the European ABS sectors. Our outlook for European ABS markets remains moderately positive for the short to medium term. Despite the bleaker macroeconomic picture, we still consider ABS fundamentals to be supportive for most European ABS sectors. In addition, favorable technicals will persist for the European ABS markets. Alongside ECB demand, investor demand is increasing as well driven by the search for yield.

The credit quality of Aegon Americas and Aegon the Netherlands is AAA for the majority of the available-for-sale (AFS) ABS portfolio.

ABS US, the Netherlands and the UK Amounts in EUR millions	2019					Total amortized cost	Total fair value
	AAA	AA	A	BBB	<BBB		
Credit cards	66	1	-	-	-	67	77
Autos	147	-	72	2	-	220	222
Small business loans	-	-	2	6	13	21	21
CDOs backed by ABS, Corp. bonds, Bank loans	1,201	229	45	42	49	1,567	1,569
Other ABS	429	98	760	104	9	1,400	1,444
<b>At December 31, 2019</b>	<b>1,843</b>	<b>329</b>	<b>878</b>	<b>154</b>	<b>71</b>	<b>3,274</b>	<b>3,332</b>

ABS US, the Netherlands and the UK Amounts in EUR millions	2018					Total amortized cost	Total air value
	AAA	AA	A	BBB	<BBB		
Credit cards	174	19	-	-	-	193	201
Autos	230	-	58	2	-	290	289
Small business loans	-	-	2	12	46	60	63
CDOs backed by ABS, Corp. bonds, Bank loans	1,535	479	216	146	46	2,423	2,386
Other ABS	525	151	774	88	8	1,547	1,563
<b>At December 31, 2018</b>	<b>2,464</b>	<b>649</b>	<b>1,051</b>	<b>248</b>	<b>100</b>	<b>4,512</b>	<b>4,503</b>

For more information about Aegon's asset-backed securities, reference is made to pages 202 - 203 of the [Integrated Annual Report 2019 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 2019 (2018: nil).

### A.4.2 Material leasing arrangements

As per January 1, 2019, Aegon has applied IFRS 16 Leases using the modified retrospective approach and therefore the comparative information has not been restated and continues to be reported under IAS 17 and IFRIC 4.

#### IFRS 16 Leases policy applicable from January 1, 2019 Aegon is the lessee

The Group recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The estimated useful lives of right-of-use assets are determined on the same basis as those of real estate and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses (using the same rate to measure the lease liability), if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or if the Group changes its assessment of whether it will exercise a purchase, extension or termination option.

The Group presents right-of-use assets that do not meet the definition of investment property in 'Other assets and receivables' and lease liabilities in 'Other liabilities' in the statement of financial position. In addition, the Group has elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets, including small office equipment. The Group recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

Aegon owns 10 offices located throughout the United States with a total square footage of 1.2 million. Aegon also leases space for various offices located throughout the United States under long-term leases with a total square footage of 1.3 million. Aegon's principal offices in the United States are located in Denver, CO; Cedar Rapids, IA; Atlanta, GA; Baltimore, MD; Harrison, NY, and Plano, TX.

Other principal offices owned by Aegon are located in The Hague, the Netherlands and Budapest, Hungary. Aegon owns its headquarters and leases other offices in the Netherlands (Amsterdam, Leeuwarden and Groningen), in the United Kingdom and in Spain under long-term leases. Aegon believes that its properties are adequate to meet its current needs.

#### **Future lease payments**

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 Americas has invested in 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 invested in 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, 2019 the investment property amounted to EUR 586 million (2018: EUR 612 million) and is leased out under operating leases.

## **A.5 Any other information**

Aegon does not have any other material information regarding its business and performance.

## 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, which 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 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 into account the interests of all Aegon stakeholders. 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 itself. Aegon aims to ensure that the composition of the Company's Supervisory Board is in line with Aegon's diversity policy for the Supervisory Board, Executive Board and Management Board and as such is well-balanced in terms of professional background, geography, gender and other relevant aspects of the diversity policy. A profile, which is published on [aegon.com](http://aegon.com), has been established that outlines the required qualifications of its members. Supervisory Board members are appointed for a four-year term, and may then be reappointed for another four-year period. Subsequently, the Supervisory Board member can be reappointed again for a period of two years, and then extended by two years at the most. Supervisory Board members are no longer eligible for (re)appointment after reaching the age of 70, unless the Supervisory Board decides to make an exception. Remuneration of the Supervisory Board members is determined by the General Meeting of Shareholders. In 2019, no transactions were concluded between the Company and any of the Supervisory Board members. Furthermore, the Company did not provide loans or issue guarantees to any members of the Supervisory Board. At present, Aegon's Supervisory Board consists of six members, all of whom qualify as independent in accordance with the Dutch Corporate Governance Code.

##### 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.

##### Audit Committee

As 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 as established by the Board. Certain Board members participate in both committees and a combined meeting of the Audit and Risk Committees is scheduled 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 main role and responsibilities of the Risk Committee are to assist and advise the Supervisory Board in fulfilling its oversight responsibilities regarding the effectiveness of the design, operation and appropriateness of both the Enterprise Risk Management (ERM) framework and the internal control systems of the Company and the subsidiaries and affiliates that comprise the Aegon Group. This includes:

- Risk strategy, risk tolerance and risk governance;
- Product development and pricing;
- Risk assessment;
- Risk response 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 Board. The Committee is designated to safeguard sound remuneration policies and practices within the Company by overseeing the development and execution of these policies and practices. In order to ensure that the remuneration policies and practices take all types of risks properly into account, in addition to liquidity and capital levels, the Remuneration Committee assesses in particular the remuneration governance processes, procedures and methodologies adopted. Furthermore, the Committee ensures that the overall remuneration policy is consistent with the longer-term strategy of the Company and the longer-term interest of its shareholders, investors and other stakeholders. This includes:

- Reviewing the Aegon Group Global Remuneration Framework and making recommendations on the remuneration policies;
- Overseeing the remuneration of the Executive Board and Heads of Group Control functions;
- Preparing recommendations regarding variable compensation both at the beginning and at the end of the performance year; 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. This includes:

- Board member and senior management succession planning;
- Drawing up selection criteria and procedures for Board members, together with supervising the selection criteria and procedures for senior management;
- Advising on and proposing nominations, appointments and reappointments;
- Reviewing and updating the Supervisory Board profile and charters for the Supervisory Board and its committees;
- Periodically assessing the functioning of individual members of the Supervisory Board and the Executive Board;
- Overseeing the corporate governance structure of the Company, compliance with the Dutch Corporate Governance Code and any other applicable corporate governance legislation and regulations; and
- Assessing and advising on the responsible business strategy as part of the corporate strategy, and overseeing the execution of the responsible business strategy.

#### B.1.1.2 The Executive Board

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 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

Aegon's Executive Board consists of Alexander R. Wynaendts, who is Chief Executive Officer (CEO) and Chairman of the Executive Board, and Matthew J. Rider, who is Chief Financial Officer (CFO), and member of the Executive Board. During the Annual General Meeting of Shareholders on May 15, 2020, it will be proposed to the shareholders to appoint Lard Friese as member to the Executive Board and succeed Alex Wynaendts as CEO. Following his appointment, Mr. Wynaendts will resign as member of the Executive Board and Mr. Friese will succeed Mr. Wynaendts as Chief Executive Officer of the Company.

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 for a four-year term, following nomination by the Supervisory Board.

The members of the Executive Board have an engagement agreement with the Company rather than an employment contract. The Company's Remuneration Policy for the Executive Board limits exit arrangements to a maximum of one year of the fixed component of the salary.

#### B.1.1.3 The Management Board

Aegon's Executive Board is assisted in its work by the Company's Management Board, which has 11 members, including the members of the Executive Board.

#### Composition of the Management Board

Aegon's Management Board is composed of Alex Wynaendts, Matthew Rider, Mark Bloom, Maarten Edixhoven, Adrian Grace, Allegra van Hövell-Patrizi, Marco Keim, Onno van Klinken, Carla Mahieu, Mark Mullin and Bas NieuweWeme. It is the intention to, subject to the regulatory approvals, appoint Mike Holliday-Williams to Aegon's Management Board, following his appointment as CEO of Aegon UK. Mike Holliday-Williams will succeed Adrian Grace who retired from the company on March 31, 2020.

#### Role of the Management Board

Aegon's Management Board works in unison with the Executive Board, and helps oversee operational issues and the implementation of Aegon's strategy. Members are drawn from Aegon's business units and from Aegon's global functions. The members have both regional and global responsibilities. This ensures that Aegon is managed as an integrated international business. While the Executive Board is Aegon's sole statutory executive body, the Management Board provides vital support and expertise in pursuit of the Company's strategic objectives.

In the relation between the Management Board and the Supervisory Board, the CEO shall be the first contact for the Supervisory Board and its Chairman. In addition thereto, and in connection with how the contacts between the Supervisory Board and the Management Board committee have been given shape, the members of the Management Board will act in accordance with the provisions provided therefore in the Management Board Charter, the Executive Board Charter and the Supervisory Board Charter.

#### 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 or Executive Board of the Company is able 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 Review

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

During 2019, there were no material changes to the system of governance. For the changes in the composition of the Supervisory Board and Executive Board during 2019, please refer to page 36 and 37 of the [Integrated Annual Report 2019 of Aegon Group](#).

#### 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. There were no material changes during 2019 on how the risk management and internal control systems and reporting procedures are implemented.

### B.1.2 Remuneration policy

Aegon has a Global Remuneration Framework (GRF) which outlines the Aegon Group Human Resource Principles, the Aegon Group Remuneration Principles and the Aegon Group Remuneration Guidelines which apply to all Aegon employees, including Executive Board members. The GRF has been designed in accordance with relevant rules, guidelines and interpretations, such as the Dutch Financial Supervision Act, the Dutch Civil Code, the Dutch Corporate Governance Code and the Solvency II Legal Framework.

Aegon's remuneration policies are derived from the GRF, which includes the Executive Board Remuneration Policy and local business Remuneration Policies. These policies define specific terms and conditions for the employment of our employee across the various countries and local businesses. All steps in the remuneration process are governed by the GRF and its underlying policies. Staff from Human Resources, Risk Management and Compliance are involved in all steps of the process. The Risk Management and Compliance functions, together with the Human Resources and Finance functions, are responsible for the execution of the various measures that ensure the GRF and associated practices are aligned with the defined risk tolerances and behaviors.

The below provides a summary of Aegon's Supervisory Board and Executive Board Remuneration policies as well as the remuneration of the Board members in 2019.

For further details, reference is made to the Remuneration Report on pages 54-84 of the [Integrated Annual Report 2019 of Aegon Group](#).

#### B.1.2.1 Supervisory Board Remuneration Policy

Aegon's Supervisory Board Remuneration Policy is aimed at ensuring fair compensation and protecting the independence of the Supervisory Board members. Terms and conditions for the Supervisory Board members are the responsibility of the Remuneration Committee of the Supervisory Board. During the reporting period no material changes have taken place in the system of governance. Under the current policy, as endorsed by shareholders at the Annual General Meeting of Shareholders on May 17, 2019, the Supervisory Board members are entitled to the following:

- 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;
- An attendance fee for each extra Board meeting attended, be it in person or by video and/or telephone conference;
- A committee fee for members on each of the Supervisory Board's Committees;
- An attendance fee for each Committee meeting attended, be it in person or through video and/or telephone conference; and
- An additional fee for attending meetings that require intercontinental, continental or US-interstate travel between the Supervisory Board member's home location and the meeting location.

Each of these fees is a fixed amount. The Supervisory Board members 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.

#### B.1.2.2 Supervisory Board Remuneration in 2019

The total remuneration in 2019 of active and retired members of the Supervisory Board amounted to EUR 865 thousand excluding VAT (2018: EUR 809 thousand). There are no outstanding balances such as loans, guarantees or advanced payments.

#### B.1.2.3 Executive Board Remuneration Policy

The Supervisory Board has the overall responsibility for Aegon's Remuneration Policies, including the Executive Board Remuneration Policy. The Supervisory Board established the Remuneration Committee from among its members. The Executive Board Remuneration Policy that has been applied in 2019 was adopted at the General Meeting of Shareholders on May 12, 2011. This policy has been subject to annual reviews by the Supervisory Board.

The Remuneration Committee may recommend Policy changes to the Supervisory Board. In that case, the Remuneration Committee will conduct scenario analyses to determine the long-term effects on the level and structure of compensation granted to each Executive Board member and reports their findings to the Supervisory Board. The Supervisory Board can subsequently decide on referring the proposed Policy changes to the Annual General Meeting of Shareholders for adoption.

During the reporting period no material changes have taken place in the system of governance.

### Total compensation

Total compensation for Executive Board members is defined in the Executive Board Remuneration Policy as a combination of fixed compensation, variable compensation, pension and other benefits.

In line with this policy, the Supervisory Board has determined a maximum total compensation level for each Executive Board member, reflecting the specific roles, responsibilities, qualifications, experience and expertise of the individual. Each year, the Remuneration reviews these total compensation levels of the Executive Board members to ensure they remain competitive and provide incentives in line with the Company's risk appetite. This review takes the specific role, responsibilities, experience and expertise of the Executive into account as well as internal and external reference information.

### Fixed compensation

The fixed compensation for the Executive Board members is paid in monthly installments.

### Variable compensation

Aegon believes that variable compensation strengthens the commitment of Executive Board members to the Company's strategy, risk tolerance, long-term interests and sustainability. The variable compensation award is based on annual performance against a number of Aegon and personal performance indicators:

- These performance indicators are a mix of financial and non-financial performance indicators with a one-year performance horizon.
- The result of a single performance indicator must exceed its predefined threshold level, before this indicator can contribute to the overall performance result. When an indicator result is below this threshold, the contribution of this indicator to the overall performance result is zero.
- In case the performance of an indicator exceeds the target, the contribution of this indicators is capped once it reaches a predefined maximum level. This means that strongly exceeding performance on one specific indicator can only contribute up to a certain level to the overall performance result (i.e. a contribution cap).
- These performance indicators are regularly evaluated by experts in the company's Finance, Risk Management, Business Control, Human Resources and Compliance departments to ensure alignment with the company's objectives, business strategy, risk tolerance and long-term performance remains strong.

At the start of the performance year, the Remuneration Committee recommends a selection of performance indicators for each Executive Board member, including its weights, threshold, target and maximum levels. This recommendation is subsequently reviewed by the Company's Risk Management team (i.e. the ex-ante risk assessment) before it is send to the Supervisory Board. The Supervisory Board can approve, revise or reject the recommendation, taking the results of the risk assessment into account.

Once the Supervisory Board has approved the performance indicators for each Executive Board member, the Executive Board members are also granted their conditionally variable compensation award for that performance year. This conditional award is equal to their at target variable compensation level, which consists of 50% cash and 50% Aegon shares. The grant price for the shares is equal to the volume weighted average price on the Euronext Amsterdam stock exchange for the period December 15 to January 15 at the start of the performance year.

After the completion of the performance year, the Remuneration Committee prepares a recommendation for the allocation of a variable compensation award to each Executive Board member. This recommendation is based on the results on each of the selected performance indicators, its threshold, target and maximum levels and takes a second ex-ante risk assessment by the Company's Risk Management team into account. This risk assessment looks into whether there are reasons for a downward adjustment of the intended variable compensation award (malus) which were not take into account yet.

In this assessment possible risk mitigating behaviors are also taken into account, such as remaining within risk limits, risk reduction, risk avoidance, risk transfer and risk response by the Executive. The Remuneration Committee sends its recommendation and the second ex-ante risk assessment to the Supervisory Board, which - based on its informed judgement - can approve, revise or reject the recommendation. This Supervisory Board decision includes validating that, when taken together, the results of the performance indicators represent a fair reflection of the overall performance of the Executive Board member over the performance year.

The allocated variable compensation award is subsequently split into equal parts of cash and Aegon shares, of which 40% is paid out upfront (i.e. in the year following the performance year) and 60% is deferred. The deferred part is paid in three equal tranches over the subsequent three-year period. All shares, both upfront and deferred, are subject to an additional three-year holding period after they are paid. The variable compensation payout can be illustrated by the following example. For every 1,000 in variable compensation 400 is paid out in the year following that performance year (year N). This upfront part will be paid 50% in cash (=200) and 50% in a number

of shares (=200 / Aegon share price at grant = number of allocated shares). The remaining 600 is deferred and paid-out during the subsequent three years (years N+1, N+2 and N+3).

All deferred cash and share portions remain conditional until they are paid. Before a deferred portion is paid, the Company's Risk Management team executes an ex-post risk assessment which looks into whether there are reasons for a downward adjustment of the original variable compensation award (malus) which were not taken into account yet. The outstanding deferred portion can be used for correcting the original award amount accordingly. This risk assessment takes the same criteria into consideration as the second ex-ante risk assessment (above). Based on this assessment, the Remuneration Committee subsequently prepares a pay-out recommendation of the deferred portion (i.e. unchanged or adjusted downward). The Remuneration Committee sends its recommendation and the ex-post risk assessment to the Supervisory Board. The Supervisory Board can approve, revise or reject the recommendation.

### Claw back provisions

Aegon's Supervisory Board can claw-back variable compensation that has already been paid to the Executive in case of a material financial restatement or individual gross misconduct, after considering a risk assessment by the Company's Risk Management team which looks into whether in hindsight the paid amount should have been lower or nil. Examples of misconduct are, but not limited to, significant breach of laws and/or regulations, use of violence, either verbally or physically, involvement with fraud, corruption or bribery, significant issues due to evident dereliction of duty and/or discrimination of any kind (for example age or gender). For practical reasons the claw-back amount can be settled by any current or future obligations as permitted by law.

### Pension arrangements

The Executive Board members are offered pension arrangements and retirement benefits, in line with the Executive Board Remuneration Policy.

From January to May 2019, Mr. Wynaendts' pension arrangement included retirement provisions that allowed benefits to be taken at the end of the term. From June 2019 onwards, Mr. Wynaendts received a gross allowance for pension purposes, which equaled 40% of the fixed compensation in 2019. In addition to this, Mr. Wynaendts continued to be entitled to an annual gross payment in 28% of his fixed compensation in 2019, which is part of a grandfathered pension arrangement.

Mr. Rider's pension contributions equaled 40% of his fixed compensation in 2019 and consisting of:

- Participation in Aegon's career average defined benefit pension plan for NL-based employees, for his fixed income up to EUR 107.593 (2019 threshold set by Dutch law);
- Participation in Aegon's defined contribution pension plan for NL-based employees, for his fixed income above EUR 107.593;
- A gross allowance for pension purposes of around 15%, in order to make the sum of all pension contributions equal to 40% of his fixed compensation in 2019.

### Other benefits

Other benefits include non-monetary benefits (e.g. company car), social security contributions by the employer, and tax expenses borne by Aegon.

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.

Both Executive Board members have a Board Agreement with Aegon N.V., rather than a contract of employment. Members of the Executive Board may terminate their Board Agreement with a notice period of three months. The Company may terminate the Board Agreement by giving six months' notice if it wishes to terminate the agreement.

The arrangements with the current Executive Board members contain provisions for severance payments in the event that their agreement is terminated as a result of a merger or takeover. These arrangements do not exceed one year's fixed remuneration. The Supervisory Board has taken appropriate steps to ensure the arrangements of Executive Board members are in line with the Executive Board Remuneration Policy. However, Mr. Wynaendts will not be entitled to a termination payment when his Board Agreement is terminated by the Company on September 30, 2020.

#### B.1.2.4 Executive Board Remuneration in 2019

The total compensation in relation to the 2019 performance years, consisting of the fixed compensation, the 2019 conditional variable compensation award, pension contributions and other benefits, for Mr. Wynaendts was EUR 3.9 million (2018: EUR 5.0 million 2017: EUR 4.6 million) and for Mr. Rider EUR 2.1 million (2018: EUR 2.1 million; 2017: EUR 1.3 million<sup>1</sup>). The total compensation for the members of the Executive Board in relation to 2019 was EUR 6.0 million (2018: EUR 7.1 million; 2017: EUR 6.0 million). At the reporting date no loans with Aegon or outstanding balances such as guarantees or advanced payments exist for either Mr. Wynaendts or Mr. Rider.

#### B.1.2.5 Management Board Remuneration

Members of the Management Board, who are not on the Executive Board, are rewarded on the basis of local remuneration policies and in line with local market practice for roles with a similar scope and complexity. These policies are derived from the GRF and are updated regularly. Their remuneration includes fixed compensation, variable compensation, pension and benefits.<sup>2</sup>

The variable compensation is determined by a similar approach as for the members of the Executive Board. It's also based on a mix of individual and company performance indicators that are linked to the Company's objectives, business strategy, risk tolerance and long-term performance. However their targets, levels and performance assessment are agreed and determined by their local Remuneration Committee.

The Executive Board and/or their local Remuneration Committee decide on a potential downward modification of the variable compensation (based on either an ex-ante or ex-post risk assessment) or claw back.

The allocated variable compensation is paid in 33% upfront cash and 67% deferred shares, which vest three years after allocation.

Depending on local practices the pension arrangements may include provisions allow for early retirement.

#### Material transactions with Aegon's boards

There were no material transactions with members of the Supervisory, Executive, or Management Boards.

## 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 charged with particular managerial tasks are primarily responsible for the risk control and monitoring of the managerial tasks concerned.

<sup>1</sup> Please note that these amounts differ from the IFRS-EU remuneration expenses disclosed in A.1.8 as a result of the accounting rules for variable compensation and defined benefit pension arrangements.

<sup>2</sup> Please refer to A.1.8. for the total IFRS-EU remuneration expenses for the members of the Management Board.

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 recognized 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, actuarial, currencies and investment and acquisition projects.

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.

Aegon aims to ensure that the composition of the Company's Supervisory Board is in line with Aegon's diversity policy for the Supervisory Board, Executive Board and Management Board and is as such well-balanced in terms of professional background, geography, gender and other relevant aspects of the diversity policy.

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 Chief Risk Officer (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 Global Head of Regulatory Compliance, reporting to the Group's General Counsel, is the 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.

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 risks that may affect Aegon. This means identifying and managing 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 covers the ERM components as identified by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The ERM framework applies to all of Aegon's businesses 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.

#### General

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

#### Definition and tolerances

For Aegon, enterprise risk management involves:

- Understanding the risks that Aegon faces;
- Maintaining a company-wide framework through which the risk-return trade-off associated with these risks can be assessed;
- Maintaining risk tolerances and supporting policies to limit exposure to a particular risk or combination of risks; and
- Monitoring risk exposures and actively maintaining oversight of the Company's overall risk and solvency positions.

By setting certain predefined tolerances and adhering to policies that limit the overall risk to which the Company is exposed, 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 principle that taking a risk should be based on serving a customer's need. In terms of Aegon's purpose statement, risk taking should be instrumental to helping people achieve a lifetime of financial security. The competence with which Aegon is able 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 the risks Aegon would like to avoid.

Aegon's risk appetite statement and risk tolerances are established in order to assist management in carrying out Aegon's strategy using the resources available to Aegon. The risk appetite statement is linked to Aegon's purpose of helping people achieve a lifetime of financial security. Aegon's risk appetite statement emphasizes that Aegon businesses:

"Fulfil our promises towards our customers and other stakeholders by delivering sustainable growing long-term free capital generation, with strong resilience in solvency and liquidity, healthy balance in exposures, and by running a responsible business with effective controls."



Following from the risk appetite statement, risk tolerances are defined on:

- Capital generation, to ensure free capital generation remains sufficiently in line with projections;
- Solvency and liquidity, to ensure that Aegon remains solvent and liquid even under adverse scenarios;
- Risk balance, to ensure a healthy balance of risk exposures that supports delivering on targets for capital generation and return on capital;
- Responsible business with effective controls, which acknowledges an acceptable level of operational risk and stresses a low tolerance for (lack of) actions which could lead to material adverse risk events that result in breaking promises or not meeting reasonable expectations of customers, legal breaches or reputational damage.

The tolerances are further developed into measures, limits and thresholds that have to be complied with to remain within the tolerances.

### Risk identification and risk assessment

Aegon has identified a risk universe that captures all known material risks to which the Company is exposed. An Emerging Risk process is in place to ensure on-going appropriateness of both 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 maintained 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.

### Risk monitoring and reporting

Risks are monitored regularly and reported on at least a quarterly basis. The impact of key financial, underwriting and operational risk drivers on earnings and capital is shown in the quarterly risk dashboard for the various risk types both separately as well as on an aggregate basis.

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, the main risks derived from Aegon's strategy and the day-to-day business are discussed, as well as forward looking points for attention. If necessary, mitigating actions are taken and documented.

### Risk control

A system of effective controls is required to mitigate the risks identified. In Aegon's ERM framework risk control includes risk governance, risk policies, internal control framework, 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:

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

### Governance structure

Aegon's risk management framework is represented across all levels of the organization. This ensures a coherent and integrated approach to risk management throughout the Company. Similarly, Aegon has a comprehensive range of company-wide risk policies that detail specific guidelines and limits. These policies include legal, regulatory and internally set requirements, and are designed to keep overall risk-specific exposures to a manageable level. Any breach of policy limits or warning levels triggers immediate remedial action or heightened monitoring. Further risk policies may be developed at a local level to cover situations specific to particular regions or business units.

Aegon's risk management governance structure has four basic layers:

- The Supervisory Board and the Supervisory Board Risk Committee (SBRC);
- The Executive Board and the Management Board;
- The Group Risk & Capital Committee (GRCC) and its sub-committees; and
- The Regional Risk & Capital Committees (RCC).

### 1. Supervisory Board

The SBRC reports to the Supervisory Board on topics related to the ERM framework and the internal control system. The formal responsibility regarding the effectiveness and design, operation and appropriateness of the ERM and internal control system rests, however, with the Audit Committee of the Supervisory Board. The Audit Committee works closely together with the SBRC with regard to the oversight of and reports on the effectiveness of the ERM framework and the risk control systems of the Company. The Audit Committee relies on the findings of the SBRC. The SBRC is responsible for overseeing Aegon's ERM framework, including risk governance and measures taken to ensure risk management is properly integrated into the Company's broader strategy. The main roles and responsibilities of the SBRC are to assist and advise the Supervisory Board and the Audit Committee of the Supervisory Board in fulfilling their oversight responsibilities regarding the effective operation and appropriateness of the ERM framework and internal controls system 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;
- Risk reporting (a subset of which is Operational and Modernization risks).

Furthermore, the SBRC regularly reviews risk exposures relating to capital, earnings and compliance with Group Risk policies. It is the responsibility of the Executive Board and the Group's Chief Risk Officer (CRO) to inform the Supervisory Board of any risk that directly threatens the solvency, liquidity or operations of the Company.

### 2. Executive Board and Management Board

Aegon's Executive Board has 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's 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, and is a member of the Management Board.

The Management Board oversees a broad range of strategic and operational issues. While the Executive Board remains Aegon's statutory executive body, the Management Board provides vital support and expertise in safeguarding Aegon's strategic goals. The Management Board discusses and sponsors ERM, in particular the risk strategy, risk governance, risk tolerance and the introduction of new risk policies.

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

### 3. Group Risk & Capital Committee (GRCC)

The GRCC is Aegon's most senior risk committee. It is responsible for managing Aegon's balance sheet at the global level, and is in charge of risk oversight, risk monitoring and risk management related decisions on behalf of the Executive Board in line with its charter. The GRCC ensures risk-taking is within Aegon's risk tolerances; that the capital position is adequate to support financial strength, credit rating objectives and regulatory requirements, and that capital is properly allocated. 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 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, Executive Board and Management Board with framework setting and maintenance across all group-level balance sheet bases, including policies, standards, guidelines, methodologies and assumptions. The ERMAAC can seek advice on significant framework development from temporary working groups comprised of subject-matter experts from across the Company's businesses. These working groups are established by the ERMAAC, including their membership, scope of work and deliverables.

#### The Non-Financial Risk Committee (NFRC)

The purpose of the NFRC is to assist the GRCC, Executive Board and Management Board with non-financial risk framework setting and maintenance, including policies, standards, guidelines and methodologies and to act as formal discussion and exchange of information platform on matters of concern regarding nonfinancial risk management.

#### The Model Validation Committee (MVC)

The MVC is responsible for approving all model validation reports across Aegon. This is an independent committee that reports into the GRCC and Executive Board to provide information on model integrity and recommendations for further strengthening of models.

### 4. Regional Risk & Capital Committee (RCC)

Each of Aegon's regions has a Risk & Capital Committee (RCC). The responsibilities and prerogatives of the RCCs are aligned with the GRCC and further set out in their respective charters, which are tailored to local circumstances.

#### Group-wide risk function

In addition to the four basic layers described above, Aegon has an established group-wide risk function. It is the mission 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 objective of the Risk Management function is to support the Executive Board, Management Board, Supervisory Board, and regional and business unit boards in ensuring that the Company reviews, assesses, understands and manages its 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 adverse conditions caused by unforeseen negative events.

The following roles are important in order to realize the objective of the Risk Management function:

- 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 ERM framework and sound practices; and
- Monitoring and challenging the implementation and effectiveness of ERM practices.

In the context of these roles, the following responsibilities can be distinguished:

#### Advising on risk-related matters:

- Bringing businesses together to facilitate information exchange, sharing best practices and working together on relevant case studies and external standards in order to develop, adopt and maintain relevant standards of practice throughout Aegon; and
- Optimizing the use of capital and growth within risk/return and consumer conduct criteria.

#### Supporting and facilitating:

- Developing and maintaining the global ERM framework for identifying, measuring and managing all material risks the Company is exposed to as defined in Aegon's risk universe and protecting Aegon's reputation;
- Developing and maintaining Aegon's risk methodology as described in the Aegon Market Consistent Reporting Manual (AMCRM);
- Supporting the businesses with implementing the ERM framework, risk methodology and standards of practice where needed;
- Supporting the Management Board in ensuring the effective operation of the ERM framework and related processes, providing subject matter expertise to businesses as appropriate and facilitating information exchange on good risk practices;
- Identifying and analyzing emerging risks, being input for ongoing risk strategy development and to ensure that Aegon's risk universe remains up to date;
- Designing the Solvency II PIM, including the validation thereof. Model validation ensures independent review of methodology, assumptions, data, testing, production, reporting and use of the Solvency II PIM;
- Analyzing Solvency II PIM outputs and performance and reporting results to the Boards and relevant (Supervisory) Committees;
- Providing subject matter expertise from the Centers of Excellence of the global Risk Management function to business areas through review of key initiatives, transactions, programs, projects, assumptions, methodologies and results across all important paradigms;
- Providing assurance on the integrity of models and cash flows through model validations and maintenance of model validation policies and standards; and
- Promoting a strong risk management culture across Aegon, including review of performance targets and remuneration in line with the Aegon Group Global Remuneration Framework.

### Challenging and monitoring:

- Monitoring the ERM framework and overseeing compliance with group-wide risk governance requirements, risk strategy and risk tolerances, risk policies and risk methodology, which are applicable to all businesses for which Aegon has operational control;
- Ensuring appropriate risk management information is prepared for use by the GRCC, the Management Board, the Executive Board and Supervisory Board;
- Overseeing material risk, balance sheet and business decisions taken throughout Aegon in line with established risk governance arrangements;
- Monitoring and reporting on risk exposures and advising the Boards and (Supervisory) Committees on risk management related matters, including in relation to strategic affairs such as corporate strategy, mergers and acquisitions and major projects and investment;
- Monitoring that the internal model is and remains appropriate to the Company's risk profile and informing the Management Board and the Supervisory Board about the on-going performance, suggesting improvements;
- Monitoring risk exposures and risk policy compliance, including review of the Own Risk and Solvency Assessment (ORSA) and Recovery Plan defined triggers and early warning indicators;
- Acting as independent business partner with focus on talent development, control excellence, customer conduct, capital allocation and by providing management focused risk tools or fostering debates and proactively challenging on key business developments that may create significant exposure for example through hedging and investment remits;
- Providing subject matter expertise and overseeing critical business initiatives to strengthen risk management activities, to improve the risk profile and to resolve risk events and control issues noted;
- Embedding robust oversight and risk management culture and processes; and
- Protecting group capital for all stakeholders.

Aegon's Group and business unit'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 within defined levels of certainty. The objective of this structure is to avoid surprises due to the materialization of unidentified risks, or from losses that exceed predefined risk tolerance levels and related limit structures.

The Company's first line of defense, the business and support functions, has direct responsibility for managing and taking risk in accordance with defined risk strategy, risk tolerances and risk policies. The second line of defense includes the risk management function. The risk management function facilitates and oversees the effectiveness and integrity of ERM across the Company. The third line of defense – the audit function – provide independent assurance on the effectiveness and integrity of the internal control, risk management and governance functions.

### Model Risk Management process

Aegon has group-wide requirements in place on management of model risk. The requirements are covered in the Model Risk Management Framework, which consists of the Model Risk Management, Model Change (for Solvency II only) and Model Validation policies. The purpose of the model risk management process is to assess, monitor and report on model integrity and the operation of related controls. The Model Risk Management function is part of the Risk Management function, and supports model owners and business users with standards on attaining and maintaining model integrity across the model life cycle. The model risk management function monitors changes in the gap remediation log and reports on model risk exposures and gap action progress by the first line of defense.

### 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. Overarching model validations are performed on annual basis, the assessment for Aegon UK and Aegon the Netherlands were performed in July 2019 and in August for Aegon Group, without identifying major gaps.

### 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.

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 performed by the Model Validation function. 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 in August 2019, with a positive conclusion.

There were no material changes to the internal model governance during the reporting period.

## 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.

### 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 frequently, 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, like in situations where the business, solvency or risk profile significantly changes. A non-regular ORSA does not necessarily require all sections to be re-produced. Management is responsible for the monitoring of the triggers that may initiate the execution of a non-regular ORSA. The 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:

- Capital generation;
- Solvency;
- Liquidity;
- Risk balance; and
- Responsible business with effective controls.

The tolerances on capital generation and solvency both directly relate to capitalization. Capital generation relates to the change in the capital position over time. The tolerance is forward looking and focuses on the long term. A sustainable growth in long-term capital generation protects capital and helps to ensure policyholder protection while allowing Aegon to pay-out a sustainable dividend to investors. The solvency tolerance is integrated within the Capital Management Policy. The primary measure of group capital adequacy that Aegon manages is Aegon Group's Solvency 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.

Aegon tests its capitalization against adverse plausible scenarios, given its current business and risk profile. The ability to meet the obligations to policyholders under the identified adverse plausible scenarios is measured by testing whether capitalization remains above the recovery plan level.

Capitalization is also a relevant factor in the risk balance tolerances. 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 tolerances in line with the Company's risk preferences.

A breach of any of the risk tolerances needs to be followed by a review of business plans and identification of management actions to remediate the breach.

Capitalization is not an explicit factor in the liquidity risk tolerance which requires having sufficient liquidity to meet cash demands, even after an extreme event. However, both sound capital and liquidity management are required to ensure that Aegon is able to meet its obligations in the short and the long run.

Capitalization is also not an explicit factor in the tolerance on responsible business with effective controls, which links risk management to the organization culture and sets tolerances for operational risk events, ensuring business integrity and operational resilience.

## B.4 Internal control system

Aegon has developed an internal control system that serves to facilitate its compliance with applicable laws, regulations and administrative processes, and the effectiveness and efficiency of operations with regard to its objectives, in addition to 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 policies and frameworks such as the ERM framework, the Model Validation Framework and the Operational Risk Management (ORM) 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 for the internal control system are based.

The internal control system was developed in accordance with regulations that Aegon must comply with (i.e. Sarbanes-Oxley Act and Solvency II). Aegon's control activities should 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-EU 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. 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.

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 ORM 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

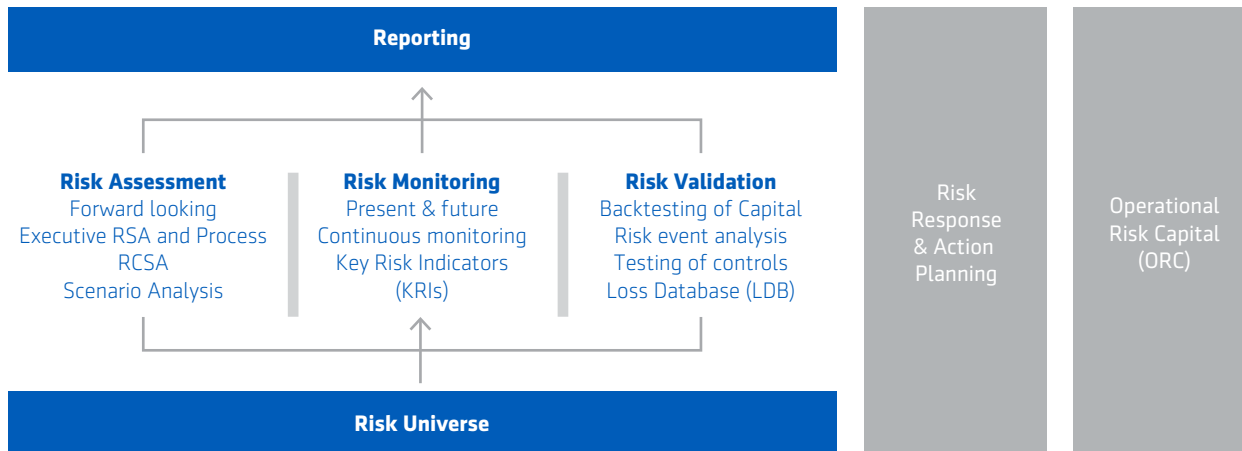
The general principles of Aegon's internal control system apply to all undertakings, functional areas or departments. These principles are as follows:

- 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 of, 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 Group and policyholder information or client information;
- All departments have developed a system of internal control to ensure that the assets and records of the Group 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;
- The interest of the customer is considered when designing, approving and reviewing products and distribution channels (in line with Aegon's market conduct principles); and
- Records of the Group are maintained in compliance with record retention policies and local regulatory requirements.

### B.4.2 ORM 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 Operational Risk Management (ORM) perspective and given the different nature of operational risks vis-à-vis financial and underwriting risks, the ORM risk framework is considered an 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 ORM framework is part of the more comprehensive ERM Framework, which is not limited to operational risk. From that perspective the ORM function applies building blocks of the ERM framework. The figure below provides a graphical illustration of this ORM framework.

#### Aegon's ORM 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. 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 and enhanced risk management.

**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, monitoring activities (including 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 ORM program as a whole.

### 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 law and regulations, internal company rules and policies governing.

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

- Identifying new and revised regulations and managing the regulatory compliance universe;
- Identifying and assessing risks stemming from these regulations;
- Advising how to comply with new changes and existing regulations;
- Policy setting and implementation;
- Investigating compliance breaches; 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 Global Head of Regulatory Compliance. The independence of the key function holder is maintained by, amongst other governance practices, having the Global Head prepare and present his/her own report to the Supervisory Board Audit Committee. At the business unit level, there are also regulatory compliance personnel who support local management in the development of the local programs. They also report to the Global Head of Regulatory Compliance about the effectiveness of the local program.

#### 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 units' Management Boards in ensuring that Aegon acts in line with relevant legal, regulatory requirements and Aegon Group risk tolerance. In this role, the 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. To ensure the achievement of this objective, the Regulatory Compliance function prepares an annual plan that is approved by the Audit Committee and reports on progress against the plan on a quarterly basis. Business units must also prepare local annual plans as well as a compliance monitoring plan to ensure that business is operating in accordance with the agreed-upon requirements. The Compliance function is also supported by a compliance methodology as well as certain tooling, such as sanction screening tooling, to ensure that there is alignment across the business units.

#### B.4.3.4 Activities

The Regulatory Compliance function is responsible for the identification and assessment of regulatory developments and associated 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, Anti-Trust and Competition);
- Privacy and data;
- Personal Conduct Regulation (Conflict of Interest, Fitness & Propriety; Personal Conduct Regulation)
- 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 compliance function that meets the requirements set out in the Regulatory Compliance Charter.

### B.4.3.6 Responsibilities & 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, to ensure compliance. The function is supported by the relevant external professionals and good market practice standards, as applicable. The function maintains a charter, a framework and a suite of global policies designed to manage the risk of non-compliance.

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

- ▀ **Advise** the Executive Board, Management Board, and Supervisory Board Audit Committee 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 & role of the ORM function

The ORM function supports the effective establishment of the Regulatory Compliance function. The following roles and compliance related objectives are set out in the ORM function charter:

#### Advise

- ▀ Keep well informed of good practices, regulatory and industry standards and trends in the fields of conduct risk management, and determine relevancy and the impact on Aegon; and
- ▀ Advise on the development of the Operational Risk framework, and the development of improvements and new initiatives that encompasses the relevant, material compliance risks pertaining to the Aegon organization

#### Support, Challenge, Report:

- ▀ 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;
- ▀ Support identification and assessment of material risks by facilitating Risk Control Self-Assessment sessions in relation to operational, conduct and regulatory risks;
- ▀ Report to the Management Board and senior management on the actual compliance 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 compliance risks, and of the effectiveness of the performance management and remuneration processes; and
- ▀ Provide oversight and reporting to the Management Board and senior management on the effectiveness of remediation measures including action plan monitoring.

## 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 Global 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 which, after review by the Management Board, is approved by the Risk and Audit Committees of the business units and the Audit Committee of the Supervisory Board;
- ▀ Identify, and agree with management, opportunities to improve the internal controls, risk management and governance processes, and verify that such improvements are implemented effectively within a predetermined period of time;
- ▀ Execute audits on the functioning of the first and second line of defense;
- ▀ Assist in the investigation of significant suspected fraudulent activities or conduct special reviews or consulting which may not usually be included in the scope of Internal Audit; and
- ▀ Issue periodic reports to respective management and Audit Committees, summarizing the progress and results of to the annual audit plan.

### 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 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 Global 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

### B.6.1 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, as there is no calculation of technical provisions, product development or reinsurance of liabilities undertaken directly at Aegon 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. However, at Aegon Group level and the operating insurance entities in the Netherlands as the Head of URM also holds the role of the Solvency II Actuarial Function Holder there is no requirement for an independent peer review of the Actuarial Function Report. This reflects that they are not directly responsible for the calculation of the technical provisions and are therefore providing an independent opinion.

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. The roles and responsibilities as defined under the Solvency II framework for the Solvency II Actuarial Function Holder are in general allocated to the Chief Actuary. However in Aegon NV, Aegon the Netherlands and Blue Square Re, due to regulatory requirements, the Solvency II Actuarial Function Holder is a second line position and is therefore allocated to the Head of URM reporting to the CRO.

### B.6.2 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, modelling, 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. Furthermore, the objective of the actuarial function is to support management in the assessment of the appropriate use of reinsurance.

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 (Actuarial Function Report), 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 the Group and the 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.

### B.6.3 Reporting

The URM function reports periodically about peer reviews of actuarial assumptions and Actuarial Function reports (except for Aegon Group and 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

Outsourcing arrangements are arrangements of any form between an Aegon entity and a third party, in which the third party performs a function or an activity, whether directly or by sub-outsourcing, which would otherwise be performed by the Aegon entity itself.

External outsourcing arrangements are those where the third party is not a member of the Aegon Group of companies. In 2018 Aegon Americas entered into an agreement with Tata Consultancy Services (TCS) to administer the company's US insurance and annuity business lines. The partnership is enabling Aegon Americas to accelerate the enhancement of its digital capabilities and the modernization of its platforms to service customers in all lines of business; oversight is performed by Aegon Americas.

In 2019 Aegon United Kingdom expanded its existing partnership with Atos, through a 15-year contract to service and administer its Existing Business (non-platform customers). This will further improve customer service for the customers of Aegon UK's Existing Business with a multitude of different policy types. The same teams previously supporting Aegon's Existing Business transferred to Atos and remained in Edinburgh, thereby providing continuity of service. Oversight is performed by Aegon UK to reflect that ultimate accountability for service delivery remains with Aegon UK.

An external outsourcing arrangement is considered to be a material risk under Solvency II and by Aegon when it covers a critical or important function or activity that 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 material external outsourcing arrangements based on a vendor classification matrix, which is included in Aegon's 'Outsourcing & Supplier Risk Policy' and (as per January 1, 2020) the TPRM-policy.

Material suppliers are performing critical or important functions or activities that Aegon is unable to perform itself and which are essential to the operation of the undertaking and in the absence of which Aegon would be unable to deliver its services to policy holders.

Material outsourcing arrangements and material suppliers have an impact on operational risk as a result of potential material changes to and reduced control over the related people, processes and systems. To manage material outsourcing arrangements and material suppliers, 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 material outsourcing arrangements due diligence, approval and on-going monitoring is performed in line with the policy. All material risks arising from external material outsourcing arrangements and material suppliers are appropriately managed to ensure that 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 (hierarchically) managed by the local business units. One intra-group outsourcing arrangement relates to Aegon's insurance entities having outsourced their asset management to Aegon Asset Management. Aegon Asset Management manages investments for Aegon's insurance companies based on investment mandates.

The Outsourcing & Supplier Risk Policy' also covers the intra-group outsourcing. For intra-group outsourcing 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 Aegon Americas. 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 Executive Board and Supervisory Board of Aegon N.V.. Regulations and (inter) national guidelines are taken into account and the roles and responsibilities of the Executive Board and Supervisory Board are reflected in the respective board charters. Those board 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 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. Where appropriate, the risk governance structure is updated to meet changing demands.

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 by Group Model Validation 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.

In 2019, risk management and internal control topics were discussed by the relevant management committees and bodies, including the Management Board, the Executive Board, the Risk Committee and the Audit Committee of the Supervisory Board, and the Supervisory Board, according to their roles and responsibilities as outlined in the respective frameworks and charters. No material weaknesses were observed, and no significant changes or major improvements were made or planned to the risk management and internal control systems.

# 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.

As a result of its activities, the Company is exposed to a range of underwriting, market, credit, liquidity and operational risks. See table below for more information on the Solvency II capital requirement for these risks. The other capital requirements category mainly includes capital requirements for entities under Deduction & Aggregation on a (provisional) equivalence basis, being US Life insurance entities, Bermuda, Japan, Mexico and Brazil. Finally, the capital requirements of Other Financial Sector entities (excluding Aegon Bank) are also part of this category.

### Composition of Group SCR

Amounts in EUR millions

	QRT 5.25.02.22	2019	2018
<b>SFCR section</b>			
C.2 Market risk	Market Risk (SF)	1,349	898
	Market Risk (IM)	2,760	2,714
C.3 Credit risk <sup>1)</sup>	Counterparty default risk (SF)	287	368
	Counterparty default risk (IM)	16	22
C.1 Underwriting risk	Life underwriting risk (SF)	1,080	1,009
	Life underwriting risk (IM)	2,287	2,341
	Health underwriting risk (SF)	322	332
	Health underwriting risk (IM)	-	-
	Non-life underwriting risk (SF)	140	138
	Non-life underwriting risk (IM)	-	-
C.5 Operational risk	Operational risk (SF)	320	288
	Operational risk (IM)	308	299
E.2.1 Solvency Capital Requirement	LAC-DT	(782)	(756)
	<b>Total undiversified components</b>	<b>8,086</b>	<b>7,653</b>
	Diversification	(3,050)	(3,000)
	<b>PIM SCR after diversification (AC only) <sup>2)</sup></b>	<b>5,036</b>	<b>4,654</b>
	Capital requirements for D&A and OFS <sup>3)</sup>	4,137	3,695
	<b>Group PIM SCR</b>	<b>9,173</b>	<b>8,349</b>

<sup>1)</sup> To align with the SCR in QRT s.25.02.22 and section E, Aegon will only discuss Counterparty Default Risk (as defined in the Delegated Regulation) in section C3.3. More generally, Aegon considers the term 'credit risk' to also include spread risk, migration risk and default (market risk concentration) risk relating to financial investments. To keep this alignment with QRT s.25.02.22 consistent throughout the SFCR, these other components of credit risk are discussed instead in section C.2 Market risk.

<sup>2)</sup> AC stands for Accounting Consolidation method for the calculation of the Solvency II group solvency ratio.

<sup>3)</sup> Excluding Aegon Bank in line with Group supervisory requirement.

Aegon Group's net Partial Internal Model (PIM) SCR amounted to EUR 9,173 million on December 31, 2019, which was an increase of EUR 824 million compared to the SCR on December 31, 2018 of EUR 8,349 million. This net SCR increase was mainly driven by the following movements in gross SCR risks:

- SF Market risk increased by EUR 451 million mainly due to a model change regarding the treatment of fixed income illiquid assets as SF Equity instead of Fixed income within Aegon the Netherlands;
- IM Market Risk increased by EUR 46 million mainly due to increased equity risk, caused by the increased equity market in Aegon UK and due to the annual pay-out of the buffer in the separate account for policyholders with profit sharing;
- IM Life Underwriting risk decreased by EUR 54 million, mainly due to the new longevity insurance contract of Aegon the Netherlands with Canada Life Re, partly offset by the decreased interest rates;
- The diversification benefit amount increased by EUR 50 million (which decreased net SCR with EUR 50 million). This was mainly driven by the increase in gross SCR;
- The loss absorbing capacity of deferred taxes (LAC DT) increased by EUR 26 million, driven by the increase of the other SCR components, partly offset by the LAC-DT factor change in the Netherlands from 75% to 65% as a consequence of lower interest rates;
- The SCR for D&A and OFS increased by EUR 442 million, mainly due to increased required capital in the Americas as a result of the appreciation of the US dollar compared with the Euro in the beginning of 2019. Decreased interest rates resulted in a further increase of the required capital of the Americas, partly offset by the adoption of the Variable Annuity Reform framework in the Americas.

When managing its day-to-day risk exposures, Aegon includes the D&A businesses in its analyses and managing 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 control system are designed to be applied consistently across the Group.

Aegon's risk strategy provides direction for the targeted 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, the return that can be achieved 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 remained within the Group's overall tolerance for risk and the Group's financial resources.

Factors influencing Aegon's risk preferences include expected returns, the 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/or net income.

To monitor Aegon's position against its risk appetite the Risk governance framework sets out Risk Tolerances and Risk Limits. Adherence to these tolerances and limits is tested on a frequent basis using actual results in addition to sensitivity and scenario analyses. For limits related to statutory capital purposes EEA legal entities use methods and assumptions that are defined by Solvency II, in some cases this is PIM based while in others it is Standard Formula based. For non-EEA legal entities the methods and assumptions are based on local regulatory requirements. When relevant, local rules will be applied, for example when allowing for the impact of tax upon results.

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 sections include a description of the methods used, the assumptions made and the outcome of sensitivity analysis. Management actions that are 'business as usual' are factored into the sensitivity analysis. Reactive management actions are not factored into the sensitivity analysis. The impact of established hedge programs are taken into account where applicable. The sensitivities do not, in general, reflect what the Solvency ratio 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, these aforementioned sections do not consider all methods available to management to respond to changes in the financial environment, such as changing investment portfolio allocations or adjusting premiums and crediting rates. Furthermore, the results of the analyses cannot be extrapolated for wider variations because effects do not tend to be linear. No risk management process can clearly predict future results.

## Prudent person principle

The prudent person principle has been embedded into 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 & Counterparty Risk Policy requires relevant business units to satisfy the prudent person principle. The risks on the investment side are presented in Risk Reporting analysis with more detailed reporting performed by Aegon Asset Management. Aegon's Risk Appetite Framework is in place to ensure that the assets held are appropriate to the nature of the liabilities without taking on excessive risks:

- Risk limits for market and financial risks are set and form part of the Aegon Risk Appetite Framework;
- The Investment and Counterparty Risk Policy establishes the prudent person principle requirements;
- Concentration in exposures is avoided by testing adverse plausible 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;
- 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 2019, 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 as defined by Article 13(26) of the Solvency II Directive (2009/138/EC).

### Other commitments and contingencies

As of December 31, 2019, guarantees amounted to EUR 380 million (2018: EUR 437 million) and include those guarantees associated with the sale of investments in low-income housing tax credit partnerships in the United States, which mostly can be called upon immediately. Standby letters of credit amounts 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	2019	2018
Guarantees	380	437
Standby letters of credit	12	12
Share of contingent liabilities incurred in relation to interests in joint ventures	14	49
Other guarantees	13	14
Other commitments and contingent liabilities	7	7

## Contractual obligations

In March 2019, affiliates of Transamerica Corporation entered into a series of agreements with Long Term Care Group (LTCG), an independent third party administrator, to transfer the administration and claims management of its long term care insurance business line. The transaction enables Transamerica to accelerate the enhancement of its digital capabilities and the modernization of its long term care insurance platform. Over the course of the multi-year contract, Transamerica will pay approximately USD 390 million to LTCG. These fees represent compensation for administering Transamerica's long term care product line including new business, policyholder service, claims processing and care management. The agreement also contains a termination clause in which case Transamerica – subject to certain limitations – agrees to compensate LTCG, on a specified schedule, for early termination.

In April 2018, affiliates of Transamerica Corporation entered into a series of agreements with affiliates of Tata Consultancy Services Limited ('TCS') to administer the Company's US life insurance, voluntary benefits, and annuity business lines. The collaboration enables Transamerica to accelerate the enhancement of its digital capabilities and the modernization of its platforms to service its customers in all lines of business. Over the course of the multi-year contract, Transamerica will pay more than USD 2 billion to TCS. These fees represent compensation for administering Transamerica's over 10 million policies and are driven by both new business and policies already in force. In addition, this commitment includes remaining transition and conversion charges of approximately USD 107 million (period 2020-2022) as well as administrative, IT and finance service fees which are contingent on TCS meeting specified milestones in the underlying agreement with Transamerica. The agreement also contains a termination clause in which case Transamerica – subject to certain limitations – agrees to compensate TCS, on a specified schedule, for early termination.

Transamerica Corporation, a wholly-owned subsidiary of Aegon N.V., previously had 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, 2018, this amounted to EUR 1,892 million (2017 EUR: 1,793 million). In 2019, the parental guarantee was cancelled resulting in a EUR 0 balance.

In November 2018, Aegon UK announced an extended partnership with Atos BPS Ltd (Atos) to service and administer its Existing Business (non-Platform customers). The agreement is a 15-year contract under which Aegon UK pays Atos to administer around 1.4 million customers, which took effect on 1 June 2019 as planned. At year-end 2019, outstanding transition and conversion charges are estimated to amount to approximately GBP 60 million, which are expected to be recorded over the next two years, with fixed payments to Atos defined in the agreement and subject to completion of milestones which have been agreed with Aegon UK.

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

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

- Due and punctual payment of payables 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. At December 31, 2019, the letter of credit arrangements utilized by captives to provide collateral to affiliates amounted to EUR 2,249 million (2018: EUR 3,469 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 10 million (2018: EUR 60 million); as of that date no amounts had been drawn, or were due under these facilities;
- Due and punctual payment of payables under letter of credit agreements or guarantees provided for subsidiaries of Transamerica Corporation at December 31, 2019 amounted to EUR 1,666 million (2018: EUR 3,164 million). As of that date no amounts had been drawn, or were due under letter of credit facilities.
- Due and punctual payment of payables by the consolidated group companies Transamerica Corporation, Aegon Funding Company LLC and Commonwealth General Corporation with respect to fixed subordinated notes, bonds, capital trust pass-through securities and notes issued under commercial paper programs amounting to EUR 1,449 million (2018: EUR 614 million); and
- 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, 2019.

## C.1 Underwriting risk

### C.1.1 Underwriting risk description

Underwriting risk, sometimes referred to as “insurance risk”, arises from deviations from 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.

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 annuity business (i.e. annuity and pension portfolios) 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

Aegon reinsured about one quarter of its longevity exposure in the Netherlands with Canada Life Reinsurance. This has reduced required capital and improve Aegon’s capital position. The reinsurance agreement with Canada Life Reinsurance, a division of a Toronto-based life insurance company with an AA rating from S&P Global, provides full protection against the longevity risk associated with EUR 12 billion of liabilities. The agreement includes both deferred and in-payment pensions and annuities. The contract will commence on December 31, 2019, and will run until the portfolio runs off. The longevity reinsurance agreement has no impact on the services and guarantees that Aegon provides to its policyholders.

#### Morbidity risk

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

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

#### Policyholder 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; 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 – meaning 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 for use in 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.

Aegon manages underwriting 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 continuing to look for risk mitigation opportunities.

There were no material changes to the measures used over the reporting period.

#### C.1.3 Risk concentration

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

The retention limits are typically chosen in such a way that the remaining exposure is acceptable, relative to the size of the earnings and the size of the balance sheet of the company. Risk mitigation and managing compliance with the retention limits can be achieved by reinsurance (external or internal), by the underwriting process or by the product design.

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 the 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. The underwriting process is conducted by following a mandatory 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 which frequency is based on materiality. Material assumptions must be reviewed at least annually.

#### Underwriting risk limits

Aegon's 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 actively monitor the actual risk exposure (measured by gross required capital) and management takes 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 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.

Aegon ensures the effectiveness of these mitigation measures through the policies in place, the yearly policy attestations where Aegon's business units attest to complying with the policies and the periodic measuring of the underwriting risks and setting these against the risk limits.

### C.1.5 Risk sensitivity

#### Longevity sensitivity

An important underwriting sensitivity Aegon applies internally is a longevity shock of 5%, which is defined as an additional 1-time reduction in annual mortality rates by 5%. Due to the developments caused by the Covid-19 pandemic, sensitivities as at March 31, 2020 have also been presented.

Sensitivities	Scenario	Estimated Group Solvency II ratio impact per December 31, 2019	Estimated Group Solvency II ratio impact per March 31, 2020
Longevity shock	+5%	(4%)	(5%)

The Group is exposed to higher longevity driven by Aegon Americas, Aegon the Netherlands and Aegon UK due to the higher liability valuation since longevity is only partially hedged. Higher longevity also increases the SCR requirements held by these units. Aegon the Netherlands' sensitivity to longevity reduced marginally over the year due to two offsetting impacts – reduction in sensitivity due

to the execution of the longevity reinsurance transaction with Canada Life Reinsurance, partly offset by higher longevity sensitivity due to the fall in interest rates over the year.

## 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, currency exchange rate risks and credit risks). 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.

To align with the SCR in QRT s.25.02.22 and section E, only Counterparty Default Risk (as defined in the Delegated Regulation) is discussed in section C.3. More generally, Aegon considers the term 'credit risk' to also include spread risk, migration risk and default (market risk concentration) risk relating to financial investments. To align with QRT s.25.02.22 throughout the SFCR, these other components of credit risk are discussed in this section.

#### Credit Risk

Internally Aegon considers credit risk to be included within market risk. Credit risk has 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 exposed to separate account credit losses.

Aegon's investment portfolios contains mainly investments, US treasury, agency and state bonds, 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.

#### 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 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 that require Aegon to establish reserves to fund these future guaranteed benefits when equity market returns do not meet 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 result in significant decreases in the value of Aegon's equity investments.

### 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. The majority of Aegon's products are long term in nature and as a consequence low interest rates or high interest rate volatility may adversely affect Aegon's profitability and shareholders' equity. It is also the case that a very rapid rise in interest rates could have negative consequences for Aegon. For example, in such a scenario policy loans, surrenders and withdrawals may increase. This may result in cash payments by Aegon requiring the sale of invested assets at a time when the prices of those assets have fallen due to the increase in market interest rates.

### Currency risk

Fluctuations in currency exchange rates may affect Aegon's profitability and shareholder equity. As an international group, Aegon is subject to foreign currency translation risk. For more information, please refer to Note 2.3 on page 164 of the [Integrated Annual Report 2019 of Aegon Group](#). 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 is 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

Under Solvency II, Aegon uses its approved partial internal model for Solvency II required capital calculations. This internal model is an appropriate representation of Aegon's risk profile and focuses on the measurement of market risks. The partial internal model used by Aegon is 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 at Group.

In line with Aegon's 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.

The Capital Management Policy was updated following a review, reference is made to section E. Capital management of this report for more information.

Investment strategies are established based on asset and liability management 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.

The risk limits reflect Aegon's risk preferences and capacity to take on risk. Aegon performed the annual review of risk limits and risk strategy. The risk limits were updated and implemented in 2019.

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 Aegon's 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;
- Default risk; and
- Migration risk.

It is important to ensure that there is no concentration to a particular name. The Credit Name Limit Policy (CNLP) covers this important aspect. All forms of exposure are covered by this policy, which is therefore not limited to credit. For example exposure through reinsurance contracts, derivative positions as well as asset holdings are included. In addition to the CNLP limits, the Focus List is in place to enhance the monitoring and assessment of credit risk. The Focus List requires that even when individual counterparties are within the CNLP limit it may be deemed necessary to restrict further investment if news regarding the credit quality of a particular company comes to light.

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.2.3 Risk concentration

Aegon minimizes concentration risks by maintaining a well-diversified portfolio across and within investment categories such as asset class, geographical region and industry sector. Investing in a larger number of separate market risks can also introduce concentration risks; separate exposures could all generate losses at the same time, perhaps due to a shared exposure to another risk factor. Aegon manages this exposure through the CNLP. The CNLP covers all asset classes such as equity, cash, credit, and derivatives. For information regarding quantitative details related to Aegon's market and credit risk concentrations, see , Note 4, "Equity market risk and other investments risk" on page 208 -209, and "Credit Risk Concentration" on page 193- 197 of the [Integrated Annual Report 2019 of Aegon Group](#).

#### Credit risk

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 CNLP under which limits are placed on the aggregate exposure that it has 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 a composite of the main rating agencies (S&P, Moody's and Fitch) and Aegon's internal rating of the counterparty. If an exposure exceeds the stated limit, then the exposure must be reduced to the limit for the country unit and rating category as soon as possible. Exceptions to these limits can only be made after explicit approval from Aegon's GRCC. The policy is reviewed regularly.

At December 31, 2019 Aegon's largest non-government credit exposures are due to reinsurance arrangements with Wilton Re Holdings Ltd and American United Mutual Insurance. After reinsurance companies the largest non – government exposures are with banks such as JP Morgan, HSBC, Wells Fargo, and Bank of America. Aegon has large government exposures, the largest being in the Americas, the Netherlands and Germany. Highly rated government bonds and government exposure domestically issued and owned in local currency are excluded from the Credit Name Limit Policy.

At December 31, 2019, there were two violations of the Credit Name Limit Policy at Group level (December 31, 2018: nil). These related to Bank of America and Republic of Turkey. The Bank of America violation was addressed in early 2020 and the Turkey violation is being monitored.



For Aegon Group, the long-term counterparty exposure limits as at December 31, 2019, are as follows:

#### Group limits per credit rating

Amounts in EUR million

	2019	2018
AAA	900	900
AA	900	900
A	675	675
BBB	450	450
BB	250	250
B	125	125
CCC-C	50	50
D	50	50
Not rated	50	50

#### 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.

#### 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 Aegon Americas.

#### 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 these 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 CNLP. 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 impacts from equity market increases and negative impacts from equity market declines as it earns fees on policyholder account balances and in certain cases 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 related to products with guarantees that have underlying equity funds.

Aegon sets a limit on equity risk at Group and regional levels. Hedging programs are in place that are designed to manage the risks within these defined limits. 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 risk measurement techniques. Fixed interest assets along with interest rate swap and swaption derivatives are used extensively to manage the interest rate risk exposure. Aegon sets a limit on interest rate risk at Group and regional levels. All derivative use is governed by Aegon's Derivative Use Policy.

Aegon sets a limit on currency risk at Group and regional levels. Subsidiaries do not engage in direct currency speculation or program trading. 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 and is reported at least quarterly.

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 (International Swaps and Derivatives Association) 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 and credit swaps. 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.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 for both A&C and D&A entities. For the A&C entities, Aegon the Netherlands and Aegon UK drive the sensitivity to market risk whereas the Aegon Americas exposures drive the sensitivity of the D&A entities. 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, 2019. There are no tiering haircuts triggered by any of these sensitivities. Due to the developments caused by the Covid-19 pandemic, sensitivities as at March 31, 2020 have also been presented.

### Equity market risk and other investments risk

Sensitivities	Scenario	Estimated Group Solvency II ratio impact per December 31, 2019	Estimated Group Solvency II ratio impact per March 31, 2020
Equity markets	+25%	12%	6%
Equity markets	(25%)	(12%)	(9%)

The Group is exposed to the risk of a fall in equity markets driven by adverse impacts on the solvency ratio in Aegon Americas, Aegon the Netherlands and Aegon UK, with Aegon Americas being the largest contributor. In Aegon Americas, equity sensitivities are primarily driven by the Variable Annuity business, where hedging programs need to consider a balance between targeting stable earnings and stable capital ratios. Under the new Variable Annuity framework which Aegon Americas adopted in 2019, sensitivities are mainly driven by the change in reserves, while required capital is fairly stable. In declining equity markets, Own Funds decrease due to higher setup of reserves for the Variable Annuity product, partly offset by payoffs on equity hedge programs. Furthermore, declining equity markets results in a reduction to the assets backing employee pension plan liabilities and a decrease in private equity and hedge fund investments. For Aegon the Netherlands, losses in the down shock come from the private equity investments in the general account and the mismatch between the guarantee provision and associated hedge assets. For Aegon UK, under an equity down scenario, the reduction in Own Funds is offset by the reduction in SCR with the main exposures coming from the Staff Pension scheme and the unitized business.

Compared to December 31, 2019, the reduction in equity sensitivity as at March 31, 2020 was driven by Aegon Americas and Aegon the Netherlands. For Aegon Americas, the reduction in equity down sensitivity is due to a larger payoff from the Macro hedge following resizing of the program and lower Variable Annuity sensitivity due to lower separate account exposure following first quarter 2020 market performance. For Aegon Netherlands, higher sensitivity for an equity up shock caused by the inclusion of the impact on the SCR as a result of a change in the symmetric adjustment after a 25% up shock.

### Interest rate risk

The sensitivities to interest rates at December 31, 2019 show that the Group's Solvency ratio will fall when interest rates fall and will increase when interest rates rise.

Sensitivities	Scenario	Estimated Group Solvency II ratio impact per December 31, 2019	Estimated Group Solvency II ratio impact per March 31, 2020
Interest rates	+50 bps	4%	4%
Interest rates	-50 bps	(4%)	(6%)

The Group is exposed to a fall in interest rates driven by higher SCR and lower Own Funds. The higher SCR is driven by Aegon the Netherlands and Aegon UK, whereas the reduction in Own Funds is driven by Aegon Americas.

In Aegon Americas, a decrease in interest rates results in a higher setup of reserves for Variable Annuity and Universal Life products, partly offset by payoffs from interest rate hedge programs. Own funds decrease further from an increase in employee pension plan liabilities relative to the invested assets. The opposite occurs in rising interest rate scenarios.

Aegon the Netherlands is over-hedged on a Solvency II Own Funds basis leading to Own Funds losses when rates go up and Own Funds gains when rates go down. This results in Aegon the Netherlands' solvency ratio being exposed to rising interest rate scenario.

There are aggregation benefits at Group level due to opposite movements in Own Funds between Aegon Americas which reduces and Aegon the Netherlands/Aegon UK which increases in a downward interest rate sensitivity. Aegon Americas reduces due to the VA reserve set up but Aegon the Netherlands and Aegon UK Own Funds increase primarily due to hedging gains.

For Aegon UK, the main exposure to interest rates arises from the swaps in the shareholders' funds which reflects a gain if rates go down, partly offset by the higher present value of expenses on the fee based business. The gain in Own Funds under a down interest rate scenario is offset by an increase in the SCR.

Compared to December 31, 2019, the increase in interest rate sensitivity as at March 31, 2020 was due to an increase in Aegon the Netherlands' over-hedge position caused by market movements in the first quarter 2020.

### Credit risk

Sensitivities	Scenario	Estimated Group Solvency II ratio impact per December 31, 2019	Estimated Group Solvency II ratio impact per March 31, 2020
Govt spreads - excl VA <sup>1)</sup>	+50 bps	(9%)	(11%)
Govt spreads - excl VA <sup>1)</sup>	-50 bps	10%	11%
Non-govt spreads - excl VA <sup>1)</sup>	+50 bps	(2%)	(5%)
Non-govt spreads - excl VA <sup>1)</sup>	-50 bps	1%	4%
NL Mortgage spread	+50 bps	(5%)	(6%)
NL Mortgage spread	-50 bps	6%	6%
US credit defaults <sup>2)</sup>	~+200 bps	(19%)	(23%)
EIOPA VA	+5 bps	3%	3%
EIOPA VA	-5 bps	(3%)	(4%)

<sup>1)</sup> Spread sensitivities as at December 31, 2019 excluding VA (Volatility Adjustment) have been approximated for reference purposes.

<sup>2)</sup> Additional 130bps defaults for 1 year plus assumed rating migration.

The Group is exposed to non-government, government and mortgage spreads widening.

The spread sensitivities do not include any offsetting impact on the volatility adjustment. EIOPA VA sensitivities capture the impact of a shock on the volatility adjustment and Group is exposed to reduction in EIOPA VA due to higher liability valuation arising from Aegon the Netherlands.

Exposure to non-government spreads widening is contributed by Aegon the Netherlands offset by Aegon UK driven by the impact on Own Funds. In Aegon Americas, the sensitivity has a marginal impact, with a negative impact on OF from the Variable Annuity product which is largely exposed to credit spreads widening, largely offset by a gain on the employee pension plan due to a higher discount rate applied in the liability valuation. For Aegon the Netherlands, the impact arises from the lower value of assets including mortgages, corporate bonds and structured instruments offset partially by lower pension scheme liabilities. For Aegon UK, non-government spreads narrowing results in a lower IAS 19 curve and hence higher pension liabilities.

Exposure to government spreads sensitivities is contributed by Aegon the Netherlands and Aegon UK both of which are exposed to spreads widening due to the reduction in value of their fixed income assets.

Group is exposed to mortgage spreads widening, driven by Aegon the Netherlands, which has an adverse impact on the asset valuation. Aegon Americas credit defaults sensitivity reflects the impact of credit defaults and rating migrations on assets held in the general account portfolio. Under this sensitivity, the credit impairments reduce the value of credit exposures and increase the amount of required capital. The increase in required capital is driven by the downward ratings migration of credit instruments, partly offset by a decrease in exposure due to the impaired value of bonds under the scenario.

Compared to December 31, 2019, the non-government spread sensitivities increased as at March 31, 2020, driven by Aegon Americas and Aegon the Netherlands. For Aegon Americas the movement is driven by the inclusion of Variable Annuity business in the spread sensitivities. For Aegon the Netherlands, the non-government spread sensitivities increased due to the reduction in the duration of pension scheme liabilities which result in lower offset to the asset sensitivities. Government spread sensitivities increased due to the increased duration of government investments as a result of the reduction in interest rates in the first quarter 2020. Increased sensitivities on US credit defaults are driven by downward rating migrations of credit assets during the first quarter 2020 which increases the exposure at risk of default under the credit scenarios.

## C.3 Credit risk

### C.3.1 Credit risk description

To align with the SCR in QRT s.25.02.22 and section E, Counterparty Default Risk (as defined in the Delegated Regulation) is discussed in section C.3. Spread risk, migration risk and default (market risk concentration) risk relating to financial investments are discussed in section C.2 Market risk.

Counterparty default risk mainly covers exposure to risk mitigating contracts, cash at bank and receivables for which capital is calculated under the Standard Formula. This is not a material component of Aegon's credit risk. For a description of Aegon's material credit risk, refer to section C.2.1.

### C.3.2 Credit risk assessment

Counterparty default risk is assessed similarly to other credit risk types. Reference is made to section C.2.2 under Market Risk section.

### C.3.3 Risk concentration

Counterparty default risk concentrations are assessed similarly to other credit risk types. Reference is made to section C.2.3 under Market Risk section.

### C.3.4 Risk mitigation

Counterparty default risk is mitigated similarly to other credit risk types. Reference is made to section C.2.4 under Market Risk section.

### C.3.5 Risk sensitivity

Reference is made to section C.2.5 under Market Risk section where Aegon's most material sensitivity to credit risk is assessed, Aegon Group does not have significant sensitivity to Counterparty Default Risk as defined in the Delegated Regulation.

## C.4 Liquidity risk

### C.4.1 Liquidity risk description

Liquidity risk is inherent in much of Aegon's business. Each asset purchased and liability incurred has its own 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 rates moving 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 each 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 a significant payment of collateral to Aegon's hedge counterparties.

Aegon's liquidity risk profile remained strong throughout 2019. A number of improvements were made to the assessment of liquidity risk at the Group level and within local units. Business units took actions during 2019 that improved available liquidity further, such as the merger of Aegon Leven and Optas in the Netherlands. Aegon the Netherlands and Aegon US continue to review the use of external liquidity facilities to ensure that they remain fit for purpose.

Many of Aegon's derivative 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.

### 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 may 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. The purpose of this Liquidity Risk Policy is to demonstrate effective liquidity management; liquidity is monitored and reported to Group at a minimum quarterly frequency. 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 Aegon Group Liquidity Policy sets out a prudent stress test that all business units must perform at least quarterly and as at 4Q 2019 Aegon was compliant with the requirements set out in this policy. In addition to the Group test, business units are required to create a local test that is specific to their own liquidity risks. Results of the Group and local tests are reported to Aegon's Management Board, Supervisory Board and DNB.

### 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, 2019 was EUR 1,561 million (2018: EUR 1,356 million).

## C.5 Operational risk

### C.5.1 Operational risk description

Aegon Group faces operational risk resulting from operational failures or external events. Aegon defines operational risk as a potential event that may result in (complete or partial) non-achievement of the Company's business objectives. Operational risk is further defined as risk of losses resulting from inadequate or failed internal processes and controls, people and systems or from external events.

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 ORM 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-compliance with laws and regulation, 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.

#### **Tax risk**

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 includes for example the risk of changes in tax rates, changes in loss carry-over rules and new rules restricting the tax deductibility of interest expenses.

Tax risk also includes 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, capital and financial condition. Any changes in tax laws, interpretation of tax laws, later jurisprudence or case law, or the introduction of new taxes or tax laws in all countries in which Aegon operates or invests, which affects Aegon's products, may have a materially adverse effect on Aegon's businesses, results of operations, capital 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).

Processing risks are generally considered to be most material for Aegon, although this has reduced over the reporting period due to ongoing 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.

### Other

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 Risk Management, Model Change and Model Validation policies.

Changes towards more sophisticated information 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 modernization 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. Aegon's operational risk capital that is included in the Aegon PIM SCR is calculated using Standard Formula, except for Aegon UK that is based on the Operational Risk Capital Model (ORC), which is an Internal Model.

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 non-compliance with legislation, 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 years. To ensure that the risks inherent with this developing concentration exposure are managed effectively, a Third Party Risk Management Framework has been developed and is being implemented across the Group.

### 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 ORM risk framework for a detailed description of the compliance ORM 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 the Standard Formula, except for Aegon UK. 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). 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.

A UFR sensitivity is applied to Aegon the Netherlands only. It is an immediate decrease of 15 basis points of the EIOPA UFR which is 3.9% as at December 31, 2019 and 3.75% as at March 31, 2020. The shift is assumed to be immediate and instantaneous. The shock includes recalculating the SCR based on the shocked balance sheet.

As mentioned in the general part of section C. Risk profile, the LAC-DT level within Aegon the Netherlands as per December 31, 2019 is set at 65%. The sensitivity in the table below shows the impact of lowering that factor to 40%. It is an immediate change in the amount of LACDT relief included in the calculation of the SCR.

Sensitivities	Scenario	Estimated Group Solvency II ratio impact per December 31, 2019	Estimated Group Solvency II ratio impact per March 31, 2020
Ultimate Forward rate	-15 bps	(2%)	(2%)
Aegon the Netherlands loss absorbing capacity of taxes	-25%pts	(5%)	(4%)

## C.7 Any other information

### Brexit

Since January 31, 2020, the United Kingdom is no longer a member of the European Union. It is currently uncertain if the UK and EU will succeed in reaching an agreement on the future trade relationship before December 31, 2020, and if they do, what that relationship would look like. This means that the implications of 'Brexit' remain unclear, with respect to the European integration process, the relationship between the UK and the European Union, and the impact on economies and businesses. Aegon has assessed possible outcomes, the risks and prepared possible contingency measures, including in particular, related to a hard Brexit (no-deal) scenario. Despite these efforts, Aegon could be adversely impacted by unexpected developments and market developments such as

increased exchange rate movements of the UK pound versus the euro and higher financial market volatility in general due to increased uncertainty, any of which could reduce the value or results of Aegon's operations. Aegon could also be adversely impacted should 'Brexit' result in the UK moving away from agreed and implemented EU legislation like, but not limited to, Solvency II regulations and financial services legislation.

### **IBOR transition**

The future of IBORs (Interbank Offered Rates) such as Euribor, Eonia and LIBOR has been a major topic on the global agenda since the G20 asked the Financial Stability Board (FSB) to undertake a fundamental review of leading interest rate benchmarks in 2013. The FSB proposed new standards to reform interest rate benchmarks and the use of transaction-based input data instead of non-transactional/panel input data. In the EU this is adopted in the new Benchmark Regulation (BMR) which stipulates that from January 2020 only BMR compliant benchmarks may be used within the EU.

Aegon recognizes that IBOR transitions potentially have implications for all reporting units, including our insurance, asset management and banking activities. Despite current uncertainties on how the transition from IBORs to alternative benchmarks will be managed, it is widely acknowledged that IBOR benchmarks impact financial products and contracts, including among others derivatives, corporate bonds, structured debt products, deposits and mortgages.

The impact of the IBOR transition on the business and operating models are described in transition plans and include among others project solutions and actions, timelines and ownership to ensure timely preparation and implementation.

### **Coronavirus (COVID-19)**

Since January 2020, the Coronavirus disease (COVID-19) outbreak is causing significant disruption to society, impacting Aegon, its employees, suppliers and customers worldwide.

Financial markets have been severely impacted by significant decreases in interest rates, equity markets and commodity prices, and by credit spreads widening. Governments and central banks worldwide are responding to this crisis with aid packages and further quantitative easing. At the date of this report the depth and length of this crisis is unknown.

The Company is continuously monitoring the market and economic turbulence that has arisen as a consequence of the COVID-19 outbreak, and its impact on Aegon. The most significant risks Aegon faces are related to financial markets (particularly credit, equity and interest rates), and underwriting risks (particularly related to mortality, morbidity and policyholder behavior). Section C. Risk profile include elaborate descriptions and related financial market and underwriting sensitivities.

As per March 31, 2020, the capital positions of the Group, and in each of our main units remain in or above the bottom-end of their respective target ranges. The Solvency II ratio of Aegon increased from 201% as per December 31, 2019 to 208% as per March 31, 2020, as the negative impact of market movements, predominantly affecting the capital position in the United States, was more than offset by the benefit of a higher EIOPA volatility adjustment in the Netherlands and by normalized capital generation. The Solvency II capital ratio as per March 31, 2020, reflects Aegon's interpretation of Solvency II requirements and are not final until filed with the regulators. The Solvency II capital calculation is subject to supervisory review on an ongoing basis.

On April 3, 2020 Aegon announced that it will comply with the call of DNB to postpone paying dividends following the statements published by the European Insurance and Occupational Pensions Authority and DNB, our principal regulator, urging insurers to temporarily postpone all dividend distributions. As a result of this, Aegon did forego its 2019 final dividend.

Aegon continues to monitor claim activity, including mortality and morbidity claims, and policyholder behavior.

At the date of this report it is too early to tell what the impact of the COVID-19 crisis is on Aegon's underwriting results and Aegon's long term underwriting and economic assumptions, if any. Based on the specific market movements as result of the COVID-19 crisis, in section C. Risk profile, updated sensitivities as per March 31, 2020, have been included for the longevity risk, financial market risks and other material risks.

Aegon has invoked its business continuity plans to help ensure the safety and well-being of its staff, as well as its capability to support its customers and maintain its business operations, while maintaining our financial and operational resilience.

Aegon does not have any other material information regarding its risk profile.

## D. Valuation for solvency purposes

This section 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 adopted by the European Union (IFRS-EU balance sheet) and Aegon N.V.'s consolidated economic balance sheet. The approach taken is described in the section 'Approach balance sheet reconciliation', 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-EU financial statements is described in sections D.1 Assets, D.2 Technical provisions and D.3 Other liabilities.

### 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-EU financial statements for the year 2019.

During the reporting period, there were no significant 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 balance sheet 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-EU.

#### General valuation principle

Aegon values its balance sheet items on a market consistent basis. Where the IFRS-EU fair value is consistent with Solvency II requirements, Aegon follows IFRS-EU for the valuation of assets and liabilities. The following is a description of Aegon's methods of determining fair value, and a quantification of its exposure to assets and liabilities measured at 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.

Aegon uses the following hierarchy for measuring and disclosing of the fair value of assets and liabilities:

- 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 transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing 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 so the reliability of the fair value measurement is high. However, certain assets and liabilities are 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 generally does not 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.

The valuation techniques applied to financial instrument affected by IBOR reforms remain consistent with those of other market participants, and the uncertainty on the outcome of the reforms has not affected the classification of the instruments.

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

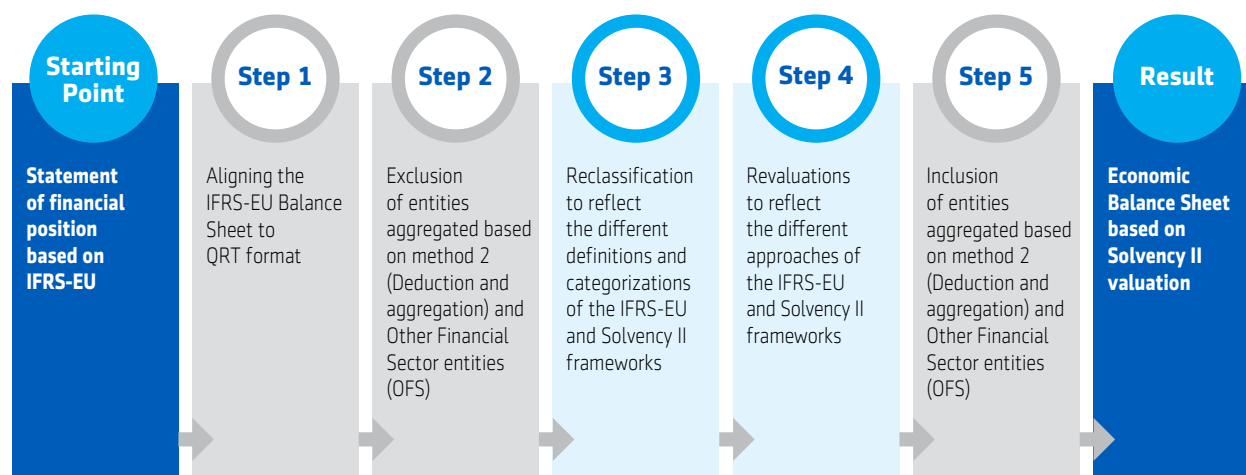
For undertakings other than European Economic Area (EEA) insurance, Aegon follows the principles set by the Solvency II Directive and specifically:

- Other financial sector entities are included based on the local sectoral rules; and
- For method 2 (Deduction & Aggregation) entities Aegon applies primarily the local regulatory regime for countries where (provisionally) equivalence has been granted (US Life insurance entities, Bermuda, Japan, Mexico and Brazil).

## Approach balance sheet reconciliation

The approach taken to reconcile the balance sheet under IFRS-EU and Solvency II is illustrated below:

As a starting point, the IFRS-EU 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-EU balance sheet in QRT format is reconciled to the Solvency II balance sheet. The detailed steps in the reconciliation process are described below:



**Step 1:** To ensure accuracy of the reconciliation and correctness of the adjustments performed, the audited IFRS-EU balance sheets of all business units are converted into their QRT equivalent and aggregated to a Group view.

**Step 2:** Entities aggregated based on method 2 (Deduction and Aggregation) and other financial sector entities (OFS) are excluded for their IFRS-EU value. These entities are added back at their Solvency II value in step 5 below. This step is also used for the IFRS-Solvency II presentational differences of joint ventures (that are consolidated using the equity method under IFRS-EU as opposed to the 'look-through' – proportionally consolidated – approach under Solvency II) and Other entities that are subsidiaries (that are consolidated on a line by line basis under IFRS-EU as opposed to be included on the Participations line in the Solvency II balance sheet).

**Step 3:** Certain balance sheet items might differ in classification between the IFRS-EU and Solvency II balance sheet. To align with the definitions and categorizations under Solvency II, some IFRS-EU 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-EU and Solvency II are included through this step. This step is also used to de-recognize balance sheet items that are valued at nil on the Solvency II balance sheet such as goodwill, deferred Policy Acquisition Costs (DPAC) and other intangible assets.

**Step 5:** The entities aggregated based on method 2 and excluded in step 2 above are included in the Group's Solvency II own funds for their proportional share of own funds according to local regulatory rules.

Aegon Group balance sheet as of December 31, 2019		Starting Point and Step 1	Step 2	Step 3	Step 4	Step 5	Result
		IFRS-EU Total	IFRS D&A entities	Reclassification adjustments	Revaluation adjustments	Solvency II D&A entities	Solvency II Total
Amounts in EUR millions							
<b>Assets</b>							
Goodwill		392	217	-	(609)	-	-
Deferred policy acquisition costs		10,804	(9,373)	(360)	(1,070)	-	(0)
Intangible assets		1,167	(915)	(0)	(252)	-	-
Deferred tax assets	<b>D.3.2</b>	193	(13)	586	(3)	-	762
Pension benefit surplus		1	-	-	-	-	1
Property, plant & equipment held for own use		744	(524)	306	(2)	-	524
Investments (other than held for index- and unit-linked contracts)	<b>D.1.1</b>	115,030	(73,344)	4,937	(27)	11,067	57,663
Assets held for index- and unit-linked contracts	<b>D.1.2</b>	226,374	(110,347)	(12,291)	(1,139)	-	102,597
Loans & mortgages	<b>D.1.3</b>	45,224	(25,445)	(844)	3,278	-	22,214
Reinsurance recoverables	<b>D.1.4</b>	20,835	(20,115)	7,444	(933)	-	7,230
Deposits to cedants		-	-	141	(0)	-	141
Insurance & intermediaries receivables	<b>D.1.5</b>	1,232	(981)	343	(38)	-	556
Reinsurance receivables		777	(715)	10	(0)	-	71
Receivables (trade, not insurance)	<b>D.1.6</b>	4,646	(1,792)	(198)	(402)	-	2,254
Own shares		-	-	277	-	-	277
Cash and cash equivalents	<b>D.1.7</b>	12,263	(3,623)	(562)	(2)	-	8,076
Any other assets	<b>D.1.8</b>	1,442	52	(1,122)	56	-	428
<b>Total assets</b>		<b>441,123</b>	<b>(246,919)</b>	<b>(1,333)</b>	<b>(1,145)</b>	<b>11,067</b>	<b>202,793</b>
<b>Liabilities</b>							
Technical provisions: non-life	<b>D.2.1</b>	9,190	(7,952)	(797)	(99)	-	342
Technical provisions: life (excluding index- and unit-linked contracts)	<b>D.2.2</b>	132,858	(90,087)	3,135	951	-	46,857
Technical provisions: index- and unit-linked contracts	<b>D.2.3</b>	229,535	(110,347)	(972)	(2,668)	-	115,548
Provisions other than technical provisions		214	(108)	(0)	(1)	-	104
Pension benefit obligations	<b>D.3.1</b>	4,360	(11)	-	(6)	-	4,344
Deposits from reinsurers		-	-	13	(0)	-	13
Deferred tax liabilities	<b>D.3.2</b>	1,394	(1,880)	586	110	-	210
Derivatives	<b>D.3.3</b>	11,616	(3,362)	(2,883)	-	-	5,370
Debts owed to credit institutions	<b>D.3.4</b>	-	-	1,746	365	-	2,112
Financial liabilities other than debts to credit institutions	<b>D.3.5</b>	9,365	(6,498)	(2,345)	(260)	-	262
Insurance & intermediaires payables	<b>D.3.6</b>	1,659	(964)	588	(4)	-	1,278
Reinsurance payables		1,597	(1,153)	4	(366)	-	82
Payables (trade, not insurance)	<b>D.3.7</b>	11,194	(6,058)	466	89	-	5,691
Subordinated liabilities	<b>D.3.8</b>	2,343	(940)	3,509	247	-	5,159
Any other liabilities	<b>D.3.9</b>	748	1,143	(1,286)	(46)	-	559
<b>Total liabilities</b>		<b>416,074</b>	<b>(228,216)</b>	<b>1,763</b>	<b>(1,689)</b>	<b>-</b>	<b>187,932</b>
<b>Excess of Assets over Liabilities</b>		<b>25,048</b>	<b>(18,703)</b>	<b>(3,096)</b>	<b>545</b>	<b>11,067</b>	<b>14,861</b>

Aegon Group balance sheet as of December 31, 2018		Starting Point and Step 1	Step 2	Step 3	Step 4	Step 5	Result
		IFRS-EU Total	IFRS D&A entities	Reclassification adjustments	Revaluation adjustments	Solvency II D&A entities	Solvency II Total
Amounts in EUR millions							
<b>Assets</b>							
Goodwill		384	212	-	(596)	-	-
Deferred policy acquisition costs		10,910	(9,758)	-	(1,152)	-	-
Intangible assets		1,342	(1,066)	-	(276)	-	-
Deferred tax assets	<b>D.3.2</b>	125	(7)	431	(45)	-	504
Pension benefit surplus		-	-	-	-	-	-
Property, plant & equipment held for own use		498	(422)	250	(1)	-	325
Investments (other than held for index- and unit-linked contracts)	<b>D.1.1</b>	105,800	(70,542)	4,588	(6)	9,898	49,738
Assets held for index- and unit-linked contracts	<b>D.1.2</b>	194,353	(98,301)	(9,323)	(616)	-	86,113
Loans & mortgages	<b>D.1.3</b>	42,911	(23,358)	(723)	2,564	-	21,393
Reinsurance recoverables	<b>D.1.4</b>	20,507	(19,893)	5,323	(341)	-	5,596
Deposits to cedants		-	-	115	-	-	115
Insurance & intermediaries receivables	<b>D.1.5</b>	1,364	(1,107)	504	(34)	-	727
Reinsurance receivables		1,129	(1,084)	9	-	-	54
Receivables (trade, not insurance)	<b>D.1.6</b>	3,526	(1,813)	(222)	(21)	-	1,471
Own shares		-	-	333	-	-	333
Cash and cash equivalents	<b>D.1.7</b>	8,744	(2,341)	(53)	(3)	-	6,347
Any other assets	<b>D.1.8</b>	1,436	179	(1,274)	(94)	-	248
<b>Total assets</b>		<b>393,031</b>	<b>(229,301)</b>	<b>(43)</b>	<b>(622)</b>	<b>9,898</b>	<b>172,963</b>
<b>Liabilities</b>							
Technical provisions: non-life	<b>D.2.1</b>	8,499	(7,282)	(721)	(181)	-	314
Technical provisions: life (excluding index- and unit-linked contracts)	<b>D.2.2</b>	124,843	(87,870)	3,299	1,340	-	41,612
Technical provisions: index- and unit-linked contracts	<b>D.2.3</b>	197,210	(98,319)	(487)	(2,182)	-	96,222
Provisions other than technical provisions		320	(201)	-	-	-	119
Pension benefit obligations	<b>D.3.1</b>	3,989	(11)	-	(6)	-	3,972
Deposits from reinsurers		-	13	1	-	-	14
Deferred tax liabilities	<b>D.3.2</b>	618	(848)	420	22	-	213
Derivatives	<b>D.3.3</b>	7,230	(1,855)	(2,475)	(1)	-	2,899
Debts owed to credit institutions	<b>D.3.4</b>	-	(1)	1,777	309	-	2,086
Financial liabilities other than debts to credit institutions	<b>D.3.5</b>	12,143	(9,130)	(2,263)	(280)	-	470
Insurance & intermediaires payables	<b>D.3.6</b>	1,545	(992)	675	(5)	-	1,223
Reinsurance payables		1,327	(1,257)	7	23	-	100
Payables (trade, not insurance)	<b>D.3.7</b>	10,500	(6,887)	338	(23)	-	3,928
Subordinated liabilities	<b>D.3.8</b>	1,522	(133)	3,396	273	-	5,058
Any other liabilities	<b>D.3.9</b>	400	1,350	(1,080)	(1)	-	668
<b>Total liabilities</b>		<b>370,146</b>	<b>(213,424)</b>	<b>2,886</b>	<b>(710)</b>	<b>-</b>	<b>158,898</b>
<b>Excess of Assets over Liabilities</b>		<b>22,885</b>	<b>(15,877)</b>	<b>(2,929)</b>	<b>89</b>	<b>9,898</b>	<b>14,066</b>

## D.1 Assets

Goodwill, DPAC and other intangibles are valued at nil on the Solvency II balance sheet. The IFRS-EU treatment of these items is not in scope of this publication. Please refer to the [Integrated Annual Report 2019 of Aegon Group](#) for additional information on the treatment of these items.

### D.1.1 Investments (other than assets held for index- and unit-linked contracts)

This paragraph describes the treatment of Aegon's investments (other than assets held for index- and unit-linked contracts). Aegon's portfolio is comprised of Bonds (41%; 2018: 47%), Related undertakings, including participations (26%; 2018: 26%), Derivatives (15%; 2018: 10%), Property other than for own use (4%; 2018: 7%), Collective Investment Undertakings (10%; 2018: 7%) and Equities (3%; 2018: 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 among them and described below.

### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (73,344) 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-EU, held-to-maturity investments are measured at amortized cost while investments at fair value through profit or loss and available for sale assets are measured at fair value. To bridge between IFRS-EU and Solvency II investment accounting principles, financial assets valued at amortized cost under IFRS-EU, 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-EU are not revalued under Solvency II. However, there are presentational differences between IFRS-EU and Solvency II, and reclassifications are required to conform to the Solvency II requirements.

### Material difference in valuation between Solvency II and IFRS-EU

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 4,937 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 sub fund in the UK (EUR 5,227 million). A reclassification of EUR 470 million from Aegon Holding, mainly due to a reclassification of between Bonds and Cash and cash equivalents. A further reclassification of EUR 104 million is performed within Aegon Spain for presentational differences between IFRS and Solvency II. These amounts are partly offset by a EUR (879) million reclassification for Aegon the Netherlands, which are mainly from reclassifications in equities (EUR (1,440) million) and derivatives (EUR (1,063) million), partly offset by reclassification in investments funds (EUR 1,452 million).

### 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 contracts) are measured at Fair Value on the IFRS-EU 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.



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, 2019, this amounted to EUR 11,067 million. This amount includes the 100% RBC CAL reduction (EUR 1,973 million) in the Excess of Assets over Liabilities of the US Life Insurance companies.

### Aggregation differences between Solvency II and IFRS-EU

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. For the latter, the main differences between its statutory regime and IFRS-EU relate to technical provisions (EUR 8,136 million), valuation of other assets (EUR 893 million), investments (EUR (7,000) million) and taxes (EUR 839 million). In addition, there is no Deferred Policy Acquisition Cost (DPAC) under US statutory accounting (EUR (8,782) million) and the 100% RBC CAL reduction (EUR (1,973) million) for the US Life Insurance companies as described in paragraph E.1.2 Tiering of own funds. 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-EU to statutory values can offset the intended conservatism in statutory accounting;
- *Other assets:* On a statutory basis, certain assets are designated as "non-admitted", and are excluded from the balance sheet. Under IFRS-EU, 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-EU are hedge reserve offset, payables for derivative cash collateral, and letters of credit;
- Under IFRS-EU 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-EU 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-EU 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.
- *DPAC:* Acquisition costs are deferred under IFRS-EU, while they are expensed as incurred under US statutory accounting. Under IFRS-EU, value of business acquired (VOBA) is an intangible asset resulting from a business combination. VOBA is not recognized for US statutory accounting basis.

The main part of the gap in the excess of assets over liabilities between Step 2 and Step 5 above relates to the differences between the US statutory regime and IFRS-EU.

### 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.

The table below provides an analysis of the individual instruments by level of the fair value hierarchy.

<b>Fair value hierarchy of financial assets</b> Amounts in EUR millions	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3<sup>2)</sup></b>	<b>Total</b>
<b>Investments (other than assets held for index-linked and unit-linked contracts)<sup>1)</sup></b>	<b>20,023</b>	<b>3,046</b>	<b>14,261</b>	<b>37,330</b>
Property (other than for own use)	-	-	2,414	2,414
<b>Equities</b>	<b>1,450</b>	<b>79</b>	<b>83</b>	<b>1,611</b>
Equities - listed	1,450	79	-	1,528
Equities - unlisted	-	-	83	83
<b>Bonds</b>	<b>18,285</b>	<b>1,901</b>	<b>3,608</b>	<b>23,794</b>
Government bonds	17,658	412	186	18,256
Corporate bonds	597	1,188	2,416	4,201
Structured notes	30	-	7	37
Collateralized securities	-	301	999	1,300
<b>Collective Investments Undertakings</b>	<b>193</b>	<b>357</b>	<b>5,337</b>	<b>5,887</b>
<b>Derivatives<sup>1)</sup></b>	<b>89</b>	<b>473</b>	<b>2,770</b>	<b>3,332</b>
<b>Deposits other than cash equivalents</b>	<b>7</b>	<b>236</b>	<b>49.18</b>	<b>292</b>
<b>Other investments</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Assets held for index-linked and unit-linked contracts (section D.1.2)</b>	<b>16,716</b>	<b>61,409</b>	<b>24,472</b>	<b>102,597</b>
<b>Loans and mortgages (section D.1.3)</b>	<b>2.58</b>	<b>-</b>	<b>22,211</b>	<b>22,214</b>
Loans on policies	1	-	2	3
Loans and mortgages to individuals	2	-	22,209	22,211

<sup>1)</sup> Note that Investments as shown in the table (EUR 37,330 million) do not include the net asset value of participations as reported in the Solvency II balance sheet (EUR 14,963 million). In addition, there is an amount of EUR 5,509 million relating to the netting of derivatives.

<sup>2)</sup> 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 contracts

#### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generate an aggregation difference of EUR (110,347) million.

#### Method of valuation under Solvency II

Assets held for index- and unit linked contracts, for which the actual return on investments is passed on to the policyholder, are measured at fair value of the assets of the contracts.

#### Material difference in valuation between Solvency II and IFRS-EU

The differences between the bases, methods and main assumptions used for valuation for solvency purposes do not generate material differences, though reclassification and gross-up adjustments are required for presentational differences between the bases.

#### Reclassification adjustments

The reclassification of EUR (12,291) million is driven by the With-Profits Sub-Funds (WPSF) 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 (4,708) million and by the reclassification of reinsured External Fund Linked (EFL) assets for an amount of EUR (7,448) million.

### Revaluation adjustments

The revaluation adjustment of EUR (1,139) million stems from Aegon UK from the reversal of the gross up following the IFRS 10 standard requiring entities to consolidate entities it controls. This does not apply for Solvency II reporting.

### D.1.3 Loans and mortgages

#### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (25,445) 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 within 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-EU

Under IFRS-EU these assets are valued at amortized cost on the balance sheet, while under Solvency II, fair value is applied. The different valuation approach between IFRS-EU 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 which is based on the contractual future cash flows discounted with a discount rate representing the time value of money and risk charges.

### Reclassification adjustments

The total reclassifications of EUR (844) million is mainly related to the reclassification of “Financial liabilities other than debts owed to credit institutions” under the QRT IFRS-EU equivalent but require to be presented as Loans and mortgages for Solvency II.

### Revaluation adjustments

The revaluation adjustments reflect the impact of conversion from amortized cost valuation under IFRS-EU 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-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (20,115) 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-EU

Under IFRS-EU, 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.

### Reclassification adjustments

The main driver of the EUR 7,444 million adjustment is the reclassification for External Fund Linked (EFL) assets within Aegon UK, deemed to be reinsurance assets for Solvency II purposes.

### Revaluation adjustments

The majority of the total revaluation for an amount of EUR (933) million was related to Aegon UK and Aegon the Netherlands. The difference in valuation is linked 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 discount rates (IFRS-EU historical rates versus Solvency II current market rates).

## D.1.5 Insurance and intermediaries receivables

### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (981) 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-EU and fair value under Solvency II is therefore not material.

### Material difference in valuation between Solvency II and IFRS-EU

Given the short-term nature of these receivables, there is no material measurement difference between amortized cost under IFRS-EU and fair value under Solvency II.

### Reclassification adjustments

The reclassification of EUR 343 million is mainly driven by a reclassification between 'Any other assets' and 'Insurance & intermediaries receivables' for the Americas non-regulated entities.

### Revaluation adjustments

Insurance and intermediaries receivables on Aegon's balance sheet are predominantly short-term. The revaluation difference between the amortized cost under IFRS-EU and fair value under Solvency II is therefore not material.

## D.1.6 Receivables (trade, not insurance)

### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (1,792) 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-EU

Given the short-term nature of these receivables, there is no material measurement difference between amortized cost under IFRS-EU and fair value under Solvency II.

### Reclassification adjustments

The total reclassification adjustment amounted to EUR (198) million and is mainly driven by the EUR (480) million reclassification which relates to Policyholder balances which are moved into UL assets, and accrued interest in the UK. A further amount of EUR 120 million related to netting of accrued interest in Aegon the Netherlands. This was partly offset by the split out of "Receivables (trade, not insurance) from "Any other assets" in the US non-regulated companies for an amount of EUR 63 million.

### Revaluation adjustments

The revaluation adjustments EUR (402) million are mainly linked to the revaluation of the underlying life insurance contracts for Aegon the Netherlands, resulting from different Solvency II value of the technical provisions compared to the IFRS value.

## D.1.7 Cash and cash equivalents

### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (3,623) million.

### 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 and, as a result, the valuation difference between the amortized cost under IFRS-EU and fair value under Solvency II is not material.

### Material difference in valuation between Solvency II and IFRS-EU

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 (562) million is mostly driven by Aegon Holding due to a reclassification of short term investment in commercial paper (classified as cash and cash equivalents) to corporate bonds.

### Revaluation adjustments

No material revaluation adjustments were required.

## D.1.8 Any other assets

### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR 52 million.

### Method of valuation under Solvency II

The fair value approach is prescribed for the majority of the asset groups. All assets without specific valuation rules are valued in accordance with IFRS-EU, 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-EU

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 (1,122) million, is mainly related to presentational differences between IFRS-EU and Solvency II for the US non-regulated entities (EUR (659) million), Aegon the Netherlands (EUR (386) million) and Aegon UK (EUR (59) million).

### Revaluation adjustments

The revaluation adjustment of EUR 56 million mostly relates to an estimate adjustment within Aegon the Netherlands due to adjustment of different valuation timing between assets and liabilities, which is partly offset by fair value adjustments for items carried at cost or amortized cost.

## D.2 Technical provisions

Aegon distinguishes between entities for which the valuation of (insurance related) liabilities is based on Solvency II (insurance and reinsurance entities within the European Economic Area (EEA)) or valuation is based on local regimes when (provisional) equivalence is granted (US Life insurance entities, Japan, Mexico, Brazil, and Bermuda).

This section describes the technical provisions for the EEA (re)insurance legal entities, including the amount of the Best Estimate Liability (BEL) and the Risk Margin (RM), including a description of the bases, methods and main assumptions used. The value of the Solvency II technical provisions are shown 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 contracts.

Given the materiality of technical provisions, this section also provides relevant information about the technical provisions for the Non-EEA (re)insurance legal entities, in particular with respect to the US life insurance entities.

### Bases (different reporting regimes)

For the EEA (re)insurance 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 (re)insurance legal entities are primarily included in the Group Solvency II position through Accounting Consolidation. Non-EEA (re)insurance legal entities are primarily 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 (re)insurance legal entities

The technical provisions consist of the Best Estimate Liability (BEL) and the Risk Margin (RM).

The BEL 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 (MA) or Volatility Adjustment (VA) 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, based on best-estimate assumptions. In cases where the liabilities do not include material embedded options or guarantees, they are calculated deterministically. The liability for material embedded options or guarantees is calculated using stochastically generated economic scenarios.

The Matching Adjustment (MA) is one of the long-term guarantee (LTG) measures in the Solvency II regulation to ensure an appropriate treatment of insurance products that include long-term guarantees. The Matching Adjustment can only be applied for separate portfolios of matched assets and liabilities and is designed to reflect the fact that for these portfolios there is no exposure to credit spread fluctuations that are not related to increased probability of default. The MA is applied by Aegon UK for separate portfolios of matched assets and liabilities that are covering annuity business. The calculation methodology which was adopted to implement the MA was approved by local regulators.

The Volatility Adjustment (VA) is the other long-term guarantee (LTG) measures in the Solvency II regulation to ensure an appropriate treatment of insurance products that include long-term guarantees. It aims at stabilizing the Solvency II balance sheet during short periods of high market volatility by adding an extra spread component to the discount rate used for the calculation of technical provisions. The VA is applied by Aegon the Netherlands and Aegon Spain for all types of their business while Aegon UK applies the VA to all traditional and unitized with-profits business.

The RM is included in the technical provisions to allow for the uncertainty around the best estimate non-economic assumptions. Solvency Capital Requirements (SCR) for non-hedgeable risks (like underwriting and operational risks) form the basis of the calculation of the RM. The RM 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.

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 (re)insurance legal entities)

Best estimate non-economic assumptions are used by the EEA (re)insurance legal entities for the Solvency II reporting framework (for the valuation of the BEL), as well as the IFRS-EU reporting framework (including the liability adequacy test, also known as DPAC recoverability test or loss recognition test).

Non-economic assumptions are proposed by the first line actuarial function and reviewed by the second line risk function. They are approved by the local board or local management team. This governance also requires the independent opinion and recommendation of the Actuarial Function Holder (AFH).

The table below gives an overview on the significant non-economic assumptions:

Unit	Business	Significant Non-Economic Assumptions
Aegon the Netherlands	Individual life and group pensions	Mortality, maintenance expenses and lapses
	Mortgages	Prepayment rates
	Non-Life	Disability
UK	All business	Lapses and maintenance expenses
SEE	Life (Hungary, Poland, Turkey)	Lapses and maintenance expenses
	Non-Life (Household, Casco and MTPL in Hungary)	Lapses, maintenance expenses and loss ratio
	Santander JVs	Lapses
	All business	Maintenance expenses

Best estimate actuarial assumptions (i.e. mortality, longevity and lapse) and maintenance expenses assumptions 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 of mortality.

Policyholder behavior (e.g. lapse, surrender, withdrawal, annuitization, and premium persistency) assumptions are set where policyholders have options to withdraw funds, cancel their contracts, 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 mainly required in order to classify costs as acquisition or renewal, to select the drivers in order to allocate costs to products, and to classify of expenses as exceptional or recurring expenses.

For Non-Life, demographic assumptions (e.g. sick leave, and disability) and claims payment assumptions (e.g. fire, marine and third-party liability) are based on observed and annually updated industry wide statistics.

### Assumptions – Economic assumptions (for EEA (re)insurance legal entities)

For the EEA (re)insurance legal entities, the key economic assumptions are the EIOPA swap curve for discounting and the UFR. Furthermore, for Aegon UK, the MA is considered to be key economic assumptions. In addition, economic scenarios are generated that are applied for the stochastic 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. EIOPA has set the annual EUR-UFR (published in their March 21, 2018 report) to 3.60%. As the 2019 UFR is 3.90% and an annual change is limited to 15 basis points, the applicable UFR in 2020 3.75%.

### Level of uncertainty associated with the value of the technical provisions (for EEA (re)insurance 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 the potential impact of this uncertainty is performed by sensitivity testing of key assumptions.

The risk margin is included in the technical provisions to allow for the uncertainty around the best estimate non-economic assumptions

### Significant simplified methods used to calculate the technical provisions (for EEA (re)insurance legal entities)

For the with-profits fund risk margin derivation of Scottish Equitable plc (UK) a simplified approach (by assuming that capital run off is in line with the run-off of the cost of guarantees) is taken, appropriate to the nature of the fund while aligning to the regulatory requirements.

For Aegon Levensverzekering N.V. (Aegon the Netherlands), the expected SCR in future years is projected by using the projected best estimate liability as risk driver and the SCR at reporting date as starting point. Aegon Levensverzekering N.V. applies a cost of capital percentage of 6%, in accordance with the Solvency II Delegated Regulation. Note that the application of the risk driver is a simplification relative to recalculating the expected SCR in each point in time in the future. This simplification does not lead to a material misstatement of the risk margin.

### The value of the Solvency II technical provisions (for EEA (re)insurance legal entities)

The value of the Solvency II technical provisions are specified below while the material difference in valuation between Solvency II and IFRS-EU 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.

Value of Solvency II technical provisions Amounts in EUR millions	Life		Non-life	Total
	Index-linked and unit-linked	TP - life (excluding index-linked and unit-linked)	Non-life	Total
Best estimate	113,852	45,153	319	159,324
Risk margin	1,696	1,704	22	3,422
Technical provision	115,548	46,014	342	162,746
Percentage of total	71.0%	28.3%	0.2%	100.0%

### Non-EEA (re)insurance legal entities on (provisional) equivalence

Non-EEA (re)insurance 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 via the D&A method where capital requirements are based on local regulatory requirements. The section below focus on most material for US insurance companies and Aegon Group.

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 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 areas are Variable Annuities (reserving under Actuarial Guideline 43, which has been updated in 2019), Universal Life (reserving under Actuarial Guideline 38) and Long Term Care.

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. The outcome of the Asset Adequacy Analysis may lead to the requirement to hold 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, and process reviews carried out by the Internal Audit function.

Each of the US legal insurance entities has its own independent Appointed Actuary which 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.

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

#### **De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (7,952) 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-EU**

Solvency II requires discounting of all the expected future cash flows by EIOPA described 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 usually a fixed rate and is set following local GAAP (Generally Accepted Accounting Principles).

Finally, presentational differences exist between IFRS-EU 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 (797) million and is mainly due to reclassification of health insurance stemming from Aegon the Netherlands. Under IFRS the technical provisions of the health insurance are presented as Technical Provisions - non-life, while under Solvency II the technical provisions are classified under Technical provisions - life (excluding index-linked and unit-linked).

#### **Revaluation adjustments**

The total revaluation adjustment amounted to EUR (99) million, and was mainly due to the application of different discount rates, and the application of shorter contract boundaries under Solvency II.

### **D.2.2 Technical provisions – life (excluding index-linked and unit-linked contracts)**

#### **De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (90,087) million.

#### **Method of valuation under Solvency II**

Refer to 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-EU**

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 VA and UFR where applied. IFRS, in general, applies a fixed discount rate which is set in accordance with Local GAAP.

Finally, presentational differences exist between IFRS-EU 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 3,135 million for technical provisions – life (excluding index-linked and unit-linked contracts) mainly consist of:

- EUR 5,457 million related to the reclassification of WPSF technical provisions, classified under IFRS-EU as “for account of policyholder”, from technical provisions – index- linked and unit-linked contracts to technical provisions – Life (excluding index-linked and unit-linked contracts);
- An amount of EUR (2,309) million for annuities stemming from non-life contracts. It consists mainly of a reclassification from technical provisions non-life for an amount of EUR 819 million and a reclassification from (bifurcated) derivatives for an amount of EUR (2,929) million for the guarantee provision of unit-linked contracts. An amount of EUR (199) million has been reclassified to financial liabilities other than debts owed to credit institutions (refer to section D.3.4) as these are not policyholder related.

### Revaluation adjustments

The total revaluation amount of EUR 951 million mainly consists of:

- EUR 2,492 million in Aegon the Netherlands, mainly due to application of the following Solvency II technical provision valuation adjustments: inclusion of the present value of future premiums; inclusion of the present value of future expenses related to servicing of the insurance contracts; inclusion of allocated general overhead expenses; revision of the discount rate to the current market rate and the incorporation of Solvency II risk margin;
- EUR (1,268) million in United Kingdom – comprised of the impact of different discount rates and the incorporation of the Solvency II risk margin under Solvency II; and
- EUR (255) million effect results mainly from valuation differences and application of different contract boundaries and originates from Spain (EUR (177) million) and CEE (EUR (78) million),
- EUR (21) million at Blue Square Re (BSR) primarily due to the application of different discount rates.

## D.2.3 Technical provisions – index-linked and unit-linked contracts

### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (110,347) 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-EU

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 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 (i.e. valued separately) under IFRS-EU, this constitutes a difference between IFRS and Solvency II.

### Reclassification adjustments

Reclassification adjustments amounted to EUR (972) million and mainly include:

- An amount of EUR (5,470) million reclassification from “Technical provisions – index-linked and unit linked” to “Technical provision – life (excluding index-linked and unit linked)” relating to the items described in section D2.2 for Aegon UK;
- An amount of EUR 4,664 million for Aegon the Netherlands due to presentational difference of embedded derivatives with “Technical provisions - life (excluding index-linked and unit-linked)”; and
- An amount of EUR (181) million from Aegon Hungary, for the reversal of the gross up following the IFRS 10 standard requiring entities to consolidate entities it controls.

### Revaluation adjustments

The revaluation adjustment for a total amount of EUR (2,668) million is mainly related to Aegon UK and Aegon the Netherlands and is 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 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 no longer apply the Transitional risk-free interest rate-term structure – as described in Article 308c of Directive 2009/138/EC. Aegon Spain used to apply a transitional arrangement related to its technical provisions and applied the Solvency II matching adjustment. At the instruction of the Spanish Insurance Regulator (DGSFP), Aegon Spain no longer applies the matching adjustment to the temporary structure of risk-free interest rate, as well as the application of the transitional measure of technical provisions.

<b>Impact of long term guarantees measures and transitionals</b> Amounts in EUR millions	Amount with Long Term Guarantee measures and transitionals	Impact of transitionals on technical provisions	Impact of volatility adjustment set to zero	Impact of matching adjustment set to zero
Technical provisions	162,746	-	562	45
Basic own funds <sup>1)</sup>	8,561	-	(408)	(37)
Eligible own funds to meet Solvency Capital Requirement	18,470	-	(408)	(37)
Solvency Capital Requirement	9,173	-	904	58
Group Solvency II ratio	201%		(22%)	(1%)

<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.

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, 2019. The impacts in the other columns show the impact of removing the 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 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, part of the liabilities for Aegon UK, and Aegon Spain. Next to this, Aegon the Netherlands applies a dynamic VA model and assesses the impact of changes in spreads on assets through scenario analyses. Key rationale is that Aegon is a long term investor (given its long dated liabilities) and that initial market value losses on assets after a spread shock will be (partially) regained over time as the assets keep paying the interest and notional. This effect is quantified in Aegon's dynamic VA model and therefore lowers the capital requirement for spread risk. In line with regulatory requirements, Aegon Levensverzekering determines the VA-impact on the SCR if the regulatory concept of the VA would not exist at all and without adjusting for the spread risk on the asset side. Aegon considers the dynamic VA an integral part of the modelling of spread risk.

The benefit of the volatility adjustment on the technical provision amounted to EUR 562 million. The own funds benefit amounted to EUR 408 million and reflects impact of taxes. The SCR benefit amounted to EUR 904 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 remainder of the impact are due to Aegon UK and Aegon Spain.

The matching adjustment is applied by Aegon UK for separate portfolios of matched assets and liabilities that are covering annuity business. For the UK, following the reinsurance and sale of the annuity books in 2018, the matching adjustment per the end of 2019 will now only impact a legacy block of inward reinsured annuities. The benefit of the matching adjustment on the technical provision amounts to EUR 45 million. The own funds benefit amounted to EUR 37 million and reflects the impact after tax. The SCR benefit amounted to EUR 58 million and is mainly attributable to the impact of removing the matching adjustment on spread risk in the SCR calculation.

### 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, 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 second and fourth quarter of 2019.

The most material were:

#### **Aegon the Netherlands:**

- ▀ Updated the methodology for longevity risk (including population mortality and experience factors) to allow for relative high mortality rates from Dutch and EU population over 2018 and 2017;
- ▀ Updates to maintenance expenses to reflect updates to the cost base model, to the outsourcing costs for Pensions and Life, and to the cost savings expected in 2020;
- ▀ New modelling for externally administrated contracts.

#### **Aegon UK:**

- ▀ Updates to policyholder behavior for Aegon UK, to reflect most recent experience and model improvements;
- ▀ Updates to maintenance expenses including updates to the cost base, shifts in cost allocations and model updates.

## **D.3 Other liabilities**

### **D.3.1 Pension benefit obligations**

#### **De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures**

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (11) million.

#### **Method of valuation**

Under Solvency II Aegon follows IFRS-EU (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-EU 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, note 39 Defined benefit plans to the consolidated financial statements, 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-EU**

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 assets and liabilities

#### Deferred tax position

The total Deferred tax assets and Deferred tax liabilities amounted to EUR 762 million (2018: EUR 504 million) and EUR 210 million (2018: EUR 213 million) respectively, as reported in the Solvency II balance sheet in section D. Valuation for Solvency Purposes.

Balance sheet items Amounts in EUR millions	Deferred Tax Asset at December 31, 2019	Expiration period <sup>4)</sup>	Deferred Tax Liability at December 31, 2019	Expiration period
Investments	(2,283)	5 - 15 years	6	15 - 30 years
Technical provisions <sup>1)</sup>	2,473	15 - 30 years	431	15 - 30 years
Defined benefit plans	185	> 30 years	-	-
Debts <sup>2)</sup>	11	15 - 30 years	-	-
Losses and tax credits	321	> 30 years	(224)	5 - 15 years
Non-recognized DTA <sup>3)</sup>	(103)	> 30 years	37	5 - 15 years
Other	158	15 - 30 years	(40)	5 - 15 years
<b>Total</b>	<b>762</b>		<b>210</b>	

<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 temporary differences (current year and previous years).

<sup>4)</sup> Applies to the material part of the deferred tax position.

The total non-recognized DTA amount to EUR 140 million (2018: EUR 114 million) of which EUR 134 million (2018: EUR 106 million) relates to tax losses and tax credits for which no deferred tax asset is recognized. The non-recognized DTA on timing differences amounts to EUR 6 million (2018: EUR 8 million).

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.

Loss carry forward periods of not recognized DTA Amounts in EUR millions	Gross amounts 2019 <sup>1)</sup>	Not recognized deferred tax assets 2019	Gross amounts 2018 <sup>1)</sup>	Not recognized deferred tax assets 2018
< 5 years	53	15	21	7
≥ 5 - 10 years	10	2	6	1
≥ 10 - 15 years	8	50	-	34
≥ 15 - 20 years	1	-	-	-
Indefinitely	287	68	279	64
<b>At December 31</b>	<b>359</b>	<b>134</b>	<b>305</b>	<b>106</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.

Not recognized DTAs for deductible timing differences Amounts in EUR millions	Gross amounts 2019	Not recognized deferred tax assets 2019	Gross amounts 2018	Not recognized deferred tax assets 2018
<b>Balance sheet items/deferred tax category</b>				
Investments	8	1	16	3
Others	25	5	24	5
<b>At December 31</b>	<b>32</b>	<b>6</b>	<b>40</b>	<b>8</b>

#### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (1,880) 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. DTA and 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-EU

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 586 million has been reclassified and is mainly driven by the inclusion of the US non-regulated entities for an amount of EUR 437 million.

### Revaluation adjustments

The difference between the deferred tax assets and liabilities according to IFRS-EU 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 for deferred tax liabilities amounted to EUR 110 million.

## D.3.3 Derivatives

### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (3,362) 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 default 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-EU

Derivatives are financial instruments of which the value changes in response to an underlying variable, that require generally 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 (2,883) million is mainly driven by:

- ▀ Reclassification of EUR (1,735) 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) for an amount of EUR (968) million.

### Revaluation adjustments

No material revaluation adjustments were required.

### D.3.4 Debts owed to credit institutions

#### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR 0 million.

#### 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-EU

Under 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 applicable own credit standing.

Liabilities measured at amortized costs under IFRS-EU need to be revaluated as part of the reconciliation. For liabilities measured at fair value under IFRS-EU, 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 amount to EUR 1,746 million and relate to the movement from financial liabilities other than debts to credit institutions to debts owed to credit institutions. These adjustments are driven by a different classification of capital funding between Solvency II and IFRS-EU and because of a number of joint ventures which – by using the equity method – presented external debt as financial liabilities other than debts owed to credit institutions when preparing their Solvency II balance sheet.

#### Revaluation adjustments

The total revaluation adjustments of EUR 365 million were the result of applying the fair value approach under Solvency II as compared to the amortized cost approach under IFRS-EU.

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

#### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (6,498) 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-EU

For the differences in bases, methods and main assumptions used for valuation for solvency purposes and its valuation in Aegon's IFRS-EU 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 (2,345) million. This reclassification is mainly related to the movement from financial liabilities other than debts to credit institutions to debts owed to credit institutions as described in D.3.4

#### Revaluation adjustments

The revaluation adjustments reflect the impact of conversion from amortized cost valuation under IFRS-EU to fair value under Solvency II. Under the amortized cost method, financial liabilities other than debts owed to credit institutions 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.3.6 Insurance & intermediaries payables

#### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (964) 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-EU

For the differences in bases, methods and main assumptions used for valuation for solvency purposes and its valuation in Aegon's IFRS-EU 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 588 million is related to the movement from the balance sheet item "Any other liabilities" of the US non-regulated entities due to presentational differences between IFRS-EU and Solvency II.

#### Revaluation adjustments

The revaluation adjustments are not material.

### D.3.7 Payables (trade, not insurance)

#### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (6,058) 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-EU

For the differences in bases, methods and main assumptions used for valuation for solvency purposes and its valuation in Aegon's IFRS-EU financial statements of the payables (trade, not insurance), please refer to section D.3.4 Debts owed to credit institutions.

#### Reclassification adjustments

The total reclassification adjustment of EUR 466 million is mostly related to the reclassification of "Any other liabilities" to "Payables (trade, not insurance)" of EUR 501 million for the US non-regulated entities, and EUR 180 million from Aegon UK in relation to Lease liabilities (IFRS16), partly offset by EUR (227) million from Aegon the Netherlands due to reclassification with Receivables (trade, not insurance).

#### Revaluation adjustments

The revaluation adjustments are not material.

### D.3.8 Subordinated liabilities

#### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR (940) 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. On the Solvency II Balance Sheet subordinated liabilities are reported on the liabilities side under subordinated liabilities, also when it is accounted for as equity under IFRS.



### Material difference in valuation between Solvency II and IFRS-EU

Subordinated liabilities – presented in 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 also considers 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.

#### Reclassification adjustments

The reclassification adjustment of EUR 3,509 million mainly relates to the reclassification of grandfathered subordinated liabilities including: perpetual contingent convertible securities, junior perpetual capital securities and perpetual capital subordinated bonds, which are presented as Equity on Aegon's IFRS-EU balance sheet, to "Subordinated Liabilities" on the Solvency II balance sheet, accompanied by accrued interest reclassified from other liabilities and Trust Pass Through Securities broke out from the line "debts owed to credit institutions".

#### Revaluation adjustments

The total revaluation adjustments for an amount of EUR 247 million were the result from applying the current interest rate and the fair value approach under Solvency II as compared to the amortized cost approach under IFRS-EU.

### D.3.9 Any other liabilities

#### De-recognition of the IFRS-EU value of D&A entities and change in approach for joint ventures

The de-recognition of the IFRS-EU value of Deduction and Aggregation (D&A) entities, Other Financial Sector (OFS) entities and IFRS-SII presentational differences of joint ventures under Solvency II (instead of associate under IFRS-EU) generates an aggregation difference of EUR 1,143 million.

#### 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-EU

Financial liabilities under IFRS-EU 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-EU at amortized cost, need to be revaluated as part of the reconciliation. For items measured under IFRS-EU 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-EU. For more information on leasing arrangements, please refer to section A.4.2 Material leasing arrangements.

#### Reclassification adjustments

The total reclassification adjustment for an amount of EUR (1,286) million was mainly driven by the EUR (1,087) million reclassification performed for the US non-regulated entities to "Insurance and intermediaries payables", "payables (trade, not insurance)" and accrued interest for both the US and the Netherlands. This reclassification is required as Solvency II prescribes presentation of investment values including accrued interest. In addition, EUR (160) million is reclassified for Aegon UK mainly relates to the reclassification from "Payables (trade, not insurance)" in relation to Lease liabilities (IFRS16).

#### Revaluation adjustments

The total revaluation adjustment is not material.

## 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.

<b>Assets - Alternative valuation methods</b>			
Amounts in EUR millions	Section	Level 3	Total
<b>Investments</b>			
<b>(other than assets held for index-linked and unit-linked contracts)<sup>1)</sup></b>		<b>14,261</b>	<b>37,330</b>
Property (other than for own use)	<b>D.4.1</b>	2,414	2,414
<b>Equities</b>		<b>83</b>	<b>1,611</b>
Equities - listed		-	1,528
Equities - unlisted		83	83
<b>Bonds</b>		<b>3,608</b>	<b>23,794</b>
Government bonds		186	18,256
Corporate bonds	<b>D.4.2</b>	2,416	4,201
Structured notes		7	37
Collateralized securities	<b>D.4.3</b>	999	1,300
<b>Collective Investments Undertakings</b>	<b>D.4.4</b>	<b>5,337</b>	<b>5,887</b>
<b>Derivatives<sup>1)</sup></b>	<b>D.4.5</b>	<b>2,770</b>	<b>3,332</b>
<b>Deposits other than cash equivalents</b>		<b>49</b>	<b>292</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>24,472</b>	<b>102,597</b>
<b>Loans and mortgages (section D.1.3)</b>	<b>D.4.7</b>	<b>22,211</b>	<b>22,214</b>
loans on policies		2	3
Loans and mortgages to individuals		22,209	22,211

<sup>1)</sup> Note that Investments as shown in the table (EUR 37,330 million) does not include the net asset value of participations as reported in the Solvency II balance sheet (EUR 14,963 million). In addition, there is an amount of EUR 5,509 million of derivatives liability netted in the derivatives amount of EUR 3,332 million.

### D.4.1 Property (other than for own use)

Valuations of Level III 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, but 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, considering 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 market prices when available. 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 taking an observable credit spread from a similar bond of the given issuer, and then adjust this spread based on unobservable inputs. These unobservable inputs may include subordination, liquidity and maturity differences. The weighted average credit spread used in valuation of corporate bonds has increased to 2.5% (December 31, 2018: 3.4%).

### 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 which uses 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 liquidity premium which is embedded in the discount rate.

### D.4.4 Collective investment undertakings

The fair values 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 trending analyses to ensure the fair values are appropriate. The net asset value is considered the best valuation method that approximates the fair value of the funds.

### D.4.5 Derivatives

Where quoted market prices are not available, other valuation techniques, such as option pricing or stochastic modeling, are applied. The valuation techniques incorporate all factors that a typical market participant would consider and are based on observable market data when available. Models are validated before they are used and calibrated to ensure that outputs reflect actual experience and comparable market prices.

Fair values for exchange-traded derivatives, principally futures and certain options, are based on quoted market prices in active markets. Fair values for over-the-counter (OTC) derivative financial instruments represent amounts estimated to be received from or paid to a third party in settlement of these instruments. 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 best estimate of mortality developments. Aegon determined 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

#### Mortgage loans

The valuation methodology for mortgage loans, which are relevant for Aegon The Netherlands only, 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 four mortgage cash flow profile types, being: Interest only, Annuity, Linear and Savings mortgages. Cash flows are adjusted for expected early repayments (also known as prepayments). The rate of early repayments follows from a model calibrated with historical data. Cash flows of non-performing loans are adjusted based on their estimated probability of default and loss given default.

The interest rate curve used for discounting is determined by applying a spread curve over the risk free yield curve, which varies over the maturity of the term structure. The spread curve applicable to 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', which serves to cover the risks and expenses of originating 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. The method described above for obtaining the spread is also known as a top-down approach. The prevailing consumer rate is determined as the single average of the mortgage rates offered by the top three providers in the market after filtering for representative mortgage products (not including Aegon affiliated entities), 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, i.e. at 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.

The estimated rate of prepayment is compared annually against actual prepayment 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 fund fees of Aegon Asset Management. The margin is verified annually on the basis of the most recent data.

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 are uploaded into the system. Based on private loan characteristics and classifications, the system selects the appropriate curve and yield per security. Via the net present value ("NPV") component combining yields and security cash flow the system calculates prices via interpolation where bid, mid and ask prices are populated with the same price.

## D.5 Any other information

Aegon does not have any other material information regarding its valuation for solvency purposes.

# E. Capital management

## Management of capital

Aegon's overall capital management strategy is based on adequate solvency capital, capital quality and the use of leverage. Aegon uses a three-year time horizon in its budgeting and medium term planning process used for business planning.

The 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, in addition to 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 that the combination of these guiding principles strengthen the Company's ability to withstand adverse market conditions, enhances its financial flexibility, and serves both the short-term and the long-term interests of the Company, its customers and other stakeholders.

The management and monitoring of capital and liquidity is firmly embedded in Aegon's ERM framework, and is in line with Aegon's risk tolerance. Aegon's risk tolerance focuses on capital generation, solvency and liquidity, risk balance and responsible business with effective controls. Its core aim is to assist management in carrying out Aegon's strategy within the Group's capital and liquidity resources.

The capitalization of the Aegon Group and its operating units is managed in relation to the most stringent of local regulatory requirements, rating agency requirements and/or self-imposed criteria. Aegon manages its Solvency II capital in relation to the required capital. Under Aegon's capital management framework the own funds are managed such that the Group Solvency II ratio remains within the target range of 150% - 200% even in an adverse event. The Solvency contribution of Aegon US insurance entities under Deduction & Aggregation (D&A) involves converting 150% Risk-Based Capital Company Action Level into Solvency Required Capital (SCR) and reducing own funds by a 100% RBC Company Action Level requirement to reflect transferability restrictions. The methodology is subject to annual review.

## Material development throughout 2019

Aegon Group Own Funds amounted to EUR 18,470 million on December 31, 2019 (2018: EUR 17,602 million). The increase of EUR 868 million in Own Funds since December 31, 2018, is mostly driven by the positive expected return on Aegon's inforce insurance portfolio, positive return from equity markets and the impact of declining interest rates on assets and hedges. This increase was partly offset by the negative market impact primarily from the EIOPA VA narrowing from 24 bps to 7 bps, negative impact from model and assumption changes, and the payment of external dividend. Furthermore, the lowering of the UFR from 4.05% to 3.90% led to a decrease in Own Funds as well.

The Group solvency capital requirement includes the benefit from the LAC-DT. The LAC-DT is calculated after diversification and it lowered the net PIM SCR by EUR 782 million (2018: EUR 756 million). The LAC-DT benefit mainly stemmed from Aegon the Netherlands. The increase in the LAC-DT is mainly driven by the increase of the other SCR components, partly offset by the LAC-DT factor change in the Netherlands from 75% to 65% as a consequence of the lower interest rates.

## Maintaining adequate solvency capital

The aim of Aegon's Capital Management Policy is to enhance transparency and accountability around capital management throughout Aegon Group. The policy therefore applies to the business units and to Aegon Group. There were some changes to the Capital Management Policy in 2019, the Gross Financial Leverage was updated for the new equity definition, specified requirements for local dividend, update regarding the excess cash zones and the capital management zones of the units were updated. 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.

Under Aegon's capital management framework, the target capitalization zone for Aegon Group and the bottom-end of the capitalization target range of the most relevant entities are as follows:

Capitalization management zones	Aegon Group	Capitalization management actions
Opportunity	>200% SCR	Accelerate capital redeployment and/or additional dividends.
Target	150% - 200% SCR	Execute capital deployment and remittances according to capital plan.
Retention	120% - 150% SCR	Re-assess capital plan and risk positions.
Recovery	100% - 120% SCR	Re-assess capital plan and risk positions. Reduce or suspend remittances.
Regulatory plan	<100% SCR	Suspension of dividends. Regulatory plan required.

	Capitalization December 31, 2019 <sup>1), 2), 3)</sup>	Capitalization December 31, 2018 <sup>2)</sup>
Aegon USA (Life entities) (RBC CAL)	470%	465%
Aegon the Netherlands (Solvency II ratio)	171%	181%
Aegon United Kingdom (Solvency II ratio)	157%	184%

<sup>1</sup> The Solvency II ratios are estimates, are not final until filed with the regulator and are subject to supervisory review.

<sup>2</sup> Refer to section 'Internal capital management framework' for the bottom-end of Aegon's capitalization target ranges.

<sup>3</sup> Note that as per 1H 2019, Aegon Bank is not included in the Aegon the Netherlands SII ratio.

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.

While the EU-domiciled legal entities are managed on a Solvency II basis for the regulatory capital requirements, 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 cash 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.

Aegon uses cash flows from its operating subsidiaries to pay holding expenses, including funding costs. The remaining cash flow is available to execute Aegon's strategy and to fund dividends on its shares, subject to maintaining holding company targeted capital. Depending on circumstances, future prospects and other considerations, Aegon's Executive Board may elect to deviate from this target. Aegon's Executive Board will also take capital position, financial flexibility, leverage ratios and strategic considerations into account when declaring or proposing dividends on common shares.

Under normal circumstances, Aegon would expect to declare an interim dividend when announcing Aegon's first half year results and to propose a final dividend at the Annual General Meeting of Shareholders for approval. Dividends would normally be paid in cash or stock at the election of the shareholder. The relative value of cash and stock dividends may vary. Stock dividends paid may, subject to capital management and other considerations, be repurchased in order to limit dilution.

When determining whether to declare or propose a dividend, Aegon's Executive Board has to balance prudence versus offering an attractive return to shareholders, for example in adverse economic and/or financial market conditions (see section C. Risk profile for sensitivities on Aegon's solvency position). Also, Aegon's operating subsidiaries are subject to local insurance regulations which could restrict dividends to be paid to Aegon Group. There is no requirement or assurance that Aegon will declare and pay any dividends.

The excess cash 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 cash in the holding. Aegon targets excess cash in the holding of EUR 1 billion – EUR 1.5 billion as the level that Aegon believes provides sufficient financial flexibility.

In 2019, Aegon the Netherlands has completed a process to review its capitalization zones as a result of a change in credit sensitivities and increased 1-in-10 year combined sensitivities for the Netherlands. The higher capital sensitivities arise from the adoption of a new dynamic VA model which has been adopted to align with the guidance from the European Insurance and Occupational Pensions Authority (EIOPA). Due to higher spread sensitivities in the new dynamic VA model, the bottom-end of the target zone of Aegon the Netherlands has increased from 150% to 155%.

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.

## 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:

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

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. Over 2019, Aegon issued Solvency II eligible Restricted Tier 1 Capital and Tier 2 capital. Part of Aegon's capital instruments do not meet all of the Solvency II 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 Aegon's share capital, share premium and the reconciliation reserve. The reconciliation reserve includes deductions to account for foreseeable dividends that have been approved by the Board but that have yet to be distributed to Aegon's shareholders, and restrictions related to Aegon's with-profits fund in the UK for which the excess of Own Funds over its capital requirement is ring-fenced for the policyholder, and therefore unavailable to Aegon's shareholders.

### Restricted Tier 1 own funds

Restricted Tier 1 capital consists of Aegon's junior perpetual capital securities and perpetual cumulative subordinated bonds, which are grandfathered securities as described in the section E.1.5 Transitional arrangements. In addition, Aegon issued a EUR 500 million perpetual contingent convertible security in 2019 which is Solvency II compliant restricted Tier 1 capital.

During 2019 Aegon exercised the right to redeem the USD 500 million perpetual capital securities with a coupon of 6.5% issued in 2005 (grandfathered Restricted Tier 1) and the USD 1 billion perpetual capital securities with a coupon of 6.375% issued in 2005 (grandfathered Restricted Tier 1). This was pre-financed by the issuance of the EUR 500 million Restricted Tier 1 perpetual contingent convertible securities, issued by Aegon N.V., and the USD 925 million Tier 2 subordinated notes with a fixed coupon of 5.1%, which is issued by Aegon Funding Company LLC (AFC).

Junior perpetual capital securities	Issue date	Possible date of next call
USD 500 million	November 23, 2005	called in 2019
USD 250 million	November 23, 2005	March 15, 2020 and quarterly thereafter
USD 500 million	July 15, 2004-October 15, 2004	January 15, 2020 and quarterly thereafter
USD 1 billion	June 1, 2005	called in 2019
EUR 950 million	July 15, 2004-October 15, 2004	January 15, 2020 and quarterly thereafter

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.

Perpetual contingent convertible securities	Issue date	Possible date of next call
EUR 500 million	April 4, 2019	Between April 15, 2029 and October 15, 2029 and every 5 yearly coupon reset date thereafter



The perpetual contingent convertible securities have the same ranking as dated subordinated debt. In addition, the conditions of the bonds contain provisions for conversion to equity. The call date of the perpetual contingent convertible securities is shown in the table below:

<b>Perpetual cumulative subordinated bonds</b>	<b>Issue date</b>	<b>Possible date of next call</b>
EUR 136 million	October 14, 1996	October 14, 2028 and every 10 year thereafter
EUR 203 million	March 4, 1996	March 4, 2021 and every 10 year thereafter
EUR 114 million	June 8, 1995	June 8, 2025 and every 10 year thereafter

The perpetual cumulative subordinated bonds have the same subordination provisions as dated subordinated debt. In addition, the conditions of the bonds contain provisions for interest deferral.

Although the bonds have no stated maturity, Aegon has the right to call the bonds for redemption at part for the first time on the coupon date in the year of next call.

## Tier 2 own funds

	<b>Issue date</b>	<b>Possible date of next call</b>
<b>Fixed floating subordinated notes</b>		
EUR 700 million	April 25, 2014	April 25, 2024 and hereafter quarterly on interest payment date
USD 800 million	April 11, 2018	April 11, 2028 and on every coupon date thereafter
<b>Fixed subordinated notes</b>		
USD 925 million <sup>1)</sup>	October 22, 2019	December 15, 2024, and quarterly thereafter

<sup>1)</sup> Issued by a subsidiary of, and guaranteed by Aegon N.V.

On April 25, 2014, Aegon issued EUR 700 million of fixed-floating subordinated notes, first callable on April 25, 2024, and each quarter thereafter 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.

On April 4, 2018, Aegon has issued USD 800 million of Solvency II eligible Tier 2 subordinated debt securities, first callable on April 11, 2028, and maturing on April 11, 2048. The coupon is fixed at 5.5% until the first call date and floating thereafter with a margin including a 100 basis points step-up. The securities are rated BBB, Baa1 and BBB- by S&P Global, Moody's and Fitch, respectively and are designed to be Tier 2 compliant under Solvency II.

On October 22, 2019, Aegon has issued USD 925 million Tier 2 subordinated notes with a fixed coupon of 5.1%. Net proceeds from this issuance will be used for general corporate purposes. The notes are being issued by Aegon Funding Company LLC (AFC) and will be guaranteed on a subordinated basis by Aegon N.V.. The first call date is on December 15, 2024, and the maturity date is on December 15, 2049. The notes are rated BBB and Baa1 by S&P Global and Moody's, respectively, and have been structured to be Tier 2 compliant under Solvency II.

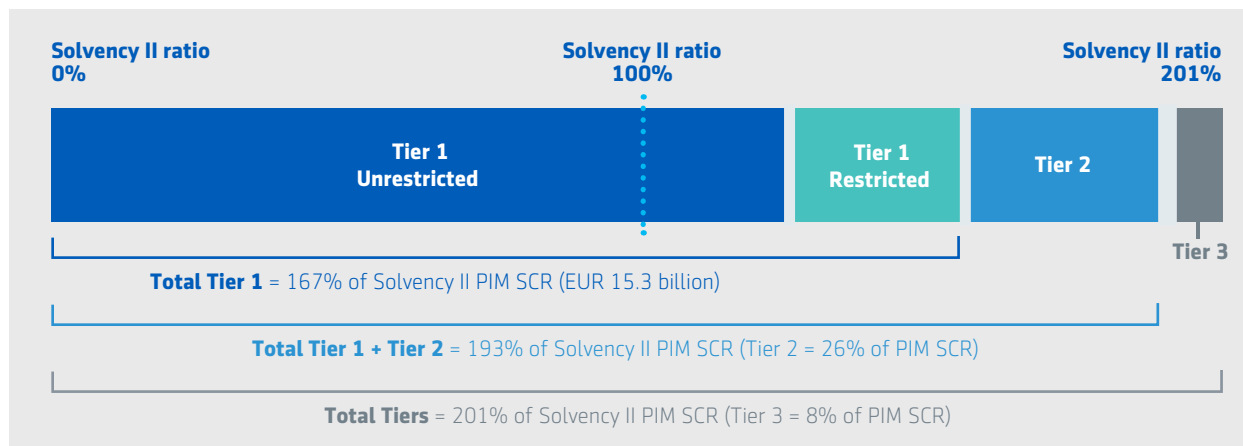
For more information on Aegon's capital securities, reference is made to the debt programs or review the [Base Prospectus 2019](#) and the [US Shelf Registration 2017](#).

## Tier 3 own funds

Aegon's Tier 3 capital under the Solvency II framework consists of Aegon's deferred tax asset position under Solvency II.

## Overview of Aegon Group Capital Quality

The capitalization of Aegon Group per December 31, 2019, is shown below:



## Aegon's use of leverage

Aegon uses leverage in order to lower the cost of capital that supports businesses in the Aegon Group, thereby contributing to a more effective use of capital and realizing capital efficiencies. In managing the use of financial and non-financial leverage throughout the group, Aegon has implemented a Leverage Use Framework that is part of Aegon's broader Enterprise Risk Management (ERM) framework.

### Leverage metrics

In line with the guiding principles of its capital and liquidity management, Aegon N.V. monitors and manages several leverage metrics:

- Gross financial leverage ratio;
- Fixed charge coverage; and
- Various rating agency leverage metrics.

Aegon's gross financial leverage ratio is calculated by dividing total financial leverage by total capitalization. Aegon defines total financial leverage as debt or debt-like funding issued for general corporate purposes and for capitalizing Aegon's business units. Total financial leverage includes hybrid instruments, subordinated and senior debt. Aegon's total capitalization consists of the following components:

- Shareholders' equity, excluding revaluation reserves, cash flow hedge reserves, based on IFRS as adopted by the EU;
- Non-controlling interests and share options not yet exercised; and
- Total financial leverage.

Aegon's fixed charge coverage is a measure of the Company's ability to service its financial leverage. It 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 includes the impact of interest rate hedging.

## Globally systemically important insurer (G-SII) designation

On November 3, 2015, Aegon was 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). Up until 2019, the FSB reviewed the G-SII designation annually. However, the FSB, in consultation with the IAIS and national authorities, decided not to publish a new list of G-SIIs for 2017 or 2018. In November 2019, in recognition of the fact that the Holistic Framework (see below), when consistently implemented, provides an enhanced approach to assessing and mitigating systemic risk in the global insurance sector, the FSB decided to suspend the identification of global systemically important insurers (G-SIIs). In November 2022, the FSB will, based on the initial years of implementation of the Holistic Framework, review the need to either discontinue or re-establish an annual identification of G-SIIs. Consequently, Aegon continues to be designated as G-SII at the time of publication of this Solvency and Financial Condition Report.

Due to its G-SII status, Aegon has been subject to an additional layer of direct supervision at group level. In accordance with these requirements, Aegon submitted a liquidity risk management plan, a systemic risk management plan, and an ex ante recovery plan to DNB and to the G-SII crisis management group (CMG) that was established. Aegon has updated these plans on an annual basis. In addition, the Aegon Group's Resolution Authority (the Dutch Central Bank) was made responsible for the development of Aegon's resolution plan.

In November 2019, the IAIS adopted the Holistic Framework for the assessment and mitigation of systemic risk in the insurance sector. Some of the provisions of the Holistic Framework are included in the IAIS Insurance Core Principles (that apply to all insurers), while others are included in ComFrame (the Common Framework for the Supervision of Internationally Active Insurance Groups, or IAIGs).

The Holistic Framework consists of an enhanced set of supervisory policy measures and powers of intervention, an annual IAIS global monitoring exercise and collective discussion on the outcomes and appropriate supervisory responses, and an assessment of consistent implementation of supervisory measures. ComFrame establishes supervisory standards and guidance focusing on the effective group-wide supervision of IAIGs. ComFrame is a comprehensive and outcome-focused framework that provides supervisory minimum requirements tailored to the international activity and size of IAIGs. ComFrame builds on the Insurance Core Principles that are applicable to the supervision of all insurers.

If the FSB would, as referred to above, discontinue the annual identification of G-SIIs after the review of the Holistic Framework in November 2022 or, alternatively, Aegon would not be identified as a G-SII, Aegon would still be subject to ComFrame and ICS, to the extent these would be implemented in local legislation.

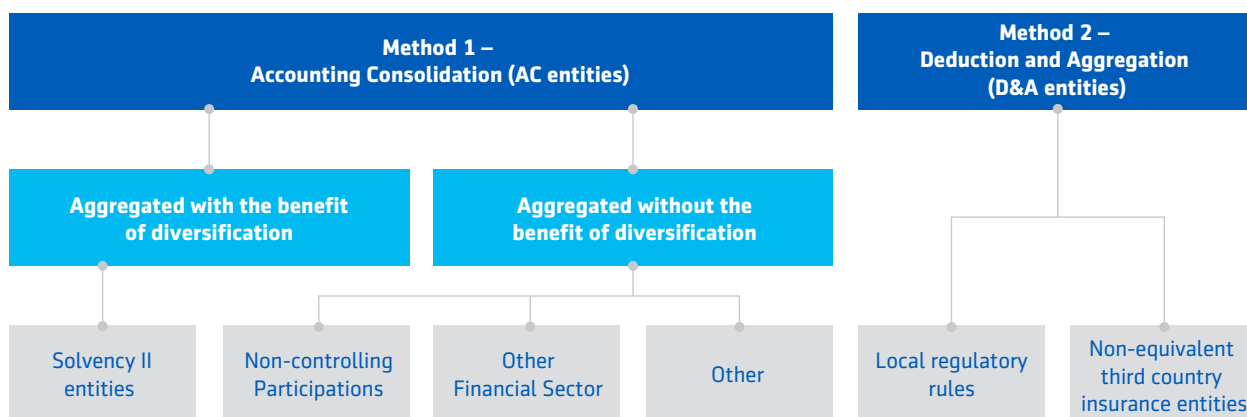
## E.1 Own funds

### 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 and 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) (re)insurance entities as well as ancillary service undertakings, mixed financial holding entities and insurance holding entities. The EEA insurance entities of Aegon are domiciled in the Netherlands, United Kingdom, Spain, Portugal, Hungary, and Poland.

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 2019 SFCR of Aegon Group).

Aegon has applied a method, consistent with the EIOPA opinion (EIOPA-BoS-16-008) published on January 27 2016, to allocate centrally issued subordinated debt between the AC and D&A parts of the group.

Aegon Group's own funds are calculated net of material intra-group transactions.

### Accounting Consolidation Method

The following applies in regard to the consolidation of own funds and solvency capital requirement based on the AC method:

- Aggregation of 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 Aegon's partial internal model used);
  - The benefit of diversification of capital requirements between these entities is included in this aggregation.
- Aggregation of non-controlling entities, Other Financial Sector entities, and Other entities:
  - For non-controlling entities (a holding of 20%-50% of the voting rights or capital) the proportional value of the participation is included in the consolidated data. This value is calculated in accordance with the adjusted equity method;
  - For Other Financial Sector entities (for example Asset Management), the proportional share of own funds and capital requirements according to relevant sectorial rules is included into the Group Solvency calculation; and
  - For Other entities, the value of participations is included in the consolidated data. Preferably the market value is used, but alternatively the adjusted equity method can be used;
  - The benefit of diversification of capital requirements between these entities is not included in this aggregation.

### Deduction and Aggregation method

For consolidation of own funds and solvency capital requirement using the D&A method (method 2), the proportional share of own funds according to local regulatory rules is included in the Group own funds (the US life insurance entities, Bermuda, Mexico and Brazil). Diversification of capital requirements 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.

The tiering of Aegon Group's 2019 own funds, compared with 2018 is shown below:

Solvency II Group own funds Amounts in EUR millions	December 31, 2019			December 31, 2018		
	Available own funds	Eligible own funds	Eligible own funds to meet minimum consolidated Group SCR	Available own funds	Eligible own funds	Eligible own funds to meet minimum consolidated Group SCR
Unrestricted Tier 1	12,724	12,724	5,402	12,205	12,205	5,555
Restricted Tier 1	2,614	2,614	1,257	3,406	2,889	1,389
Tier 2 own funds	2,370	2,370	449	1,487	2,004	391
Tier 3 own funds	762	762	-	504	504	-
<b>Total Tiers</b>	<b>18,470</b>	<b>18,470</b>	<b>7,108</b>	<b>17,602</b>	<b>17,602</b>	<b>7,335</b>

Aegon has historically applied a centralized funding structure and no own funds items have been issued by solo entities. Grandfathered Restricted Tier 1 and Restricted Tier 2 capital instruments were issued from the top holding company of the Group, Aegon NV, or an ancillary services undertaking, Aegon Funding Company LLC. The proceeds were invested as Unrestricted Tier 1 capital in the insurance operations or held as excess cash in the holding. During 2019 Aegon exercised the right to redeem the USD 500 million perpetual capital securities with a coupon of 6.5% issued in 2005 (grandfathered Restricted Tier 1) and the USD 1 billion perpetual capital securities with a coupon of 6.375% issued in 2005 (grandfathered Restricted Tier 1). This was pre-financed by the issuance of the inaugural EUR 500 million Restricted Tier 1 perpetual contingent convertible securities, with a fixed coupon of 5.625% until October 15, 2029; and the USD 925 million Tier 2 subordinated notes with a fixed coupon of 5.1%, which is issued by Aegon Funding Company LLC (AFC). The notes are guaranteed on a subordinated basis by Aegon N.V.

The allocation of Aegon Group's subordinate debt is based on an available Own Funds basis within AC and D&A.

Aegon's tiering methodology is as follows:

**Step 1:** Calculate the total available Own Funds of the Aegon Americas regulated entities, aggregated and using US NAIC regulations (RBC) and taking into account articles 331 through 334 of the Solvency II Delegated Regulation.

**Step 2:** The resulting available Own Funds are reduced by an amount equal to 100% RBC CAL to reflect transferability limitations. This reduction (haircut) is first applied to the DTAs of the US regulated entities. If the remaining amount of DTAs after application of this haircut exceeds 100% RBC CAL, the remainder stays part of eligible group Own Funds as Tier 3 own funds. If the amount of DTAs of the US regulated entities is lower than 100% RBC CAL, the difference between the DTAs and the 100% RBC CAL is deducted from the unrestricted Tier 1 capital of the US regulated entities.

**Step 3:** The equivalent capital requirement for the US regulated entities in the Solvency II Group SCR calculation is set at 150% RBC CAL.

**Step 4:** Restricted Tier 1 and Tier 2 debt is allocated on the share of available Own Funds of the AC and D&A entities (excluding the OFS category). These available Own Funds are calculated after steps 1 and 2 above, applying the 100% RBC CAL haircut at the Aegon Americas regulated entities.

Tiering restrictions are 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. For the part of Aegon Group covered by the AC method, tiering limits are based on the allocated Restricted Tier 1 and Tier 2 and the 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 allocated own funds from step 4 and the SCR of the consolidated D&A entities.

As at December 31, 2019, Tier 1 capital accounted for 83% of own funds (2018: 89%), including EUR 1,617 million of junior perpetual capital securities (2018: EUR 2,931 million) and EUR 479 million of perpetual cumulative subordinated bonds (2018: EUR 476 million) which are both classified as grandfathered restricted Tier 1 capital. In addition, Tier 1 capital includes the newly issued inaugural

perpetual contingent convertible security which is Solvency II compliant restricted Tier 1 capital of EUR 518 million. The decrease in Tier 1 capital is mainly due to the redemptions of USD 1 billion perpetual capital securities issued in 2005, partly offset by the issuance of a perpetual contingent convertible security.

As at December 31, 2019, Tier 2 capital accounted for 13% of own funds (2018: 8%), including USD 925 million Tier 2 subordinated notes subordinated notes issued by Aegon Funding Corporate LLC (AFC) during 2019 (EUR 823 million). EUR 773 million of subordinated liabilities, which were issued in 2018 and classified as Solvency II compliant Tier 2 capital (2018: EUR 716 million). EUR 774 million of fixed floating subordinated notes (2018: EUR 771 million) which are classified as grandfathered Tier 2 capital. Changes in Tier 2 capital compared to previous year is mainly related to the issuance of subordinated notes by AFC.

The grandfathered restricted Tier 1 and Tier 2 capital instruments are grandfathered such that they are considered as capital under the Solvency II framework for up to 10 years as from January 1, 2016. For the terms and conditions of these grandfathered instruments refer to note 31 and note 32 to the [Integrated Annual Report 2019](#).

Tier 3 capital as of December 31, 2019 is comprised of deferred tax assets balances related to Solvency II entities.

### 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'.

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 table.

Composition of eligible own funds by aggregation method Amounts in EUR millions	% of total Group		% of total Group	
	Eligible own funds December 31, 2019	Eligible own funds December 31, 2019	Eligible own funds December 31, 2018	Eligible own funds December 31, 2018
Accounting Consolidation (AC) entities, excluding OFS	8,561	46%	8,518	48%
Deduction & Aggregation (D&A) entities	9,242	50%	8,435	48%
Other Financial Sector (OFS) entities	667	4%	649	4%
<b>Total</b>	<b>18,470</b>	<b>100%</b>	<b>17,602</b>	<b>100%</b>

Most of Aegon's eligible own funds are held by AC entities which is mainly related to the own funds of Aegon the Netherlands and Aegon UK. The majority of the eligible own funds of D&A entities consist of the US Life insurance business.

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, 2019:

<b>Solvency II Group own funds as at December 31, 2019</b>	<b>Tiers Total</b>	<b>Tier 1 unrestricted</b>	<b>Tier 1 restricted</b>	<b>Tier 2</b>	<b>Tier 3</b>
Amounts in EUR million					
<b>Basic own funds</b>					
Ordinary share capital	323	323	-	-	-
Share premium account	7,213	7,213	-	-	-
Reconciliation reserve	6,025	6,025	-	-	-
Amount equal to the value of net deferred tax assets	762	-	-	-	762
Subordinated liabilities	4,984	-	2,614	2,370	-
<b>Total basic own funds before adjustments</b>	<b>19,307</b>	<b>13,561</b>	<b>2,614</b>	<b>2,370</b>	<b>762</b>
-/- Non-available own funds	108	108	-	-	-
-/- Deductions deducted according to art 228 of the Directive 2009/138/EC	730	730	-	-	-
<b>Available own funds</b>	<b>18,470</b>	<b>12,724</b>	<b>2,614</b>	<b>2,370</b>	<b>762</b>
<i>of which:</i>					
- AC entities excluding OFS	8,561	5,402	1,257	1,140	762
- D&A entities	9,242	6,655	1,357	1,230	-
- Other Financial Sector entities	667	667	-	-	-
<b>Eligible own funds to Group SCR</b>	<b>18,470</b>	<b>12,724</b>	<b>2,614</b>	<b>2,370</b>	<b>762</b>
Eligible own funds to meet minimum consolidated Group SCR	7,108	5,402	1,257	449	-
<b>Consolidated Group SCR</b>	<b>9,173</b>				
Minimum consolidated Group SCR	2,244				
<b>Solvency II ratio</b>	<b>201%</b>				
Group MCR ratio	317%				

<b>Solvency II Group own funds as at 31 December 2018</b>	<b>Tiers Total</b>	<b>Tier 1 unrestricted</b>	<b>Tier 1 restricted</b>	<b>Tier 2</b>	<b>Tier 3</b>
Amounts in EUR million					
<b>Basic own funds</b>					
Ordinary share capital	322	322	-	-	-
Share premium account	7,487	7,487	-	-	-
Reconciliation reserve	5,186	5,186	-	-	-
Amount equal to the value of net deferred tax assets	504	-	-	-	504
Subordinated liabilities	4,893	-	3,406	1,487	-
<b>Total basic own funds before adjustments</b>	<b>18,392</b>	<b>12,994</b>	<b>3,406</b>	<b>1,487</b>	<b>504</b>
-/- Non-available own funds	153	153	-	-	-
-/- Deductions deducted according to art 228 of the Directive 2009/138/EC	636	636	-	-	-
<b>Available own funds</b>	<b>17,602</b>	<b>12,205</b>	<b>3,406</b>	<b>1,487</b>	<b>504</b>
<i>of which:</i>					
- AC entities excluding OFS	8,518	5,555	1,712	747	504
- D&A entities	8,435	6,001	1,694	740	-
- Other Financial Sector entities	649	649	-	-	-
<b>Eligible own funds to Group SCR</b>	<b>17,602</b>	<b>12,205</b>	<b>2,889</b>	<b>2,004</b>	<b>504</b>
Eligible own funds to meet minimum consolidated Group SCR	7,335	5,555	1,389	391	-
<b>Consolidated Group SCR</b>	<b>8,349</b>				
Minimum consolidated Group SCR	1,953				
<b>Solvency II ratio</b>	<b>211%</b>				
Group MCR ratio	376%				

In the remainder of this section, the own funds items as of year-end 2019 are discussed in more detail.

## Basic own funds

### Ordinary share capital

Ordinary share capital (gross of own shares) consists of 2,105 million common shares and 585 million common shares B. Both share classes have a par value of EUR 0.12 per share.

### Share premium account

Share premium account related to ordinary share capital is comprised of common shares for an amount of EUR 5,560 million, and common shares B for an amount of EUR 1,653 million.

### Reconciliation reserve

The reconciliation reserve reflects Aegon's free reserve net of adjustments. The reconciliation reserve is calculated as follows:

Amounts in EUR million	December 31, 2019	December 31, 2018
<b>Excess of Assets over Liabilities</b>	<b>14,861</b>	<b>14,066</b>
Own shares (held directly and indirectly)	(277)	(333)
Foreseeable dividends, distributions and charges		-
Other basic own fund items	(8,298)	(8,312)
Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fence funds	(261)	(233)
Other non-available own funds	(1)	(1)
<b>Reconciliation reserve</b>	<b>6,025</b>	<b>5,186</b>

The matching adjustment portfolios and ring fenced restriction for an amount of EUR 261 million (2018: EUR 233 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.

The total excess of assets over liabilities within ring-fenced funds and matching adjustment portfolios are EUR 644 million (2018: EUR 572 million). The matching adjustment for Aegon Spain (2018: EUR 22 million) is no longer applied at year-end 2019. The split is as follows:

- Aegon UK's With-profit sub-funds: EUR 334 million (2018: EUR 308 million);
- Aegon UK's matching adjustment portfolio: EUR 310 million (2018: EUR 242 million).

To manage its risk exposure, Aegon has risk policies in place. Many of these policies are group-wide while others are specific to the unique situation of local businesses. The 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. Operating within this policy framework, Aegon employs risk management programs including asset liability management (ALM) processes and models and hedging programs (which are largely conducted via the use of financial derivative instruments). These risk management programs are in place in each country unit and are not only used to manage risk in each unit, but are also part of the Group's overall risk strategy.

Aegon operates a Derivative Use Policy to govern its usage of derivatives. This policy establishes the control, authorization, execution and monitoring requirements of the usage of such instruments. In addition, the policy stipulates necessary mitigation of credit risk created through derivatives management tools. For derivatives, counterparty credit risk is normally mitigated by requirements to post collateral via credit support annex agreements or through a central clearinghouse.

As part of its risk management programs, Aegon takes inventory of its current risk position across risk categories. Aegon also measures the sensitivity of net income and shareholders' equity under both deterministic and stochastic scenarios. Management uses the insight gained through these 'what if?' scenarios to manage the Group's risk exposure and capital position. The models, scenarios and assumptions used are reviewed regularly and updated as necessary.

### Amount equal to the value of net deferred tax assets

The amount of EUR 762 million (2018: EUR 504 million) is mainly related to Aegon's Accounting Consolidation entities in the United States and Aegon the Netherlands. The increase compared to 2018 is attributable to the increased deferred tax assets in Aegon the Netherlands mainly as a result of declined interest rates which increase technical provisions.



### Subordinated liabilities

The total amount of subordinated liabilities consist of Solvency II compliant subordinated liabilities that were issued by Aegon Funding Company LLC (AFC) during 2019 - included in Tier 2; inaugural perpetual contingent convertible securities issued in 2019 - included in Tier 1; subordinated liabilities which were issued in 2018 and classified as Solvency II compliant capital - included in Tier 2; junior perpetual capital securities – included in Tier 1; perpetual capital subordinated bonds – included in Tier 1; and fixed-floating subordinated notes - included in Tier 2.

The following basic own funds items do not meet the criteria to be classified as available own funds:

### Ancillary Own Funds

The year-end 2019 Solvency II position of Aegon Group did not include any ancillary own funds as defined in Article 89(1) of Directive 2009/138/EC).

### Available own funds

#### Non-available own funds - due to fungibility and transferability restrictions

Aegon annually performs an assessment of the fungibility and transferability restrictions that may apply to both (re)insurance entities and holding companies. As such, the assessment is conducted on a legal entity level, and subsequently on the level of the holding company as well. During the year, Aegon monitors certain information and/or events that could materially impact the restrictions on a group level. Following these developments, the Company has the option of updating the restrictions for relevant entities on a quarterly basis, in addition to the regular annual review.

The amount of EUR 108 million (2018: EUR 153 million) of non-available own funds is related to the restricted charitable trust assets in the US non-regulated entities.

#### Deductions based on Article 228 of Directive 2009/138/EC

The amount of EUR 730 million (2018: EUR 636 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.

### Eligible own funds

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. There is no overflow from Restricted Tier 1 to Tier 2 Own Funds anymore in 2019, as a result of increase of Unrestricted Tier 1 capital and the redemption of grandfathered perpetual capital securities (Tier 1 Own Funds) during 2019.

The amount of eligible own funds to the Aegon Group SCR was EUR 18,470 million leading to Group Solvency II ratio of 201% at year-end 2019 (2018: EUR 17,602 million; 211%).

#### Eligible own funds to meet minimum consolidated Group SCR

The minimum consolidated Aegon Group SCR consists of the simple sum of MCRs of the participating insurance or reinsurance undertaking and the proportional shares of MCRs of related insurance and reinsurance undertakings. This amounted to EUR 2,244 million at year-end 2019 (2018: EUR 1,965 million).

The total eligible own funds to meet the minimum consolidated Aegon Group SCR amounted to EUR 7,108 million at year-end 2019. This amount relates exclusively to the undertakings accounted for using method 1 but excluding the Tier 3 capital (EUR 762 million) thereto related.

#### Significant developments own funds throughout 2019

Aegon Group Own Funds amounted to EUR 18,470 million on December 31, 2019 (2018: EUR 17,602 million). The increase of EUR 868 million in Own Funds since December 31, 2018, is mostly driven by the positive expected return on Aegon's inforce insurance portfolio, positive return from equity markets and the impact of declining interest rates on assets and hedges. This increase was partly offset by the negative market impact primarily from the EIOPA VA narrowing from 24 bps to 7 bps, negative impact from model and framework changes, and the payment of external dividend. Furthermore, the lowering of the UFR from 4.05% to 3.90% led to a decrease in Own Funds as well.

During 2019, part of restricted Tier 1 capital instruments were redeemed and new Tier 2 capital instruments were issued. The increase in Unrestricted Tier 1 was generated by the positive performance of Aegon's operating units.

#### E.1.4 Difference between Solvency II own funds and IFRS-EU shareholders' equity

##### Reconciliation shareholders' equity - own funds

Amounts in EUR million

	December 31, 2019	December 31, 2018
<b>Shareholders' equity<sup>1)</sup></b>	<b>22,457</b>	<b>19,518</b>
IFRS adjustments for other equity instruments and non-controlling interest	2,591	3,342
<b>Group equity</b>	<b>25,048</b>	<b>22,860</b>
<i>Differences in aggregation related to D&amp;A entities</i>	(5,663)	(4,095)
<i>Differences in recognition basis for i.e. DPAC and Goodwill</i>	(1,932)	(2,024)
<i>Valuation difference between IFRS and Solvency II</i>	2,753	2,470
<i>Reclassification of subordinated debt</i>	(3,372)	(3,262)
<b>Solvency II revaluations and reclassifications<sup>1)</sup></b>	<b>(8,214)</b>	<b>(6,911)</b>
<b>Transferability restrictions<sup>2)</sup></b>	<b>(1,973)</b>	<b>(1,884)</b>
<b>Excess of Assets over Liabilities</b>	<b>14,861</b>	<b>14,066</b>
<i>Adjustments for restricted own funds (Ring-fenced funds)</i>	(262)	(233)
<i>Subordinated liabilities in own funds</i>	4,984	4,893
<i>Treasury shares</i>	(277)	(333)
<b>Availability adjustments</b>	<b>4,446</b>	<b>4,327</b>
<i>Non-available own funds related to charitable trusts</i>	(108)	(153)
<i>Deductions according to art. 228 of the Directive 2009/138/EC related to Aegon Bank</i>	(730)	(636)
<b>Fungibility adjustments<sup>3)</sup></b>	<b>(838)</b>	<b>(789)</b>
<b>Available own funds</b>	<b>18,470</b>	<b>17,602</b>

<sup>1)</sup> The 2018 comparative numbers have been updated for the voluntary accounting policy change related to the liability adequacy test (LAT) of Aegon the Netherlands.

<sup>2)</sup> This includes the transferability restriction related to the RBC CAL conversion method in 2018 and 2019.

<sup>3)</sup> Amongst others, this contains the exclusion of Aegon Bank in 2018 and 2019.

The Solvency II revaluations and reclassification of EUR 8,214 million negative (2018: EUR 6,911 million negative) mainly stem from the difference in valuation and presentation between IFRS-EU and Solvency II frameworks. The change in Solvency II revaluations per December 31, 2019 compared to December 31, 2018 is mainly driven by lower interest rates during 2019, increasing the revaluation reserves in Aegon US.

The Solvency II revaluations can be grouped into four categories:

- Items that are not recognized under Solvency II. The most relevant examples of this category for Aegon include Goodwill, DPAC and other intangible assets (EUR 1,932 million negative, 2018: EUR 2,024 million negative);
- Items that have a different valuation treatment between IFRS-EU and Solvency II. Solvency II is a market consistent framework hence all assets and liabilities are to be presented at fair value while IFRS-EU also includes other valuation treatments in addition to fair value. The most relevant examples of this category for Aegon Group include Loans and Mortgages, Reinsurance Recoverables, and Technical provisions. The revaluation difference stemming from this category amounted to EUR 2,753 million positive (2018: EUR 2,470 million positive) compared to the IFRS-EU Statement of Financial Position;
- The Net Asset Value of subsidiaries that are included under the Deduction & Aggregation method (on provisional equivalence or Standard Formula basis) in the Group Solvency II results. The revaluation difference stemming from this category amounted to EUR 5,663 million negative (2018: EUR 4,095 million negative) compared to the IFRS-EU Statement of Financial Position;
- Reclassification of subordinated liabilities of EUR 3,372 million negative (2018: EUR 3,262 negative). The movement of subordinated liabilities mainly stems from the redemption of perpetual capital securities, the issuance Restricted Tier 1 perpetual contingent convertible securities, and the issuance of Tier 2 subordinated notes during 2019.

The transferability restrictions reflect the restrictions on US Life Companies DTA and capping of Tier 1 unrestricted own funds as a consequence of the RBC CAL conversion methodology as described above.

The availability adjustments are changes to the availability of own funds of Aegon Group in accordance with Solvency II requirements. Examples include the adjustments for subordinated liabilities, ring-fenced fund, treasury shares and foreseeable dividend (if applicable).

Finally, the fungibility restrictions limit the availability of own funds on Aegon Group level as prescribed by the Supervisory Authorities. These limitations refer to charitable trusts in the Americas for which the local Supervisory Authority could limit the upstream of capital to the Group, and Aegon Bank which is under a different regulatory regime but under the same Supervisory Authority and therefore excluded for Solvency II purposes.

### **E.1.5 Transitional arrangements**

Restricted Tier 1 capital includes 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 securities. 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.

Aegon Spain used to apply a transitional arrangement related to its technical provisions and applied the Solvency II matching adjustment. At the instruction of the Spanish Insurance Regulator (DGSFP), Aegon Spain no longer applies the matching adjustment to the structure of risk-free interest rate, as well as the application of the transitional measure of technical provisions.

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

### E.2.1 Solvency Capital Requirement

Aegon applies a combination of the group consolidation methods available under Solvency II, being the Accounting Consolidation and Deduction & Aggregation methods. Solvency II capital requirements are mainly used for the EEA-based insurance and reinsurance entities, applying the Accounting Consolidation method. Local requirements are used for insurance and reinsurance entities in (provisionally) equivalent third-country jurisdictions (mainly US life insurance companies, Bermuda, Japan and Brazil). 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 Partial Internal Model (PIM) to calculate the solvency position of the majority of its EEA insurance activities under Solvency II. Aegon's Internal model (IM) was approved by the College of Supervisors as part of the Internal Model Application Process. For Aegon, a PIM 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 (SF) 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 as part of the Solvency II PIM. The table represents the structure of the internal model.

Risk Class	QRT S.25.02.22	Risk Type	Application <sup>1,2</sup>		
			Aegon NL	Aegon UK	Aegon N.V.
Mismatch risk		Interest rate	IM	IM	IM
		Interest rate volatility	IM	IM	IM
		Currency	SF	IM	IM
Investment & Counterparty risk	Market risk	Fixed income	IM & SF	IM & SF	IM & SF
		Equity level	IM & SF	IM & SF	n/a
		Equity volatility	IM	IM	n/a
		Alternative investment	IM & SF	SF	n/a
		Counterparty default risk	Counterparty	SF	SF
Underwriting risk	Life underwriting risk	Mortality Contagion	SF	SF	n/a
		Mortality Parameter	IM	SF	n/a
		Longevity Parameter	IM	IM	n/a
		Disability/morbidity	SF	SF	n/a
		Persistency	IM & SF	IM	n/a
	Health underwriting risk	Expense risk	SF	IM	n/a
		Health	n/a	SF	n/a
		Persistency	n/a	n/a	n/a
		Expense risk	n/a	n/a	n/a
		P&C	SF	n/a	n/a
Non-life underwriting risk	Persistency	SF	n/a	n/a	
	Expense risk	SF	n/a	n/a	
Operational risk	Operational risk	Operational	SF	IM	n/a
	Aggregation		IM	IM	IM
Diversification	PIM - integration		Integration technique 3	Integration technique 3	Integration technique 3

<sup>1</sup> The table only reflects the application of Solvency II PIM methodology for the legal entities with approved internal models within each country unit.

<sup>2</sup> In the table above, IM & SF refers to SF shocks used in combination with IM shocks to determine to total component risk.

### Scope of the internal model parts of Solvency II PIM SCR

The internal model of Aegon covers the following legal entities:

- Aegon the Netherlands:
  - Aegon Levensverzekering N.V..
  - Spaarkas N.V.;
- Aegon UK:
  - Scottish Equitable plc; and
- Aegon N.V..

All other legal entities within Aegon that are subject to a Solvency II SCR calculation use the standard formula.

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 for Aegon the Netherlands, UK and Aegon N.V.; and
- Currency risk for Aegon UK and Aegon N.V..

Within the Investment and counterparty risk category:

- Fixed income risk (both spread risk and default/migration risk);
- Equity level risk, excluding private equity which is on SF;
- Equity volatility risk; and
- Within alternative investment risk, Aegon uses IM for property risk for Aegon the Netherlands. All other alternative investment risks are based on SF.

Within the underwriting risk category - life underwriting risk:

- Mortality parameter risk for Aegon the Netherlands;
- Longevity parameter risk for Aegon the Netherlands and Aegon UK;
- Within persistency risk, mortgage prepayment risk for Aegon the Netherlands only and policyholder behavior for Aegon UK only; and
- Expense risk for Aegon UK.

Other risks:

- Operational Risk 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, a marginal probability distribution function is fitted for every risk factor by making use of historical data and expert judgement. The overall joint probability distribution function of all the risk factors combined takes into account the dependency structure between the risks. The loss from 2 million scenarios simulating the samples from this joint distribution are used to fit an overall empirical loss distribution function, from which Aegon derives the 1 in 200 year loss by taking the 99.5% point.

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.

The total net SCR (after diversification) is determined by the average 1 in 200 year loss in own funds. Diversification benefit is defined as the difference between the sum of the standalone SCRs of the risk types and the total net SCR.

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.

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.

### 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, accuracy and appropriateness respectively. Data used in the internal model originates from internal as well as external sources, for example:

- Policy data 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 available capital, which is measured on a prudent regulatory accounting basis, to a minimum capital amount determined by the RBC formula. The RBC formula measures exposures to investment risk, insurance risk, market risk, and general business risk and applies a covariance diversification offset to determine the appropriate risk-based capital. 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 RBC 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.

### Solvency II PIM SCR at December 31, 2019

Aegon's Group Partial Internal Model (PIM) Solvency Capital Requirement (SCR) amounted to EUR 9,173 million on December 31, 2019 (2018: EUR 8,349 million). The SCR increased by EUR 824 million mainly due to the negative market movements driven by higher equity markets and lower interest rates, and the treatment of illiquid assets. This was partly offset by the new longevity reinsurance contract of Aegon the Netherlands with Canada Life Reinsurance.

The following table below shows the breakdown of the Solvency II PIM SCR for Aegon Group at year-end 2019, as reported in QRT S.25.02.22:

### Composition of Group SCR

Amounts in EUR millions

	QRT S.25.02.22	2019	2018
<b>SFCR section</b>			
C.2 Market risk	Market Risk (SF)	1,349	898
	Market Risk (IM)	2,760	2,714
C.3 Credit risk <sup>1)</sup>	Counterparty default risk (SF)	287	368
	Counterparty default risk (IM)	16	22
C.1 Underwriting risk	Life underwriting risk (SF)	1,080	1,009
	Life underwriting risk (IM)	2,287	2,341
	Health underwriting risk (SF)	322	332
	Health underwriting risk (IM)	-	-
	Non-life underwriting risk (SF)	140	138
	Non-life underwriting risk (IM)	-	-
C.5 Operational risk	Operational risk (SF)	320	288
	Operational risk (IM)	308	299
E.2.1 Solvency Capital Requirement	LAC-DT	(782)	(756)
<b>Total undiversified components</b>		<b>8,086</b>	<b>7,653</b>
	Diversification	(3,050)	(3,000)
<b>PIM SCR after diversification (AC only) <sup>2)</sup></b>		<b>5,036</b>	<b>4,654</b>
	Capital requirements for D&A and OFS <sup>3)</sup>	4,137	3,695
<b>Group PIM SCR</b>		<b>9,173</b>	<b>8,349</b>

<sup>1)</sup> To align with the SCR in QRT s.25.02.22 and section E, Aegon will only discuss Counterparty Default Risk (as defined in the Delegated Regulation) in section C3.3. More generally, Aegon considers the term 'credit risk' to also include spread risk, migration risk and default (market risk concentration) risk relating to financial investments. To keep this alignment with QRT s.25.02.22 consistent throughout the SFCR, these other components of credit risk are discussed instead in section C.2 Market risk.

<sup>2)</sup> AC stands for Accounting Consolidation method for the calculation of the Solvency II group solvency ratio.

<sup>3)</sup> Excluding Aegon Bank in line with Group supervisory requirement.

The sum of SCR categories shown in QRT S.25.02.22 amounted to EUR 8,086 million (2018: EUR 7,653 million). The SCR after diversification of the Solvency II risk types of the AC entities is EUR 5,036 million (2018: EUR 4,654 million).

The increase in the sum of SCR categories shown in QRT S.25.02.22 was mainly driven by:

- SF Market risk increased by EUR 451 million mainly due to a model change regarding the treatment of fixed income illiquid assets as SF Equity instead of Fixed income within Aegon the Netherlands;
- IM Market Risk increased by EUR 46 million mainly due to increased equity risk, caused by the increased equity market in Aegon UK and due to the annual pay-out of the buffer in the separate account for policyholders with profit sharing;
- IM Life Underwriting risk decreased by EUR 54 million, mainly due to the new longevity insurance contract of Aegon the Netherlands with Canada Life Re, partly offset by the decreased interest rates;
- The diversification benefit amount increased by EUR 50 million (which decreased net SCR with EUR 50 million). This was mainly driven by the increase in gross SCR;
- The loss absorbing capacity of deferred taxes (LAC DT) increased by EUR 26 million, driven by the increase of the other SCR components, partly offset by the LAC-DT factor change in the Netherlands from 75% to 65% as a consequence of lower interest rates;
- The SCR for D&A and OFS increased by EUR 442 million, mainly due to increased required capital in the Americas as a result of the appreciation of the US dollar compared with the Euro in the beginning of 2019. Decreased interest rates resulted in a further increase of the required capital of the Americas, partly offset by the adoption of the Variable Annuity Reform framework in the Americas.

Diversification of EUR 3,050 million (2018: EUR 3,000 million) shown in QRT S.25.02.22 includes the integration between the SF and IM parts of the PIM SCR and diversification between the risk categories, but does not include diversification within each risk component.

Within the QRT S.25.02.22 risk categories there is diversification between risk categories. The diversification is contributed by the internal model risk types followed by SF risk types and finally IT3 aggregation. An overview of the interaction between various risk types which results in the overall Group diversification benefit is below:

- Market Risk (MR) diversification is mainly driven by diversification of interest rate mismatch risk within the internal model. Group's tail scenario is driven by credit risk with losses from spread widening driving the 1-in-200 year scenario. The diversification benefits for credit risk is relatively small compared to other IM risk types as credit risk (exposure to spread widening) are the largest risk exposure for Aegon in terms of SCR. The adverse credit scenario is accompanied with interest rates narrowing which is a favorable scenario for both the Netherlands and the UK. Hence, under a credit dominant scenario, interest rate mismatch risk diversifies as a result of the diversified interest rate exposures. Group also achieves diversification across CUs for currency risk specifically between GBP instruments in Holdings and the GBP denominated exposures of the UK.
- Underwriting risks (UR) diversification, driven by longevity risk which has a relatively low correlation with other underwriting and market risk types thereby resulting in diversification benefits. Life underwriting risk as reported in the QRT S.25.02.22, and shown in the table above includes longevity and policyholder behavior risk as the largest components. Policyholder behavior risk includes both lapses and mortgage prepayments. Underwriting risks, especially longevity risk also has a low correlation with market risk types, like credit risk, that drive the aggregated own funds losses in a 1 in 200 year event. Hence, the low correlation between these risk types results in a higher diversification of longevity risk under a credit risk dominated scenario;
- The LAC-DT is calculated after diversification and lowered the net PIM SCR by EUR 782 million (2018: EUR 756 million). The LAC-DT benefit mainly stemmed from Aegon the Netherlands. The increase in the LAC-DT is mainly driven by the increase of the other SCR components, partly offset by the LAC-DT factor change in the Netherlands from 75% to 65% as a consequence of the lower interest rates. The LAC-DT factor will be recalibrated on a quarterly basis using the agreed methodology;
- Other capital requirements include capital requirements for entities under D&A (mainly Aegon Americas, being US Life insurance entities) in addition to OFS entities (excluding Aegon Bank). There is no diversification benefit between AC, OFS and D&A entities.

The Solvency II capital ratios of the Group and Aegon the Netherlands 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 any potential liability cannot be reliably quantified at this point.

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 2019 is illustrated in the figure below. The illustration shows that the D&A entities, which mainly consist of the US Life insurance entities, make up 40% (2018: 39%) of the Group SCR.

#### Split of Aegon Group Solvency II PIM SCR into SCR of AC entities and D&A entities

Amounts in EUR millions

	Solvency II PIM SCR December 31, 2019	% of total Group Solvency II PIM SCR December 31, 2019	Solvency II PIM SCR December 31, 2018	% of total Group Solvency II PIM SCR December 31, 2018
Accounting Consolidation (AC) entities, excluding OFS	5,036	55%	4,654	56%
Deduction & Aggregation (D&A) entities	3,648	40%	3,263	39%
Other Financial Sector (OFS) entities	489	5%	432	5%
<b>Total</b>	<b>9,173</b>		<b>8,349</b>	

#### E.2.2 Solvency II ratio

The solvency position is calculated as the 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 (1-in-200 year events) and gives reasonable assurance to policyholders and beneficiaries that payments will be made as they fall due.



**Solvency II key figures**

Amounts in EUR millions	December 31, 2019 <sup>1) 2) 3)</sup>	December 31, 2018 <sup>2) 3) 4)</sup>
Eligible own funds	18,470	17,602
Consolidated Group SCR	9,173	8,349
<b>Solvency II ratio</b>	<b>201%</b>	<b>211%</b>

<sup>1)</sup> The Solvency II ratio is an estimate and subject to supervisory review.

<sup>2)</sup> The Solvency II ratios are based on Aegon's partial internal model.

<sup>3)</sup> Aegon Bank is not included in the Group Solvency II ratio.

**E.2.3 Minimum consolidated Aegon Group SCR**

The minimum consolidated Aegon Group SCR is calculated as the simple sum of MCRs of the participating insurance or reinsurance undertaking and the proportional shares of MCRs of related insurance and reinsurance undertakings. The calculation for each of the undertakings follows a factor-based approach that consists of multiple volume measures (e.g. written premiums, technical provisions). The MCR result of this 'linear formula' is subject to a cap and a floor such that it may not exceed 45% nor fall below 25% of that undertaking's calculated SCR. Lastly, an absolute floor is applied that is dependent on the type of undertaking (i.e. life, non-life or reinsurance).

At year-end 2019 the Group MCR amounted to EUR 2,244 million (2018: EUR 1,965 million) and was mainly driven by Aegon the Netherlands and Aegon UK. The MCR increase during 2019 of EUR 279 million was driven by the decreased interest rates during 2019.

**E.3 Use of the duration-based equity risk sub-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 described by risk type below.

**Market risk**

On credit risk, the fixed income risk for bonds differs because Solvency II PIM shocks are calibrated on the basis of the fixed income portfolio. In contrast to the standard formula, government bonds are shocked with a factor larger than zero. Fixed income illiquid assets are shocked under equity standard formula as a result of a model change in 2019. Furthermore, the Solvency II PIM makes use of a dynamic volatility adjustment approach within Aegon the Netherlands, while the standard formula does not.

This dynamic volatility adjustment methodology follows an asset-only approach, ensuring spread widening is the biting scenario. The performance of the fixed income portfolio is assessed under a broad range of credit scenarios and the model determines which part of the (short-term) losses experienced by the assets are recouped.

For mortgages, the Solvency II PIM contains a spread shock, while the standard formula implies a counterparty default risk shock.

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.

For currency risk, the shocks are calibrated based on Aegon's own portfolio. In addition, the Solvency II PIM allows for diversification between exposures to different currencies, as opposed to no diversification between currency exposures 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.

### Operational Risk

For Aegon UK, the Solvency II PIM for operational risk differs from the standard formula as follows:

- The Solvency II PIM is based on the input of subject matter experts where workshops are used to generate possible scenarios supplemented by experience data. The data is then fitted into a stochastic model, while the standard formula is based on technical provisions, premiums and expenses; and
- The Solvency II PIM allows for diversification of operational risk with other risk types as opposed to the standard formula which does not allow for diversification of operational risk at all.

### 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 2019, the Aegon Group and the regulated entities within the Aegon Group that are subject to regulatory capital requirements on a solo-level continued to comply with such requirements, except for Aegon España, S.A.U. de Seguros y Reaseguros (Aegon Spain). Aegon Spain used to apply a transitional arrangement related to its technical provisions and applied the Solvency II matching adjustment. At the instruction of the Spanish Insurance Regulator (DGSFP), Aegon Spain no longer applies the transitional arrangements and the matching adjustment. As a consequence of this, the Solvency II ratio of Aegon Spain dropped below the 100% and Aegon Group contributed a capital injection into Aegon Spain to restore the Solvency II position.

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 includes actions that need to be performed as soon as the projected solvency ratio is expected to fall within a predefined capitalization zone.

## E.6 Any other information

Aegon does not have any other material information regarding its capital management.

# 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.

**Actuarial funding** enables a life insurance company to reduce the size of the unit reserves it holds for unit-linked business to reflect some or all of the unit-linked charges it expects to receive in the future from the units nominally allocated. Actuarial funding is used on those contracts that have surrender penalties and the Company will hold a minimum of the surrender value at all times.

**Actuarial gains and losses** relate to the accounting for post-employment benefit plans. They comprise the effects of experience adjustments and changes in assumptions used to determine the cost of a plan.

**Acquisition date** is the date on which the acquirer effectively obtains control of the acquiree. In most cases this includes at least the transfer of risks and rewards related to the acquired business or assets/liabilities.

**Alt-A mortgages** relates to a type of US residential mortgage which are securitized home equity loans. Typical Alt-A borrower has a credit score high enough to obtain an 'A' standing. Alt-A mortgages are primarily backed by loans with fixed interest rates for the entire term of the loan.

**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.

**Authorized Control Level (ACL)** is the level regulators are permitted to seize control of a company.

**Bifurcation** is the measurement and presentation of embedded derivatives separate from the host contracts, as if they were stand-alone derivative financial instruments.

**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.

**Company Action Level (CAL)** is the regulatory intervention level at which a company has to submit a plan to its state regulators for the Aegon Americas segment. It is 200% of the Authorized Control Level (ACL) - the level regulators are permitted to seize control of a company. It is a requirement and the most pertinent for measuring risk-based capital (RBC).

**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 our 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.

**Cash-generating unit** is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

**Cedant** is the policyholder under a reinsurance contract.

**Claims settlement expenses** are costs incurred in settling a claim. These costs include internal administration and payout costs, but also such items as attorney's fees and investigation expenses.

**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.

**Compound financial instruments** are financial instruments that, from the issuer's perspective, contain both a liability and an equity element.

**Constructive obligation** is an obligation that derives from an entity's actions whereby an established pattern of past practice, published policies or a sufficiently specific current statement, the entity has indicated to other parties that it will accept certain responsibilities, and as a result, the entity has created a valid expectation on the part of those other parties that it will discharge those responsibilities.

**Contingent liability** is a possible obligation dependent on the occurrence of an uncertain future event or a present obligation for which payment is not probable or the amount cannot be measured reliably.

**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** relate to the accounting for post-employment benefit plans. It 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.

**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.

**Deposit accounting method** includes amounts charged and paid to customers directly into the financial liability and not through the income statement as premium income and claims.

**Derecognition** 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.

**Excess cash in the holding**, which is rather a measure of Holdings liquidity, can be defined as the sum of the Holding company assets, less capital investments, less matched short term assets, less other adjustments. Management of excess cash in the holding is based on a similar approach as the management of the Group and Local Unit capitalization, using a range approach and a ladder of intervention to trigger timely conversations and escalating management actions.

**Exchange differences** are differences resulting from translating a given number of units of one currency into another currency at different exchange rates.

**Fee-based earnings** refers to the excess of fees earned over expenses. This is typically associated with pensions business, asset management business, distribution business, variable annuities and unit linked products.

**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.

**Firm commitment** is a binding agreement for the exchange of a specified quantity of resources at a specified price on a specified future date or dates.

**Fixed charge coverage** is a measure of the Aegon's ability to service its financial leverage. It 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 includes the impact of interest rate hedging.

**Foreign currency** is a currency other than the functional currency of an entity within the Group.

**Foreign currency translation reserve (FCTR)** is part of shareholders' equity, and is the reserve for the exchange differences recognized from the financial statements of the group entities. On the consolidation, the financial statements of group entities with a foreign functional currency are translated to euro, the currency in which the consolidated financial statements are presented. Assets and liabilities are translated at the closing rates on the reporting date. Income, expenses and capital transactions (such as dividends) are translated at average exchange rates or at the prevailing rates on the transaction date, if more appropriate. The resulting exchange differences are recognized in the FCTR.

**Foreign operation** is an entity that is a subsidiary, associate, joint venture or branch of a reporting entity within the Group, the activities of which are based or conducted in a country or currency other than those of the reporting entity.

**Free Capital Generation** represents the movement of own funds (after tax) and SCR (after LACDT and diversification). Impacts from dividends and capital injections that do not generate capital but that do affect OF are excluded from Free Capital Generation. Furthermore, movements in Group holdings SCR and Group diversification are excluded from Free Capital Generation as well. Group Holdings' own funds movements, excluding movements stemming from dividends and capital injections, are included in Free Capital Generation. As Free Capital Generation tracks the movement of the surplus, it combines both the movements of the available and the required capital, where the latter is measured against the midpoint of the target range (as defined in Aegon's Capital Management Policy).

**Functional currency** is the currency of the primary economic environment in which an entity within the Group operates.

**Fungibility & Transferability** 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.

**Guaranteed minimum death benefits** are benefits that guarantee that the beneficiary, as named in the contract, will receive a death benefit if the annuitant dies. The benefit received differs among contracts and may be greater than the current account value.

**Guaranteed minimum income benefits** are a type of option that annuitants can purchase for their retirement annuities. When the annuity is annuitized, this specific option guarantees that the annuitant will receive a minimum value's worth of payments, regardless of the current level of the account value.

**Guaranteed minimum withdrawal benefits** are a type of option that annuitants can purchase for their retirement annuities. This specific option gives annuitants the ability to protect their retirement investments against downside market risk by allowing the annuitant the right to withdraw a percentage of their withdrawal base each year, regardless of how markets have performed.

**Hedge effectiveness** is the degree to which changes in the fair value or cash flows of the hedged item that are attributable to a hedged risk are offset by changes in the fair value or cash flows of the hedging instrument.

**Incremental cost** is one that would not have been incurred if the entity had not acquired, issued or disposed of a financial instrument.

**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 (LAC-DT)** 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 (MCR)** is the threshold of which below local regulators would intervene.

**Monetary items** are units of currency held and assets and liabilities to be received or paid in a fixed or determinable number of units of currency.

**Monoline insurer** is an insurance company which issues types of insurance for securities and bonds to cover the interest and principal when an issuer defaults.

**Negative amortization mortgages** are loans whereby the payment made by the borrower may be less than the accrued interest due and the difference is added to the loan balance. When the accrued balance of the loan reaches the negative amortization limit (typically 110% to 125% of the original loan amount), the loan recalibrates to a fully amortizing level and a new minimum payment amount is determined.

**Non-controlling interests** are that portion of the profit or loss and net assets of a subsidiary attributable to equity interests that are not owned, directly or indirectly through subsidiaries, by the parent.

**Onerous contracts** are contracts in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it.

**Operational funding** includes debt securities that are issued for the financing of dedicated pools of assets. These assets are either legally segregated or tracked as separate portfolios.

**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.

**Past service cost** is the increase in the present value of the defined benefit obligation for employee service in prior periods, resulting in the current period from the introduction of, or changes to, post-employment benefits.

**Plan assets** are assets held by a long-term employee benefit fund and qualifying insurance policies.

**Policy acquisition costs** are the expenses incurred in soliciting and placing new business as well as renewal of existing business. It includes agent's commissions, underwriting expenses, medical and credit report fees, marketing expenses and all other direct and indirect expenses of the departments involved in such activities.

**Policyholder** is a party that has a right to compensation under an insurance contract if an insured event occurs.

**Presentation currency** is the currency in which the financial statements are presented.

**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.

**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.

**Quantitative Reporting Templates (QRT)** are the reporting templates as prescribed by EIOPA for Solvency II reporting which are submitted to local regulator. The QRT's are split in the public and non-public QRT's. In this SFCR we only refer to the public QRT S.25.02.22 (Solvency Capital Requirement - for undertakings using the standard formula and partial internal model) and S.32.01.22 (Undertakings in the scope of the group).

**Real estate investments foreclosed** are real estate investments purchased through foreclosure on the mortgage. Such purchases are not accounted for as mortgages, but as real estate investments until they can be sold at a better price than at the foreclosure. Meanwhile they yield a rental income.

**Realizable value** is the amount of cash or cash equivalents that could currently be obtained by selling an asset in an orderly disposal.

**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 residential mortgage or collection of residential mortgages.

**Return on plan assets** is the investment income derived from plan assets, together with realized and unrealized gains and

losses on the plan assets less any costs of administering the plan and less any tax payable by the plan itself.

**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 prudential regulatory supervisory regime introduced per January 1, 2016. The Solvency II framework is structured along three pillars. Pillar 1 comprises quantitative requirements (including technical provisions, valuation of assets and liabilities, solvency requirements and own fund requirements). Pillar 2 requirements include governance and risk management requirements, and requirements for effective supervision (the supervisory review process). Pillar 3 consists of disclosure and supervisory reporting requirements. In addition to the requirements that apply to the individual EEA insurance and reinsurance undertakings, the Solvency II framework includes a layer of group supervision.

**Solvency capital requirement** is the capital buffer that insurance and reinsurance companies in the EEA are required to hold. Insurers and reinsurers are required to hold eligible own funds in addition to the assets held to cover the technical provisions in order to ensure that they are able to meet their obligations over the next 12 months with a probability of at least 99.5% (insurance or reinsurance company's balance sheet ability to withstand a 1-in-200-year event).

**Spot exchange rate** is the exchange rate for immediate delivery.

**Spread** is the difference between the current bid and the current ask or offered price of a given security.

**Spread earnings** is the difference between the interest earned on investments and the interest credited to policyholders. This is typically associated with traditional type business.

**Standard Formula** is a risk-based approach to the calculation of an insurer's solvency capital requirement, under the Solvency II framework, 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 (TRUPS)** are securities through which the holders participate in a trust. The assets of these trusts consist of debentures issued by an Aegon Group company.

**Unlocking** of DPAC and VOBA refers to the process of updating the DPAC or the VOBA amortization schedule to reflect changes between the past and current expectations of key assumptions used in the projection of future gross profits.

**Value of Business Acquired (VOBA)** the difference between the fair value and the carrying amount of the insurance liabilities recognized when a portfolio of insurance contracts is acquired (directly from another insurance company or as part of a business combination).

**Volatility adjustment (VA)** 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, under the Solvency II framework. The adjustment has the effect of stabilizing the capital resources of insurers and will be calculated by EIOPA.

## 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 could be 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.

### Forward-looking statements

The statements contained in this document that are not historical facts are forward-looking statements as defined in the US Private Securities Litigation Reform Act of 1995. The following are words that identify such forward-looking statements: aim, believe, estimate, target, intend, may, expect, anticipate, predict, project, counting on, plan, continue, want, forecast, goal, should, would, is confident, will, and similar expressions as they relate to Aegon. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. Aegon undertakes no obligation to publicly update or revise any forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements, which merely reflect company expectations at the time of writing. Actual results may differ materially from expectations conveyed in forward-looking statements due to changes caused by various risks and uncertainties. Such risks and uncertainties include but are not limited to the following:

- Changes in general economic conditions, particularly in the United States, the Netherlands and the United Kingdom;
- Changes in the performance of financial markets, including emerging markets, such as with regard to:
  - The frequency and severity of defaults by issuers in Aegon's fixed income investment portfolios;
  - The effects of corporate bankruptcies and/or accounting restatements on the financial markets and the resulting decline in the value of equity and debt securities Aegon holds; and
  - The effects of declining creditworthiness of certain private sector securities and the resulting decline in the value of government exposure that Aegon holds;
- Changes in the performance of Aegon's investment portfolio and decline in ratings of Aegon's counterparties;
- Consequences of a potential (partial) break-up of the euro;
- Consequences of the anticipated exit of the United Kingdom from the European Union;
- The frequency and severity of insured loss events;
- Changes affecting longevity, mortality, morbidity, persistence and other factors that may impact the profitability of Aegon's insurance products;
- Reinsurers to whom Aegon has ceded significant underwriting risks may fail to meet their obligations;
- Changes affecting interest rate levels and continuing low or rapidly changing interest rate levels;
- Changes affecting currency exchange rates, in particular the EUR/USD and EUR/GBP exchange rates;
- Changes in the availability of, and costs associated with, liquidity sources such as bank and capital markets funding, as well as conditions in the credit markets in general such as changes in borrower and counterparty creditworthiness;
- Increasing levels of competition in the United States, the Netherlands, the United Kingdom and emerging markets;
- Changes in laws and regulations, particularly those affecting Aegon's operations' ability to hire and retain key personnel, taxation of Aegon companies, the products Aegon sells, and the attractiveness of certain products to its consumers;
- Regulatory changes relating to the pensions, investment, and insurance industries in the jurisdictions in which Aegon operates;
- Standard setting initiatives of supranational standard setting bodies such as the Financial Stability Board and the International Association of Insurance Supervisors or changes to such standards that may have an impact on regional (such as EU), national or US federal or state level financial regulation or the application thereof to Aegon, including the designation of Aegon by the Financial Stability Board as a Global Systemically Important Insurer (G-SII);

- Changes in customer behavior and public opinion in general related to, among other things, the type of products Aegon sells, including legal, regulatory or commercial necessity to meet changing customer expectations;
- Acts of God, acts of terrorism, acts of war and pandemics;
- Changes in the policies of central banks and/or governments;
- Lowering of one or more of Aegon's debt ratings issued by recognized rating organizations and the adverse impact such action may have on Aegon's ability to raise capital and on its liquidity and financial condition;
- Lowering of one or more of insurer financial strength ratings of Aegon's insurance subsidiaries and the adverse impact such action may have on the premium writings, policy retention, profitability and liquidity of its insurance subsidiaries;
- The effect of the European Union's Solvency II requirements and other regulations in other jurisdictions affecting the capital Aegon is required to maintain;
- Litigation or regulatory action that could require Aegon to pay significant damages or change the way Aegon does business;
- As Aegon's operations support complex transactions and are highly dependent on the proper functioning of information technology, a computer system failure or security breach may disrupt Aegon's business, damage its reputation and adversely affect its results of operations, financial condition and cash flows;
- Customer responsiveness to both new products and distribution channels;
- Competitive, legal, regulatory, or tax changes that affect profitability, the distribution cost of or demand for Aegon's products;
- Changes in accounting regulations and policies or a change by Aegon in applying such regulations and policies, voluntarily or otherwise, which may affect Aegon's reported results and shareholders' equity;
- Aegon's projected results are highly sensitive to complex mathematical models of financial markets, mortality, longevity, and other dynamic systems subject to shocks and unpredictable volatility. Should assumptions to these models later prove incorrect, or should errors in those models escape the controls in place to detect them, future performance will vary from projected results;
- The impact of acquisitions and divestitures, restructurings, product withdrawals and other unusual items, including Aegon's ability to integrate acquisitions and to obtain the anticipated results and synergies from acquisitions;
- Catastrophic events, either manmade or by nature, could result in material losses and significantly interrupt Aegon's business; Aegon's failure to achieve anticipated levels of earnings or operational efficiencies as well as other cost saving and excess cash and leverage ratio management initiatives; and
- Aegon's failure to achieve anticipated levels of earnings or operational efficiencies as well as other cost saving and excess cash and leverage ratio management initiatives.

This document contains information that qualifies, or may qualify, as inside information within the meaning of Article 7(1), 7(1)a and 7(4) of the EU Market Abuse Regulation (596/2014). Further details of potential risks and uncertainties affecting Aegon are described in its filings with the Netherlands Authority for the Financial Markets and the US Securities and Exchange Commission, including the Annual Report. These forward-looking statements speak only as of the date of this document. Except as required by any applicable law or regulation, Aegon expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in Aegon's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

### **Non-audited information**

PricewaterhouseCoopers Accounting N.V. is the external auditor of Aegon N.V.. The external auditor's mandate does not cover an audit on the information disclosed in this SFCR.

## Contact

### Head office

Aegon N.V.  
Aegonplein 50  
2591 TV The Hague  
The Netherlands  
Telephone: +31 (0) 70 344 32 10  
[www.aegon.com](http://www.aegon.com)

### Investor Relations

Telephone: +31 (0) 70 344 83 05  
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)

