

# Aviva Insurance Limited

Solvency and Financial Condition Report

Year ended 31 December 2017

# Contents

	Summary
A	Business and Performance
B	System of Governance
C	Risk Profile
D	Valuation for Solvency Purposes
E	Capital Management
F	Appendices
F.1	Public Disclosure Quantitative Reporting Templates
F.1.1	<i>S.02.01 Balance Sheet</i>
F.1.2.1	<i>S.05.01 Premium claims and expenses (by line of business) [life]</i>
F.1.2.2	<i>S.05.01 Premium claims and expenses (by line of business) [non-life]</i>
F.1.2.3	<i>S.05.02 Premium claims and expenses (by country) [life]</i>
F.1.2.4	<i>S.05.02 Premium claims and expenses (by country) [non-life]</i>
F.1.3.1	<i>S.12.01 Technical Provisions [life]</i>
F.1.3.2	<i>S.17.01 Technical Provisions [non-life]</i>
F.1.4	<i>S.19.01 Insurance claims [non-life]</i>
F.1.5	<i>S.22.01 Impact of transitional measures</i>
F.1.6	<i>S.23.01 Own Funds</i>
F.1.7	<i>S.25.02 Solvency Capital Requirement</i>
F.1.8	<i>S.28.01 Minimum Capital Requirement</i>
F.2	Glossary of Abbreviations and Definitions
F.3	Directors' Statement
F.4	Auditors' Report

# Aviva Insurance Limited

## Solvency and Financial Condition Report

2017

### Summary

The purpose of the Solvency and Financial Condition Report (SFCR) is to provide information required by the Solvency II (SII) regulatory framework and in particular the capital position of Aviva Insurance Limited (the Company) at 31 December 2017. The report sets out different aspects of the Company's business and performance, system of governance, risk profile, valuation methods used for solvency purposes and its capital management practices.

#### Business and Performance

The Company is a limited company registered in Scotland and a member of the Aviva plc group of companies. The Company transacts general and health insurance business in the United Kingdom (UK) and Ireland. The major classes of business underwritten are personal lines (motor, home, creditor and other), health and commercial lines (property, liability, motor and other).

The Company made a profit before tax of £216m in the year ended 31 December 2017 (*2016: loss of £340m*). This comprised underwriting profit of £143m (*2016: £139m*), net investment income of £252m (*2016: £314m*) and other costs of £179m (*2016: £793m*).

The Company's underwriting profit, net investment income and other costs measure the Company's own performance. The performance of the Company's subsidiaries, including its principal subsidiary Aviva Canada Inc. (ACI), is not reflected in these measurements, except that dividends received from subsidiaries are included in the Company's net investment income.

Gross written premiums increased by 4% as a result of broad based organic growth in the Company's chosen channels and products. The increased underwriting profit reflects this premium growth and further improvements in underwriting performance with underlying weather costs remaining flat.

The Company has a 50% quota share reinsurance arrangement with fellow subsidiary Aviva International Insurance Limited (AIIIL) and ceded net underwriting profit of £142m (*2016: £110m*) to AIIIL during the year.

The Company's net investment income of £252m (*2016: £314m*) decreased by £62m during the year.

The other costs incurred during the year ended 31 December 2017 include net costs recharged to the Company in respect of closed defined benefit pension schemes of £65m (*2016: £68m*) and impairment losses on the valuation of subsidiaries, arising from dividends received by the Company, of £55m (*2016: £20m*).

On 27 February 2017, the Lord Chancellor announced a reduction in the discount rate used in the Ogden tables, which are used in the settlement of lump sum payments in bodily injury claims, from 2.5% set in 2001 to minus 0.75%. As at 31 December 2016, the Company's IFRS claims reserves (net of all reinsurance) were increased by £238m to allow for the impact of the reduction in the Ogden discount rate. On 7 September 2017, the Lord Chancellor set out a proposal for legislation to change the way the discount rate is set and on 30 November 2017, the Justice Select Committee published its report into the inquiry into the draft discount rate legislation. As at 31 December 2017, the Company's claims reserves have been maintained using the current Ogden discount rate of minus 0.75%. The impact of Ogden on the Company's 2017 results is not material.

The Civil Liability Bill was published on 20 March 2018 with the Ministry of Justice accepting the majority of the recommendations on the approach to the Ogden discount rates proposed by the Justice Select Committee in November 2017. The Bill is not expected to be enacted until later in 2018.

Section A of this report sets out further details about the Company's key operations and financial performance over the year.

## System of Governance

The Board's role is to be collectively responsible for promoting the long-term success of the Company and for setting the Company's strategy, against which management's performance is monitored. It sets the Company's risk appetite and satisfies itself that financial controls and risk management systems are robust, whilst ensuring the Company is adequately resourced. A strong system of governance throughout the Company aids effective decision-making and supports the achievement of the Company's objectives for the benefit of customers and shareholders whilst maintaining compliance with regulations.

Roles and responsibilities for risk management in the Company are based around the 'three lines of defence model' where ownership for risk is taken at all levels in the Company. Line management in the business is accountable for risk management, including the implementation of the Risk Management Framework and embedding of the risk culture.

The Risk Management Framework is embedded throughout the Company and forms an integral part of the management and Board processes and decision-making framework across the Company. The key elements of the Risk Management Framework comprise:

- Risk appetite;
- Risk governance, including risk policies and business standards, risk oversight committees and roles and responsibilities; and
- The processes used to identify, measure, manage, monitor and report (IMMMR) risks, including the use of our risk models and stress and scenario testing.

The Risk Committee, on behalf of the Board, last carried out a full review of the effectiveness of the Company's systems of internal control and risk management in February 2018.

During the year, Aviva adopted a UK-wide approach to managing its UK insurance operations, covering Life insurance, General insurance and Health businesses. Notwithstanding this change, the Company's Board and Board Committee responsibilities and arrangements, and the fundamental approach to the system of governance, have not materially changed. Section B of this report provides further details of the Company's System of Governance.

## Risk Profile

The types of risk to which the Company is exposed have not changed significantly over the year and remain credit, market, underwriting, liquidity and operational risks. The Company's risk profile looks through to the underlying risk exposures of its subsidiaries, including ACI.

Risk identification is carried out on a regular basis, is embedded in the business planning process and any major business initiatives, and draws on a combination of internal and external data, covering both normal conditions and stressed environments.

The SII Capital Requirement (SCR) and SCR Cover Ratio are the bases on which the Company sets SII capital risk appetites and limits and are used to assess the significance of risks and to appropriately direct resources to their management.

Some categories of risk are not measured and managed solely by holding capital, principally liquidity risk, which is measured through both absolute level targets and bespoke liquidity coverage ratios.

The Company's underlying risk profile has remained relatively stable during the year. The Company's exposure to underwriting risk, in particular, has remained relatively stable and consistent with new business written in the year.

Section C of this report further describes the risks to which the Company is exposed and how it measures, monitors, manages and mitigates these risks, including any changes in the year to the Company's risk exposures and specific risk mitigation actions taken.

## Valuation for Solvency Purposes

Assets, technical provisions and other liabilities are valued in the Company's SII Balance Sheet according to the SII Directive and related guidance. The principle that underlies the valuation methodology for SII purposes is the amount for which they could be exchanged, transferred or settled by knowledgeable and willing third parties in an arm's length transaction.

At 31 December 2017, the Company's excess of assets over liabilities was £2.3bn on a SII basis which is £1.8bn lower than the value under IFRS. The difference is primarily driven by the different bases used to value the Company's participations in its subsidiaries, including ACI. Under SII, participations are valued at the Company's proportionate equity share of the excess of assets over liabilities of each subsidiary, valued on a look through basis to the SII value of the assets and liabilities of the entity.

The majority of the Company's assets measured at fair value (excluding participations) are based on quoted market information or observable active market data. Where the quoted market information or observable market data is not available, an alternative method for valuation is used.

No material changes were made to the bases used to recognise and value the Company's assets, technical provisions and other liabilities, or to their estimations, during the year.

Section D of this report provides further description of the bases, methods and main assumptions used in the valuation of assets, technical provisions and other liabilities for each material asset or liability class. In addition, it also provides an explanation of the material differences between the IFRS and SII bases of valuation.

### Capital Management

The Company's primary capital management objective is to maintain an efficient capital structure in a manner consistent with the Company's risk profile whilst maintaining its regulatory capital surplus in accordance with approved risk appetites.

There have been no material changes to the Company's objectives, policies or processes for managing its capital during the year.

The Company manages its Own Funds in conjunction with its SCR and seeks, on a consistent basis, to:

- Match the profile of its assets and liabilities, taking into account the risks inherent in the business;
- Maintain sufficient, but not excessive financial strength in accordance with risk appetite, to support new business growth, and satisfy the requirements of the Company's regulators and other stakeholders giving the Company's customers assurance of its financial strength;
- Retain financial flexibility by maintaining strong liquidity; and
- Allocate capital rigorously to support value-adding growth and repatriate excess capital where appropriate.

In the calculation of the SCR, the Company has chosen to implement a partial internal model (PIM), defined as using a combination of internal model (IM) and standard formula (SF) approaches to calculate solvency capital requirements for different components of its business.

The SCR of the Royal Bank of Canada business, acquired by ACI during 2016, which was previously calculated using the SF, was determined using the IM as at 31 December 2017.

At 31 December 2017, the total eligible Own Funds to meet the SCR was £2.5bn (2016: £2.6bn), 86% (2016: 85%) of which was represented by unrestricted tier 1 capital. The Company's SCR, at 31 December 2017, was £1.3bn (2016: £1.3bn). The overall surplus position was £1.2bn (2016: £1.3bn) which translates to an SCR Cover Ratio of 198% (2016: 209%).

Section E of this report further describes the objectives, policies and procedures employed by the Company for managing its Own Funds. The section also covers information on structure and quality of Own Funds and calculation of SCR, including information about the Company's PIM.

# Aviva Insurance Limited

## Solvency and Financial Condition Report 2017

### A. Business and Performance

#### [In this Chapter](#)

A.1 Business

A.2 Underwriting Performance

A.3 Investment Performance

A.4 Performance of Other Activities

A.5 Any Other Information

## A. Business and Performance

The 'Business and Performance' section of the report sets out the Company's business structure, key operations, and financial performance over the reporting period.

### A.1 Business

The Company is a limited company, registered in Scotland, and is a member of the Aviva plc group of companies (the Group).

#### Qualifying holdings

The Company's shares and the associated voting rights are wholly owned by Aviva Group Holdings Limited (AGH), being a qualifying holding in the Company.

#### Supervisor

The Company is authorised by the Prudential Regulatory Authority (PRA). The Company and the Group are regulated by the PRA and the Financial Conduct Authority (FCA) in the UK. The PRA is part of the Bank of England. Contact details for the PRA are as follows:

<b>Address</b>	20 Moorgate, London, EC2R 6DA
<b>Telephone number</b>	+44 (0) 20 7601 4444

#### External auditor

The Company's external auditor is PricewaterhouseCoopers LLP. Contact details are as follows:

<b>Address</b>	7 More London Riverside, London, SE1 2RT
<b>Telephone number</b>	+44 (0) 20 7583 5000

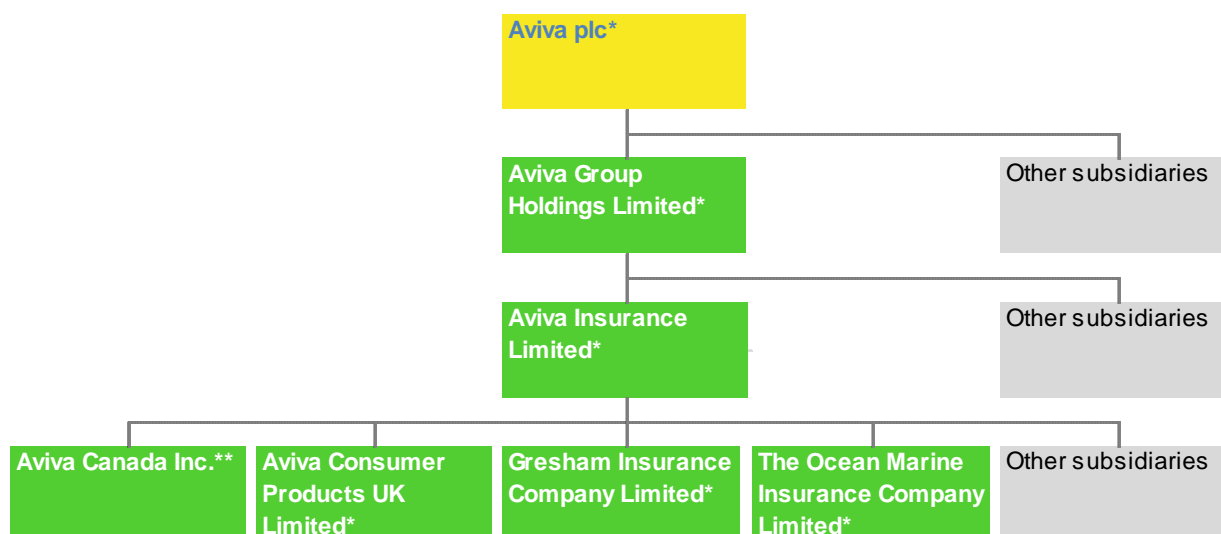
#### Financial statements

The Company's financial statements are available from the Company Secretary, Aviva Company Secretarial Services Limited, St Helen's, Undershaft, London, EC3P 3DQ.

The SFCR is presented in pound sterling rounded to the nearest million which is consistent with the presentation in the IFRS financial statements. The Quantitative Reporting Templates (QRT) are presented in pound sterling rounded to the nearest thousand. Rounding differences of +/- one unit can occur.

## A.1.1 Organisation

The following chart shows, in simplified form, the Company's position within the structure of the Group as at 31 December 2017:



\* Incorporated in the United Kingdom

\*\* Incorporated in Canada

AGH is the immediate parent entity of the Company and Aviva plc is the ultimate controlling parent entity, both are registered in England and Wales. The chart above also presents the Company's material subsidiaries as at 31 December 2017. All of the Company's material subsidiaries are wholly owned by the Company.

## A.1.2 Business operations and events occurring in the year

### Business operations

The Company primarily transacts general and health insurance business in the UK and Ireland. The major classes of business underwritten are personal lines (motor, home, creditor and other), health and commercial lines (property, liability, motor and other). Whilst the Company only conducts non-life insurance activities, the Company has material obligations, similar in nature to life insurance, in the UK in relation to annuities stemming from non-life insurance contracts also known as Periodic Payment Orders (PPO).

### Significant business and other events

On 27 February 2017, the Lord Chancellor announced a reduction in the discount rate used in the Ogden tables, which are used in the settlement of lump sum payments in bodily injury claims, from 2.5% set in 2001 to minus 0.75%. As at 31 December 2016, the Company's IFRS claims reserves (net of all reinsurance) were increased by £238m to allow for the impact of the reduction in the Ogden discount rate. The impact on the Company's SII capital surplus, as at 31 December 2016, was to reduce it by circa. £0.1bn.

On 7 September 2017, the Lord Chancellor set out a proposal for legislation to change the way the Ogden discount rate is set and on 30 November 2017, the Justice Select Committee published its report into the inquiry into the draft discount rate legislation. As at 31 December 2017, the Company's claims reserves have been maintained using the current discount rate of minus 0.75%

The Civil Liability Bill was published on 20 March 2018 with the Ministry of Justice accepting the majority of the recommendations proposed by the Justice Select Committee. The Bill is not expected to be enacted until later in 2018.

During the year, the balance of the Company's loan to its immediate parent company, AGH, has reduced by £144m from £1,513m at 31 December 2016 to £1,369m at 31 December 2017. The reduction was settled via set-off of investment properties transferred to AIL from AGH of £94m and an annual repayment in cash of £50m.



## A.2 Underwriting Performance

### A.2.1 Measurement of underwriting performance

The Company uses underwriting result to measure its underwriting performance. Underwriting result is a non-GAAP financial performance measure, calculated on an IFRS basis. It excludes certain items to enhance comparability and understanding of underwriting performance by highlighting net underwriting income attributable to on-going underwriting operations. Examples of items excluded from underwriting result are investment return, economic assumption changes and amortisation of intangible assets. The items excluded from underwriting result, which comprise the Company's investment performance and its performance of other activities, are detailed in sections A.3 and A.4 respectively.

### A.2.2 Underwriting profit

The table below presents the underwriting profit for the Company for the year ended 31 December 2017, as well as the reconciliation of underwriting profit to the profit before tax. The profit before tax is as shown in the Company's financial statements.

	£m	£m	£m	£m
Year ended 31 December	2017	2017	2016	2016
Gross written premiums		5,296		5,100
Premiums ceded to reinsurers		(2,789)		(5,720)
Premiums written net of reinsurance		2,507		(620)
Net change in provision for unearned premiums		(36)		884
Net earned premiums		2,471		264
Fee and commission income, net of reinsurance		19		24
Net investment income		252		314
<b>Income</b>		<b>2,742</b>		<b>602</b>
Claims paid net of recoveries from reinsurers		(1,572)		(1,508)
Change in insurance liabilities, net of reinsurance		27		1,636
Fee and commission expense, net of reinsurance		(679)		(834)
Other expenses, net of reinsurance		(302)		(235)
Finance cost		-		(1)
<b>Profit / (loss) for the year before tax</b>		<b>216</b>		<b>(340)</b>
Less: Net investment income (above, see A.3)		(252)		(314)
Add back:				
Changes in economic assumptions for claims provisions	9		115	
Net pension costs recharged to the Company for closed defined benefit schemes	65		68	
Impairment losses on investment in subsidiaries	55		20	
Impact on execution of the reinsurance transaction with AILL to increase the quota share from 5% to 50%	-		309	
Strengthening of claims provisions, net of all reinsurance, to allow for the impact of the reduction in the Ogden discount rate	-		238	
Other	50		43	
Performance of other activities (see A.4)		179		793
<b>Underwriting profit</b>		<b>143</b>		<b>139</b>

Underwriting profit of £128m (2016: £126m) arose in the UK and £15m (2016: £13m) in Ireland.

The Company's gross written premiums increased by 4% as a result of broad-based organic growth in its chosen channels and products. Personal lines premiums (within motor vehicle liability, fire and other damage to property and other motor) increased, benefiting from growth in direct home and motor. Commercial lines premiums (within motor vehicle liability, other motor, fire and other damage to property and general liability) also increased reflecting growth in commercial non-motor, partly off-set by remediation in underperforming segments of commercial motor.

Ireland saw a 15% increase in gross written premium, driven by foreign exchange movements and increases across all lines of business.

The Company has a 50% quota share reinsurance arrangement with its fellow subsidiary, AILL. The Company's underwriting profit of £143m (2016: £139m) is net of underwriting profit ceded to AILL during the year of £142m (2016: £110m) under this arrangement.

Underwriting profit reflects premium growth and further improvements in underwriting performance. Underlying weather claims experience (within fire and other damage to property) remained flat.

## A.2.3 Quantitative Reporting Templates S.05.01

Quantification of premiums, claims and expenses, analysed by SII lines of business, is provided in QRT S.05.01, (see Appendix F.1.2.1 and F.1.2.2). These QRT have been prepared in accordance with the definitions and formats prescribed under SII. They include the items (except net investment income) excluded from underwriting result in the reconciliation presented in section A.2.2 which are described in section A.4.

A summary of the information provided in the premium, claims and expenses QRT S.05.01, analysed by SII lines of business, is provided in the tables below. The table for the year ended 31 December 2016 has been restated to combine accepted proportional reinsurance with direct business under each heading.

£m	Medical expense insurance	Motor vehicle liability insurance	Other motor insurance	Fire and other damage to property insurance	General liability insurance	Annuities stemming from non- life contracts	Other SII lines of business	Total
<b>Year ended 31 December 2017</b>								
Gross written premium	568	1,559	390	2,079	443	-	257	5,296
Net earned premium	284	755	189	915	207	-	121	2,471
Gross claims incurred	(406)	(1,107)	(277)	(908)	(245)	4	(125)	(3,064)
Net claims incurred	(213)	(540)	(135)	(399)	(113)	7	(58)	(1,451)
Direct expenses incurred	(55)	(179)	(45)	(469)	(80)	-	(58)	(886)
<b>Year ended 31 December 2016 (restated)</b>								
Gross written premium	564	1,489	378	2,001	402	-	266	5,100
Net earned premium	263	(273)	(62)	648	(353)	-	41	264
Gross claims incurred	(417)	(1,485)	(329)	(775)	(425)	(213)	(135)	(3,779)
Net claims incurred	(193)	124	61	(122)	339	(48)	(11)	150
Direct expenses incurred	(59)	(212)	(54)	(518)	(74)	-	(55)	(972)

The material SII lines of business underwritten by the Company, in order of the value of gross written premium, as presented in QRT S.05.01 (Appendix F.1.2.1 and F.1.2.2), are:

	%	%
Year ended 31 December	2017	2016
Fire and other damage to property insurance	39	39
Motor vehicle liability insurance	30	29
Medical expense insurance	11	11
General liability insurance	8	8
Other motor insurance	7	7
Other SII lines of business	5	6
<b>Total</b>	<b>100</b>	<b>100</b>

In addition to the developments described in section A.2.2, comparison of QRT S.05.01 for the year ended 31 December 2017 with those for 2016 is significantly affected by the following factors, which impact QRT S.05.01 but are excluded from underwriting profit:

- During the year, net earned premiums have increased by £2,207m and net claims incurred have increased by £1,601m. These increases are mainly driven by earned premium of £1,986m, and claims incurred of £1,869m, ceded to AIL in 2016, on execution of the contract to increase the quota share reinsurance from 5% to 50%, relating to 2015 and prior years. The earned premium and claims incurred for motor vehicle liability, other motor and general liability is particularly affected because of their longer tail.
- The Company's IFRS claims provisions as at 31 December 2017 have been maintained using the current Ogden discount rate of minus 0.75% which was also used to value the Company's claims provisions as at 31 December 2016. The impact of the change in Ogden rate on gross and net claims incurred for 2017, as reported in QRT S.05.01, is not material. However, gross and net claims incurred for the year ended 31 December 2016, as reported in QRT S.05.01, are adversely impacted by £238m for the effects of the change in the Ogden discount rate made on 27 February 2017 and referred to in section A.1.2. Gross and net claims incurred for motor vehicle liability, other motor and general liability are particularly affected by the change in the Ogden discount rate.

## A.3 Investment Performance

### A.3.1 Measurement of investment performance

Net investment income, as shown in the Company's financial statements, is used as the measure to report the Company's investment performance.

#### Net investment income analysed by asset class

The Company's net investment income for the year was £252m (2016: £314m). The table below provides an analysis of net investment income by asset class.

Net investment income £m	Investments in subsidiaries	Debt securities	Other financial investments	Loans with Group companies	Interest payable under quota share reinsurance with AIL	Investment property	Total
<b>Year ended 31 December 2017</b>							
Dividend income	122	-	12	-	-	-	134
Interest income/(expense)	-	92	(26)	72	(22)	-	116
Unrealised gains/(losses)	-	(89)	47	-	-	12	(30)
Realised gains/(losses)	-	59	(30)	-	-	-	29
Rental income less expense	-	-	-	-	-	12	12
Other (incl. investment expenses)							(9)
<b>Total</b>	<b>122</b>	<b>62</b>	<b>3</b>	<b>72</b>	<b>(22)</b>	<b>24</b>	<b>252</b>
<b>Year ended 31 December 2016</b>							
Dividend income	168	-	4	-	-	-	172
Interest income/(expense)	-	100	8	80	(134)	-	54
Unrealised gains/(losses)	-	208	(42)	-	-	(3)	163
Realised gains/(losses)	-	6	(84)	-	-	-	(78)
Rental income less expense	-	-	-	-	-	9	9
Other (incl. investment expenses)							(6)
<b>Total</b>	<b>168</b>	<b>314</b>	<b>(114)</b>	<b>80</b>	<b>(134)</b>	<b>6</b>	<b>314</b>

During the year ended 31 December 2017 the Company's net investment income decreased by £62m compared to 2016.

The decrease was mainly due to net investment income from debt securities of £62m, which was £252m lower than 2016, driven in particular by the realised gains and unrealised losses that arose in 2017, compared to gains in 2016 which resulted from underlying market performance.

The reduced net investment income from debt securities was partly offset by returns from other financial investments which improved by £117m. This improvement was driven by losses which arose on derivatives in 2016 from movements in foreign exchange rates and inflation, compared to a modest £3m return in 2017. Derivatives are used for risk reduction and efficient portfolio management purposes.

In addition, investment income payable by the Company under the quota-share reinsurance arrangement with AIL was reduced by £112m, partly offset by reduced dividend income that the Company received from its subsidiaries, which was £46m lower.

Net investment income is stated after deduction of £9m (2016: £6m) of investment expenses.

### A.3.2 Gains and losses recognised directly in equity

The material gains and losses recognised directly in equity are summarised in the table below:

Year ended 31 December	£m 2017	£m 2016
Fair value (losses)/gains on investments in subsidiaries	(279)	403
Impairment losses on investments in subsidiaries previously revalued through other comprehensive income, now taken to the income statement	55	20
Foreign exchange rate movements	3	17

Further detail is provided in the Statement of Comprehensive Income on page 27 of the Company's financial statements.

### A.3.3 Investments in securitisation

The Company does not have any investments in securitisation.

## A.4 Performance of Other Activities

### A.4.1 Other income and expense

As described in section A.2.1, performance of other activities comprises those items of other income and expense, other than net investment return, excluded from underwriting result. The table in section A.2.2 summarises the loss of £179m (2016: loss of £793m) that the Company sustained from its performance of other activities during the year. The material components are as follows:

#### Changes for economic assumptions of claims provisions: loss of £9m (2016: loss of £115m)

A loss before tax of £9m (2016: loss of £115m) arose in relation to changes in the economic assumptions used to value claims provisions, reflecting the impact of a decrease in the real interest rates (i.e. net of inflation) used to discount claim reserves for PPO and latent claims.

#### Net contributions to closed defined benefit pension schemes: £65m (2016: contribution of £68m)

The Company has no employees. However, it is one of a number of companies in the Group being charged for the costs of staff participating in defined benefit pension schemes in the UK and its contributions are affected by the financial position of these schemes. The defined benefit sections for the schemes are now closed to both new members and future accrual. In the absence of any contractual arrangements to allocate the net defined benefit cost for these schemes, measured in accordance with IAS 19, to individual businesses it is the policy of the Group to allocate this cost fully to the main trading companies. The Company therefore recognises a pension expense equal to its contributions payable in the year. Full disclosure of the Group's pension schemes is given in the Annual Report and Accounts of the Group. The Company's net contributions to closed defined benefit pension schemes during the year were £65m (2016: £68m).

#### Impairment losses on the valuation of investments in subsidiaries £55m (2016: impairment of £20m)

Impairment losses of £55m (2016: impairment of £20m) on the valuation of investments in subsidiaries result from dividends received from subsidiaries.

#### Increase in quota share reinsurance arrangement with AIL from 5% to 50%: £nil (2016: loss of £309m)

The impact on execution of the reinsurance transaction in 2016 to increase the quota share from 5% to 50% is detailed in the table below. This related to business from 2015 and prior years. There is no impact on the Company's performance of other activities in 2017.

	£m	£m
Year ended 31 December	2017	2016
Premiums ceded to reinsurers, relating to 2015 and prior years	-	(2,919)
Change in reinsurer's share of net unearned premium reserve	-	933
Change in reinsurer's share of insurance liabilities	-	1,869
Change in deferred acquisition costs	-	(192)
<b>Loss before tax</b>	<b>-</b>	<b>(309)</b>

#### Reduction in Ogden discount rate: £nil (2016: loss of 238m)

On 27 February 2017, the Lord Chancellor announced a reduction in the discount rate used in the Ogden tables, which are used in the settlement of lump sum payments in bodily injury claims, from 2.5% set in 2001 to minus 0.75%. As at 31 December 2016, the Company's IFRS claims provisions (net of all reinsurance), and its other costs for the year then ended were increased by £238m to allow for the impact of the reduction in the Ogden discount rate. As at 31 December 2017 the Company's IFRS claims reserves have been maintained using the current discount rate of minus 0.75%. The impact of the change in the Ogden discount rate on the Company's other costs for the year ended 31 December 2017 is not material.

### A.4.2 Leasing arrangements

Net rental income from investment properties was £12m (2016: £9m). Operating lease costs were £20m (2016: £22m). The Company's leasing arrangements are described in sections D.1.6 and D.3.2.

## A.5 Any Other Information

In February 2018, the directors declared interim dividends of £392m, of which £334m was settled in cash and £58m was set-off against accrued interest due on the Company's loan to AGH.

The Civil Liability Bill was published on 20 March 2018 with the Ministry of Justice accepting the majority of the recommendations on the approach to the Ogden discount rates proposed by the Justice Select Committee in November 2017. The Bill is not expected to be enacted until later in 2018.

# Aviva Insurance Limited

## Solvency and Financial Condition Report 2017

### B. System of Governance

#### [In this Chapter](#)

- B.1 General Information on the System of Governance
- B.2 Fit and Proper Policy
- B.3 Risk Management System including the Own Risk and Solvency Assessment
- B.4 Internal Control System
- B.5 Internal Audit Function
- B.6 Actuarial Function
- B.7 Outsourcing
- B.8 Any Other Information

## B. System of Governance

This section of the report sets out information regarding the 'System of Governance' in place within the Company.

Details of the structure of the undertaking's 'administrative, management or supervisory body' (defined as including the Board, and Board committees) are provided. The roles, responsibilities and governance of key functions (defined as the Risk, Compliance, Internal Audit and Actuarial functions) are also provided. Other components of the system of governance are also outlined, including the risk management system and internal control system implemented across the business.

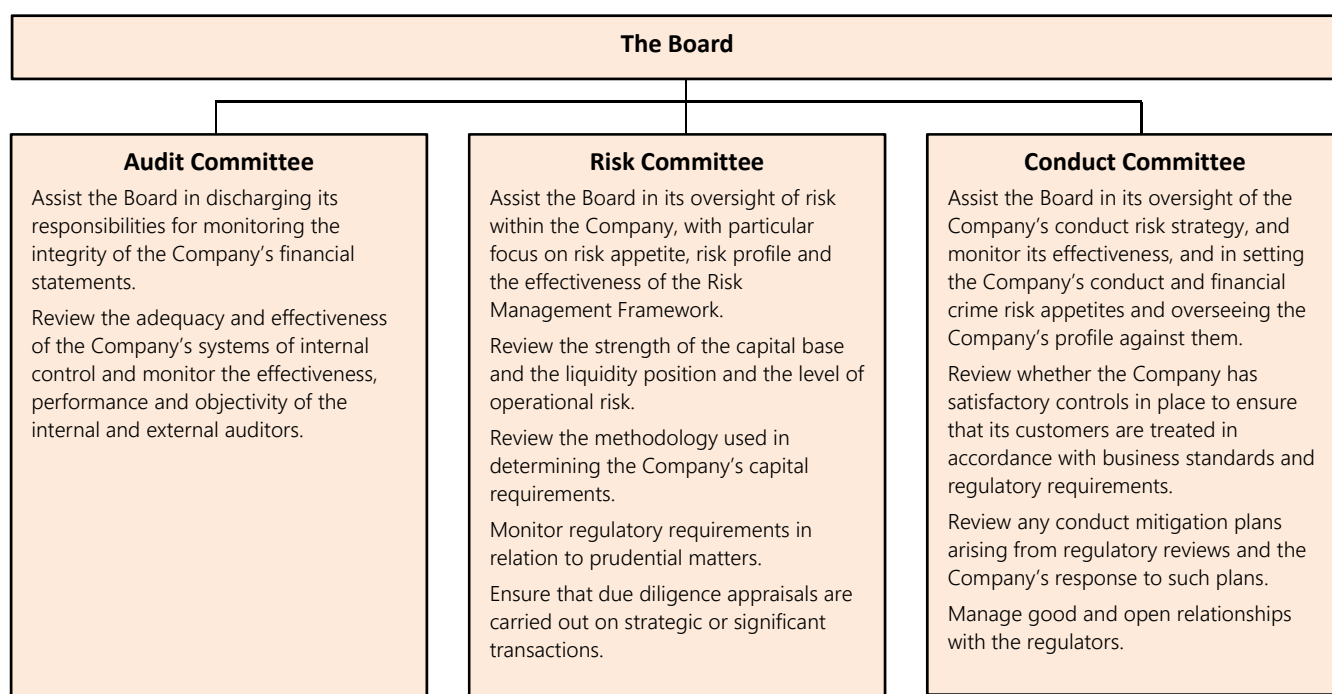
### B.1 General Information on the System of Governance

#### B.1.1 Board structure

The Company's Board is responsible for promoting the long-term success of the Company and for setting its strategy. It sets the Company's risk appetite and satisfies itself that financial controls and risk management systems are robust. A strong system of governance throughout the Company aids effective decision-making and supports the achievement of the Company's objectives for the benefit of policyholders and the shareholder.

The Company's Board has established various committees and delegated responsibilities to assist in its oversight of risk management and the approach to internal controls. The duties of the Company's Board and of each of its committees are set out in their respective terms of reference. The terms of reference list both those items that are specifically reserved for decision by the Board and those matters that must be reported to the Board.

The diagram below shows the segregation of responsibilities between the various committees, in addition to a description of the main roles of each.



The Company's Board comprises the Chairman (an Independent Non-executive Director (NED)), the Chief Executive Officer (CEO), the Chief Financial Officer (CFO), the Managing Director of the UK General Insurance business, and six further NEDs (five independent and one nominated by the Group). The three committees comprise independent NEDs only, with the exception of the Risk Committee which includes the Group Chief Risk Officer.

#### The 'three lines of defence model', and roles and responsibilities of key functions

Roles and responsibilities for risk management in the Company are based around the three lines of defence model.

##### The first line

Management are responsible for the application of the Risk Management Framework, for implementing and monitoring the operation of the system of internal control and for providing assurance to the Audit, Conduct and Risk Committees and the Board.

##### The second line

- The Risk Management Function is accountable for the quantitative and qualitative oversight and challenge of the identification, measurement, management, monitoring and reporting of principal risks and for developing the Risk Management Framework;
- The Actuarial Function is accountable for actuarial methodology, and reporting to the relevant governing body on the adequacy of reserves and capital requirements, as well as on underwriting and reinsurance arrangements; and
- The Compliance Function supports and advises the business on the identification, measurement and management of its regulatory, financial crime and conduct risks and is accountable for monitoring and reporting on the Company's compliance risk profile.

### The third line

The Internal Audit Function provides independent and objective assessment on the robustness of the Risk Management Framework and the appropriateness and effectiveness of internal control to the Audit, Conduct and Risk Committees, and to the Board.

Sections B.3.2, B.4.2, B.5 and B.6 detail the roles, responsibilities, authority, resources, independence and reporting lines of the Risk Management, Compliance, Internal Audit and Actuarial Functions respectively, and how their independence is ensured.

### B.1.2 Material changes in the system of governance

During the year, Aviva adopted a UK-wide approach to managing its UK insurance operations, covering Life insurance, General Insurance and Health businesses. Notwithstanding this change, the Company's Board and Board committee's responsibilities and arrangements, and the fundamental approach to the system of governance, have not materially changed.

### B.1.3 Adequacy of the Company's system of governance

An assessment of the effectiveness of the Company's governance, internal control and risk management systems was conducted at the end of 2017, and led to the CEO certifying that:

- There are sound risk management and internal control systems that are effective and fit for purpose in place across the business; and
- The business operates in a manner which conforms to the minimum requirements outlined in the Company's risk policies and business standards.

The Chief Risk Officer (CRO) provided his own certificate which states that:

- The Risk Function has reviewed and challenged the process supporting the CEO's certification and is satisfied that it can provide reasonable assurance of the material accuracy and completeness of the CEO's assessment; and
- No material gaps exist in the Risk Management Framework.

Any material risks not previously identified, control weaknesses or non-compliance with the Company's risk policies and business standards or local delegations of authority are highlighted as part of this process. The results of the certification process and details of key failings or weaknesses are reported to the Risk Committee and the Board to enable them to carry out an effectiveness assessment. The Risk Committee, on behalf of the Board, last carried out a full review of the effectiveness of the Company's systems of internal control and risk management in February 2018.

### B.1.4 Remuneration policy

The Company's reward principles and arrangements are designed to incentivise and reward employees for achieving stated business goals in a manner that is consistent with the Company's approach to sound and effective risk management. The Company's remuneration policy:

- Aligns to the Company's strategy;
- Incentivises achievement of the Company's annual business plan and longer term sustainable growth of the business; and
- Differentiates reward outcomes based on performance and behaviour that is consistent with the Company's values.

#### Executive directors

The remuneration policy provides market competitive remuneration and incentivises Executive Directors (EDs) to achieve both the annual business plan and the longer-term strategic objectives of the Company. Significant levels of deferral and an aggregate shareholding requirement align EDs' interests with those of shareholders and aid retention of key personnel. As well as rewarding the achievement of objectives, variable remuneration can be zero.

Remuneration of EDs is split between the following components:

- Basic salary informed by individual and business performance, levels of increase for the broader UK employee population and relevant pay data;
- Variable components (refer to section 'Variable components' below for further details);
- Pensions;
- Benefits;
- Relocation and mobility; and
- Shareholding requirement.

#### Variable components

The main forms of variable remuneration for EDs are:

- Annual bonus: Awards are based on performance in the year. Performance is assessed against a range of relevant financial, employee, customer and risk targets designed to incentivise the achievement of strategy as well as individual strategic objectives. Targets are set annually and pay-out levels are determined based on performance against those targets. A significant proportion of any bonus award is deferred into shares which vest in three equal tranches; and
- Long Term Incentive Plan (LTIP): Shares are awarded which vest over a three year period, in some cases dependent on the achievement of performance conditions over that period.



### Pension and early retirement schemes

The Company did not operate any enhanced pension arrangements or early retirement schemes for management during the reporting period.

### NEDs

NEDs receive a basic annual fee in respect of their Board duties. Further fees are paid for membership and, where appropriate, chairing Board committees. The Chairman receives a fixed annual fee. Fees are reviewed annually taking into account market data and trends and the scope of specific Board duties.

The Chairman and NEDs do not participate in any incentive or performance plans or pension arrangements and do not receive an expense allowance. NEDs are reimbursed for reasonable expenses, and any tax arising on those expenses is settled directly by the Company. On the limited occasions when it is appropriate for a NED's spouse or partner to attend a business event, the Company will meet these costs and any tax liabilities that may arise.

### Employees

Remuneration arrangements for employees that are not EDs take account of the seniority and nature of the role, individual performance and local market practice. The components and levels of remuneration for different employees may therefore differ from the policy for EDs. Any such elements are reviewed against market practice and approved in line with internal guidelines and frameworks.

Variable components are discretionary and fully flexible as opposed to a contractual entitlement, and there is a possibility of zero awards being made should the performance of the Company and/or individuals require this (other than where payments are required by law). Individual awards are based on an assessment of performance of individuals allowing for differentiation.

The remuneration of employees in Risk, Compliance, Internal Audit and the Actuarial Function is determined independently of the financial results of the business areas they oversee. This reinforces the independence of these Functions.

### Performance criteria for share awards

Shares can be awarded to both EDs and employees. These vest after three years, in some cases dependent on performance conditions over a three year period, as outlined above.

## B.1.5 Material transactions with the shareholder, persons with significant influence on the Company and members of the Board

Material transactions with the shareholder include:

- **Loan receivable:** As part of the restructuring in 2013, the Company entered into a loan of £5.8bn with AGH, the Company's immediate parent. The loan is secured on the UK Life business and certain non-UK operations of the Group, and has a final maturity date of December 2042. Interest accrued at 308 basis points above 12 month LIBOR until 31 December 2017, after which interest accrues at 240 basis points above 12 month LIBOR until the next reset date on 31 December 2022. Effective in 2017, minimum annual repayments were amended to £50m until December 2026, with no rights of deferral. During the year, the loan balance has been reduced by £144m to £1,369m at 31 December 2017 (£1,513m at 31 December 2016). The reduction was settled via set-off of investment properties transferred to the Company from AGH of £94m and an annual repayment in cash of £50m. Interest of £44m was earned on this loan in 2017 (2016: £64m).
- **Loan payable:** In June 2016, the Company entered into a subordinated unsecured loan from AGH of CAD 480m. The loan, with a carrying balance of £283m (2016: £290m), accrues interest at 474 basis points above the Canadian Dealer Offered Rate and matures in 2046.
- **Dividends:** Interim ordinary dividends totalling £214m on the Company's ordinary shares were declared and settled during 2017 (2016: £1,264m). A total of £69m of interim dividends were settled by way of set-off against accrued interest on the Company's loan to AGH; the remainder was settled in cash.
- **Investment property transfers:** In November 2017, freehold investment properties with a market value of £94 million were transferred from AGH to the Company.

The total compensation to those employees classified as key management, being those having responsibility and authority for planning, directing and controlling the activities of the Company, including the directors, was £11m (2016: £9m).

## B.2 Fit and Proper Policy

### B.2.1 Requirements for the persons who run the Company or who are other key function holders

For persons responsible for running the undertaking or responsible for key functions an assessment of fitness and propriety must consider their allocated responsibilities and skills and experience across the following areas:

- Insurance and financial markets;
- Business strategy and business models;
- System of governance;
- Financial and actuarial analysis;
- Regulatory framework and requirements; and
- Skills relevant to that role.

The Company's requirements in respect of skills, knowledge and expertise for key function holders are set following engagement with both internal and external subject matter experts in each specialism. These requirements and qualifications are captured within individual role descriptions for each key function role.

### B.2.2 Process assessing fitness and propriety

The Company has implemented processes to ensure that individuals employed within it, or acting on its behalf, are both fit and proper in line with the PRA Fit and Proper requirements for individuals subject to the Senior Insurance Managers Regime and the FCA requirements for Approved Persons. This means that, as part of recruitment and employee screening, an individual's career history will be assessed and validated to establish whether an individual's skills and knowledge are appropriately matched to the role. It also means that checks are in place to ensure that an individual is honest, of good reputation, has integrity and is financially sound.

The governance over the fitness and propriety of individuals includes recruitment, performance management and training. However, to ensure that the Company protects itself against employing individuals who potentially could threaten its customers, properties, facilities or reputation, the majority of its fitness and propriety processes take place at recruitment and more specifically at pre-employment screening. A minimum set of basic screening requirements has been agreed and implemented. Additional enhanced screening requirements are applied for individuals who will run the Company or become notified or approved senior managers.

Compliance with the initial and ongoing fitness and propriety minimum requirements is reported on a half-yearly basis by the CEO to the Group People function.

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

### B.3.1 Risk Management Framework

The Risk Management Framework forms an integral part of management and Board processes and the decision-making framework across the Company. The key elements are:

- Risk appetite;
- Risk governance, including risk policies and business standards, risk oversight committees and roles and responsibilities; and
- The IMMMR processes including the use of risk models and stress and scenario testing.

For the purposes of risk identification and measurement risks are usually grouped by risk type: credit, market, liquidity, general insurance and operational risk. Risks falling within these types may affect a number of metrics, including those relating to balance sheet strength, liquidity and profit. They may also affect the performance of products delivered to customers and service provided to customers and distributors, which can be categorised as risks to brand and reputation or as conduct risk.

To promote a consistent and rigorous approach to risk management the Company has adopted a number of risk policies and business standards which set out the risk strategy, appetite, framework and minimum requirements for its operations. Compliance with these policies and standards is confirmed annually.

A regular top-down key risk identification and assessment process is carried out by the Risk Function. This includes the consideration of emerging risks and is supported by deeper thematic reviews. The risk assessment processes are used to generate risk reports which are shared with the relevant risk committees.

Risk models are an important tool in the measurement of risks and are used to support the monitoring and reporting of the risk profile and in the consideration of the risk management actions available. A range of stress (where one risk factor, such as equity returns, is assumed to vary) and scenario (where combinations of risk factors are assumed to vary) tests are undertaken to evaluate their impact on the business and the management actions available to respond to the conditions envisaged.

The Risk Function is accountable for quantitative and qualitative oversight and challenge of the IMMMR process and for developing the Risk Management Framework. Internal Audit provides an independent assessment of the risk framework and internal control processes.

Board oversight of risk and risk management is maintained on a regular basis through the Risk Committee. The Board has overall responsibility for determining risk appetite, which is an expression of the risk the business is willing to take. Risk appetites are set relative to capital and liquidity.

Economic capital risk targets are also set for each risk type, calculated on the basis of the SII balance sheet. The Company's position against risk appetite is monitored and reported to the Board on a regular basis. Long-term sustainability depends upon the protection of franchise value and good customer relationships. As such, the Company has a risk preference that it will not accept risks that materially impair the reputation of the Company and requires that customers are always treated with integrity. The oversight of risk and risk management is supported by the Asset and Liability Committee (ALCO), which focuses on business and financial risks, and the Operational Risk Committee, which focuses on operational and reputational risks.

### B.3.2 Risk Function

The Risk Function is responsible for the design and implementation of the Risk Management Framework, and the design, implementation and independent validation of the IM. The Risk Function reports to the Company's Board on material risks, together with any other specific areas of risk requested by the Board, and assists the Board and management in the effective operation of the Risk Management Framework including, amongst other things, the provision of specialist analysis and quality reviews, an aggregated view of the risk profile, and an assessment of the key risks associated with the business's strategy, major projects, strategic investments and other key decisions.

The Risk Function has authority to review all areas of the Company and has full, free and unrestricted access to all activities, records, property and personnel necessary to complete its work. The CRO has direct management accountability for the Risk Function. Appointment and removal of the CRO are matters reserved for the Board, on the recommendation of the Risk Committee, which supports the independence of the Risk Function.

Sections B.3.1 and this section explain how risk management is integrated into the organisational structure and the decision-making process. To further support the role of risk management in decision-making processes, the role of the 'first line' is critical as part of the three lines of defence model. The CEO is responsible for the implementation of the Company's strategies, plans and policies, the monitoring of operational and financial performance, the assessment and control of financial, business and operational risks and the maintenance and ongoing development of a robust control framework and environment in their areas of responsibility. During 2017, the Company's ALCO, chaired by the CFO, assisted the CFO with the discharge of his responsibilities in relation to management of the Company's balance sheet within risk appetite and provided financial and insurance risk management oversight. The Company's Operational Risk Committee was chaired by the CFO. It supported the first line owners of key operations and franchise risks in the discharge of their responsibilities in relation to operational risk management. For 2018, an Asset and Liability Committee and Operational Risk and Conduct Committee have been established covering all UK insurance operations. These are supplemented by management committees focused solely on the Company.

### B.3.3 Own Risk and Solvency Assessment

The Company considers that its Own Risk and Solvency Assessment (ORSA) comprises all the processes and tools that underpin the consideration of risk and capital implications in key decisions, including business planning. It provides a continuous and forward-looking assessment of the short-term and long-term risks that the Company faces, or may face, and ensures that its capital requirements are met at all times. In this context, the Board has confirmed the use of the regulatory capital requirement plus a risk appetite buffer as the Company's own measure of capital for the purposes of the ORSA.

The ORSA therefore comprises a number of elements of the Risk Management Framework, which are embedded in the business through the requirements of the business standards around capital allocation, strategy, business planning and stress testing. These elements create an overview of the impact of risk on the business, which are taken into account by management in day-to-day decision-making. In particular, using economic capital in decision-making ensures risk and capital management are connected. The outcomes of the ORSA processes provide the Company's Board and management with insights on the key risks and current and future capital requirements.

The CEO and his direct reports are responsible for the majority of the underlying ORSA processes set out above. The Risk Function is responsible for the design of the Risk Management Framework, including the ORSA Policy and annual ORSA reporting.

#### Review and approval

The outputs from the ORSA processes are reported to and reviewed by the Board and the Risk Committee regularly during the year. The Risk Committee sets the approach to the ORSA and, on behalf of the Board, oversees the ORSA processes including the identification of risk, the methodology and assumptions used in the IM, and the results of the IM validation exercise. The results of the Company's ORSA processes are considered by the Board when reviewing the Company's strategy and approving annually the business and capital plan.

The annual ORSA Report brings together and summarises a high level description of the key components of ORSA, together with key developments and outcomes during the year. This is submitted to the Board, and subject to their approval shared with the PRA.

Economic capital (as a risk based capital measure) is embedded in the Company's Risk Management Framework and is used as a key input to a wide range of business and strategic decisions. The framework, supported by risk policies and business standards, sets out the areas where economic capital management information must be used as part of decision-making and risk management processes. This ensures that requirements to use economic capital are embedded within the relevant processes including, but not limited to, strategy and planning. Economic capital is calculated using the IM or through the Standard Formula (SF) calculation, and aggregated to determine the Company's economic capital requirement using its Partial Internal Model (PIM).

### B.3.4 Governance of the IM

The CRO is the ultimate owner of the IM; the day-to-day responsibilities are delegated to the Chief Risk Actuary. The Chief Risk Actuary gives assurance to the Risk Committee that the IM is appropriate for use on an ongoing basis. He also confirms the IM adequately reflects the Company's risk profile, is accurate and works effectively.

The SII IM and Data Governance Business Standards are part of the overall Risk Management Framework. These combine to ensure that the Company operates within a controlled environment when developing methodologies and assumptions and when running processes and systems.

The Risk Committee is responsible for approving any material IM changes before submission to the College of Supervisors for approval. The quarterly model change reports, and supporting evidence, provide the required information to support Risk Committee and the College of Supervisors' approval.

There has been no material change to the governance of the IM during 2017.

#### Validation process

The Company's IM is validated by testing the individual calibrations and methodologies that are input into the model and the results that are output from the model. The validation tests applied comprise both mathematically defined tests and those based on qualitative judgement. Key tests include benchmarking, back-testing and sensitivity testing. The validation tests are run, documented and assessed against criteria which are designed to draw conclusions on the appropriateness of the IM.

The Internal Model Independent Validation (IMIV) Business Standard defines the scope of IMIV. The Enterprise Risk Director reviews the findings of the exercise and provides an opinion to the Risk Committee as to whether the IM is suitably accurate and fit for purpose, and whether it is recommended for approval by the Board.

## B.4 Internal Control System

### B.4.1 System of Internal Control

The Company's principles for ensuring effective internal control are set out in the Risk Management Framework and, in particular, the Internal Control Business Standard. These include:

- An appropriate "tone from the top". This supports the effective management of exposures, adequate resourcing, effective communication, malpractice reporting, a business ethics code that is annually signed up to by employees, and a commitment to integrity, ethical behaviour and compliance;
- A clear organisational structure that supports the system of internal control and includes the effective operation of an adequately resourced three lines of defence model, appropriate and proportionate segregation of duties, a clear system of delegated authorities, clearly defined roles and responsibilities for staff, and the consideration of risk management and control responsibilities when setting objectives for, and reviewing the performance of, all staff;
- Implementation of risk policies and business standards, and consistent IMMMR of all risks;
- Effective controls for each of its core business processes which are regularly monitored and reported on; and
- A risk oversight process that provides adequate challenge to the completeness and openness of internal control and risk assessment.

### B.4.2 Compliance Function

The primary purpose of the Compliance Function is to assess and manage exposure to regulatory risk. The Compliance Function is an integral part of the Risk Management Framework and constitutes a key part of the Company's corporate governance, including relationships with the FCA and the PRA, and other regulatory bodies. The function is a critical contributor to the safe and sound operation of the Company and underpins the achievement of its strategy and business goals. The key processes that comprise the Company's compliance activity are:

- Conduct regulatory risk management (including monitoring regulatory developments), performed by the Compliance Function and including activities such as:
  - Setting the conduct and financial crime policy framework;
  - Providing advice, support, guidance and challenge on conduct and financial crime risk; and
  - Managing conduct and financial crime regulatory engagement.
- Prudential regulatory risk management (including monitoring regulatory developments), performed by the Risk Function and including activities such as:
  - Setting the prudential regulatory risk policy framework;
  - Providing advice, support, guidance and challenge on prudential regulatory risk; and
  - Managing prudential regulatory engagement.
- Legal developments monitoring, performed by the Legal & Company Secretarial Function.

Through these processes the Compliance, Risk Management and Legal Functions also take responsibility for reporting information to the Board and its committees. The oversight of conduct risk has remained a key focus of the Conduct Committee during 2017. The Committee receives a report from the CRO at each meeting which covers any material concerns regarding conduct risk and the treatment of customers generally, along with details and an assessment of the adequacy of management's response.

The CRO has responsibility for prudential and conduct regulatory risk management, whilst the General Counsel is responsible for monitoring legal developments. Those carrying out compliance activities have authority to review all areas of the Company and have full, free and unrestricted access to all activities, records, property and personnel necessary to complete their work, where appropriate.

## B.5 Internal Audit Function

The Company's Internal Audit Function is led by the Internal Audit Director who reports directly to the Group Chief Audit Officer and to the Chairman of the Company's Audit Committee.

The Internal Audit Function provides regular reports to the Company's Audit Committee on the robustness of the Company's Risk Management Framework and the appropriateness and effectiveness of the system of internal control. In doing this it considers the adequacy of the Company's system of internal control to manage its business risk and to safeguard its assets and resources. It also considers the effectiveness of any actions put in place by management to address any deficiencies that might exist in the system of internal control.

The Internal Audit Function investigates and reports on cases of suspected financial crime and employee fraud and malpractice, and undertakes designated advisory projects for management.

### Independence and objectivity

The Internal Audit Function maintains its independence and objectivity by reporting directly to the Group Chief Audit Officer and the Chairman of the Company's Audit Committee. The Audit Committee has a duty to recommend the appointment or dismissal of the Internal Audit Director to the Board and to participate, jointly with the Chief Audit Officer or designee, in the determination of the objectives of the Internal Audit Director and the evaluation of his levels of achievement, including consultation with the CEO.

The Internal Audit Director proposes a budget which ensures that Internal Audit has sufficient skills and resources to discharge its responsibilities. Internal Audit is authorised to review all areas of the Company and has full, free, and unrestricted access to all activities, records, property, and personnel necessary to complete their work.

Internal Audit Function staff have no direct responsibility for any operational activities. There is a formal policy of rotating staff to ensure that independence is maintained. There is also a restriction on the audits that staff who have previously worked elsewhere in the Company can perform. The Internal Audit Function cannot perform any projects for management that will threaten its actual or perceived independence and objectivity.

An annual declaration of independence is signed by all members of the Internal Audit Function's staff.

## B.6 Actuarial Function

The Actuarial Function is accountable for actuarial methodologies and calibrations, plus the resultant Best Estimate Liabilities and capital requirements. It also considers the appropriateness of the IM, supports the IM validation exercises and maintains the IM change log. The Actuarial Function produces an annual report to the Board providing all of the information necessary for the Company's Board to form their own opinion on the adequacy of Technical Provisions and on the Company's underwriting and reinsurance arrangements.

The independence of the Actuarial Function is derived through its membership in the wider Risk Function. The Actuarial Function is led by the Chief Risk Actuary, who reports to the Company's CRO. Persons employed in certain specific roles within the Actuarial Function are subject to the Fit and Proper policy requirements to ensure they have the requisite skills and knowledge to complete their responsibilities. (Fit and Proper requirements are considered in section B.2.).

The Actuarial Function has the authority to review all areas of the Company and has full, free and unrestricted access to all activities, records, property and personnel necessary to complete its work.

## B.7 Outsourcing

### Policy

The Procurement and Outsourcing Business Standard contains information on the Company's outsourcing policy, setting out the relevant responsibilities, objectives, process, and monitoring arrangements to be applied in cases of outsourcing, all of which shall be consistent with the overall strategy. The standard applies equally to any externally or internally (intra-group) outsourced activity. The objective of this standard is to ensure that minimum control objectives and controls for supplier-related activities are followed by all elements of the business, to ensure that supply risk is managed effectively, customers are being treated fairly and continue to receive good outcomes, as well as mitigating potential financial, operational, contractual, and brand damage caused by inadequate management.

The standard aligns with UK regulatory expectations, the FCA, the PRA, SII and where appropriate, regulatory guidance will be applied as a requirement. The standard applies to all staff involved in supplier-related activities and provides direction to staff on their roles and responsibilities in effectively managing supplier activity. It provides clarity on the definition of outsourcing, including where activity is delegated to an intermediary, and whether an outsourced function or activity is assessed as critical or important. All staff have a responsibility to comply with this standard if they are involved with supplier-related activity.

The Board has approved the objectives and controls in the standard which cover the following areas:

- Supply governance: business oversight of operational performance for sourcing and supply management activities;
- Sourcing: how a service provider of suitable quality is selected;
- Supplier contracting and approvals: financial, commercial and legal approval of contracts; and
- Supplier management and business continuity: risk-based approach to management of supply contracts.

Critical or important outsourcing will attract the highest level of rigour, including regulatory notification, performance and relationship reviews, regulatory compliance review, and risk and control assessments.

### Critical and important outsourced functions and activities

The Company outsources a range of activities consistent with its outsourcing strategy. These include elements of underwriting, customer contact, including claims handling, IT, accounting services, property services and investment management. Critical or important outsourced operational activities include handling of mobile device and travel insurance claims and provision of data centres.

### Jurisdiction of service providers

Critical or important outsourced activities are carried out mostly in the UK, but also in several other jurisdictions. The latter includes handling of mobile device insurance claims for business sold in the EU but outside the UK, international claims predominantly in the location of the insured risk and support functions in India and Sri Lanka. Investment management services are outsourced within the Group in the UK.



## B.8 Any Other Information

The Company has no other material information to disclose.

# Aviva Insurance Limited

## Solvency and Financial Condition Report 2017

### C. Risk Profile

#### [In this Chapter](#)

- C.1 Underwriting Risk
- C.2 Market Risk
- C.3 Credit Risk
- C.4 Liquidity Risk
- C.5 Operational Risk
- C.6 Other Material Risks
- C.7 Any Other Information

## C. Risk Profile

The 'Risk Profile' section of this report provides information on the key risks encountered by the Company as well as the corresponding processes for monitoring the risk exposures and the techniques in place for mitigating these risks. Comments have been included in the following sections to highlight where the Company is exposed to underlying risk arising from ACI.

### C.1 Underwriting Risk

#### C.1.1 Exposure

The Company's exposure to non-life (including health similar to non-life) insurance underwriting risk in the UK, Ireland and Canada arises from:

- Inadequate claims reserving assumptions;
- Unforeseen fluctuations in the timing, frequency and severity of claims and claim settlements relative to expectations;
- Unexpected claims arising from a single source;
- Inaccurate pricing of risks or inappropriate underwriting of risks when underwritten; and
- Inadequate reinsurance protection or other risk transfer techniques.

The Company does not underwrite life insurance business, or health products similar to life insurance. Longevity risk, associated with bodily injury claims settled as PPO, is reinsured with Aviva Life & Pensions UK Limited (UKLAP), a fellow Group company.

The Company has a preference for general insurance risk in measured amounts for explicit reward, in line with its core skills in underwriting and pricing. This includes risks ceded to the Company under an inwards reinsurance arrangement with its subsidiary undertaking, Gresham, with effect from 1 January 2006 whereby nearly all of Gresham's premiums, claims and expenses are reinsured by the Company. The Company also has an inwards adverse reserve deterioration agreement with its subsidiary undertaking, Ocean Marine (see section C.3.2).

The Company has a 50% internal quota share reinsurance arrangement with AILL. Further details are provided in section A.4.1 and section C.3.2.

The Company's underlying exposure to underwriting risk has remained relatively stable and consistent with new business written in the year. However, the Company's exposure to underwriting risk remains sensitive to a change in the Ogden discount rate, which is used in calculating awards for claims involving future care costs or loss of earnings. On 7 September 2017, the Lord Chancellor set out a proposal for legislation to change the way the Ogden discount rate is set. Further details are provided in section A.1.2. Any change in Ogden rate would impact underwriting risk exposure because it affects the amount of awards for lump sum bodily injury claims and therefore also the tendency for claimants to settle on a lump sum basis rather than as PPO.

The Company's overall exposure to underwriting risk is measured using the SCR. QRT S.25.02.21 (Appendix F.1.7) shows that the Company's undiversified SCR for underwriting risk is £0.8bn (2016: £0.6bn). Underwriting risk is also measured and monitored in terms of best estimate liabilities, total sum insured and estimated maximum loss. Estimated maximum loss is an estimation of the maximum loss that could be reasonably sustained as a result of a single incident considered to be within the realms of probability. There has been no material change to the measures used to assess underwriting risk during the reporting period.

#### C.1.2. Risk concentration

The Company avoids underwriting risk concentration through its scale, geographical distribution of underwriting risks, diversity of product lines and diversity of distribution channels. Individual risks and groups of risk are only accepted if, after diversification and reinsurance, the residual risk is within appetite. Controls are in place to ensure accumulations of risk are identified, evaluated and controlled.

The Company's general insurance risk is primarily located in the UK and Ireland and its most concentrated non-life underwriting peril is North European Windstorm. The Company is also exposed to the underlying general insurance risk arising from its principal subsidiary ACI, which operates in Canada. This is managed locally but is captured within the Company's SCR. The most concentrated non-life underwriting peril in Canada is British Columbian Earthquake.

#### C.1.3 Risk mitigation

The Company manages its exposure to general insurance risk through the application of controls frameworks that include:

- Claims reserving that is undertaken by actuaries and is also subject to periodic external review;
- Risk appetites to limit exposures to key general insurance risks;
- Extensive use of data, financial models and analysis to improve pricing and risk selection;
- Underwriting limits linked to delegations of authority that govern underwriting decisions;
- Product development in a management framework that ensures products and propositions meet customer needs;
- Product limits and exclusions;
- Governance of outsourced functions writing products on behalf of the Company; and
- Documented claims management philosophies and procedures.

The primary technique used to mitigate underwriting risk is reinsurance. Reinsurance is purchased to mitigate underwriting risk and to maintain exposures within appetite. In some cases, the Company participates in Group reinsurance programmes, which leverage economies of scale whilst allowing the Company to trade to the full extent of its underwriting appetite.

The Company and its subsidiaries have a number of reinsurance arrangements in place, with both internal and external counterparties, to mitigate underwriting risk. Major reinsurance arrangements include:

- Catastrophe reinsurance providing protection against the risk of natural hazard events (e.g. earthquake, windstorm);
- Reinsurance of most of the Company's legacy UK latent claims reserves;
- Reinsurance of the legacy London Market claims reserves of the Company's subsidiary undertaking, Ocean Marine;
- Reinsurance of longevity risk on the Company's bodily injury claims settled as PPO;

- The 50% quota share reinsurance arrangement with the Group's internal reinsurance vehicle, AILL. Further details are provided in section A.4.1 and section C.3.2;
- Reinsurance of specific flood risks to Flood Re Limited;
- Reinsurance of terrorism risk to Pool Reinsurance Company Limited;
- Casualty excess of loss reinsurance providing protection against the risk of large losses arising from motor liability or general liability insurance; and
- Property excess of loss reinsurance providing protection against the risk of large losses arising from property insurance.

Reinsurance purchases are reviewed to verify that the levels of protection being bought reflect any developments in exposure and the risk appetite of the Company. The basis of these purchases is underpinned by extensive financial and capital modelling and actuarial analyses which consider the cost and capital efficiency benefits. This may involve utilising externally sourced probabilistic models to verify the accumulations and loss probabilities based on specific portfolios of business. In addition to external models, scenarios are developed and tested using Company data to determine potential losses and appropriate levels of reinsurance protection. Reinsurance covers single large exposures and concentrations of exposures. The Company has processes in place to manage catastrophe risk and purchases catastrophe reinsurance to protect against significant natural and man-made hazard events.

The management of insurance risk is overseen by specific senior management committees, namely the ALCO, the Insurance Committee and the Reserve Committee.

#### **C.1.4 Stress and scenario testing and sensitivity analysis**

Descriptions of the methods used, assumptions made and outcomes of stress and scenario testing and sensitivity analysis are provided in section C.7.1.

#### **C.1.5 Special purpose vehicles**

The Company has not transferred underwriting risk to special purpose vehicles, as defined by the Solvency II Directive.

## C.2 Market Risk

### C.2.1 Exposure

The Company's exposure to market risk arises from the risk of adverse financial impacts resulting directly or indirectly from fluctuations in interest rates, equity prices, property prices, foreign currency exchange rates and inflation. Market risk arises due to fluctuations in both the value of liabilities and the value of assets held. In addition to its own risks, the Company's SCR also includes the underlying risks of its subsidiaries, including its principal subsidiary ACI.

Interest rate risk arises primarily from the Company's fixed income securities and liabilities, which are exposed to fluctuations in interest rates. The Company seeks to match assets to liabilities and uses interest rate derivatives to meet its interest rate appetite.

Property price risk arises from the Company's investments in investment property and property investment vehicles. Property price risk is accepted by the Company, within appetite, to drive investment return as part of the Company's investment strategy.

Equity risk arises from the level or volatility of market prices for equities. Equity risk is accepted by the Company to drive investment returns as part of the Company's investment strategy, including the use of equity derivatives to mitigate risk where considered appropriate. The Company is also exposed to global market risks through its holdings in a unitised target return fund (Aviva Investors Multi Strategy Fund).

The Company is exposed to inflation risk where there is a mismatch between assets and liabilities that are sensitive to inflation. RPI elements of inflation risk are monitored and managed through asset-liability matching and hedging, where appropriate, in accordance with the agreed risk appetite.

The Company's material exposure to foreign currency risk arises primarily from its investment in ACI, the business of its Irish branch, the growth of Global Corporate and & Specialty Risk (GCS) business lines, and non-domestic currency denominated investments held to drive enhanced investment returns. The Company seeks to match non-sterling liabilities from its Ireland and international GCS business using a combination of non-sterling assets and currency derivatives to ensure liabilities in non-domestic currency can be settled as they fall due. The Company also seeks to mitigate the impact of foreign currency risk to its regulatory surplus (denominated in sterling) by using currency derivatives to hedge the contribution of ACI (denominated in Canadian Dollars) to its regulatory surplus. The Company also seeks to mitigate foreign currency risk on non-domestic denominated investments, where not matched to liabilities, by the use of currency derivatives.

The Company's overall market risk exposure has remained relatively stable during the reporting period. However, the Company's exposure to interest and inflation risk remains sensitive to the prevailing Ogden discount rate and associated assumptions about the number of future PPO.

The Company's overall exposure to market risk is measured using the SCR. QRT S.25.02.21 (Appendix F.1.7) shows that the Company's undiversified SCR for market risk is £0.9bn (2016: £0.8bn). This includes credit risk in respect of the Company's bond holdings whose risk profile and management is described in section C.3. In addition to the SCR, a number of risk-specific metrics are used to monitor market risk at a granular level:

- Key interest rate, RPI, and currency related parameters; and
- Changes in the price level of individual assets or specific asset classes, for example property prices.

There has been no material change to the measures used to assess market risk during the reporting period.

### C.2.2 Risk concentration

The Company monitors its investment exposures in aggregate across all classes of financial instruments (debt securities, equities, derivatives and other investments), to individual issuers, geographies, sectors, and asset classes.

The Company's largest foreign currency exposure is to the Canadian Dollar, via ACI, with CAD1.4bn notional currency forward derivatives in place to hedge the foreign exchange risk to the Company's Regulatory surplus position. In 2016, exposure to the Canadian Dollar was hedged using foreign exchange options.

The valuation of assets and liabilities are materially impacted by movements in market-implied interest rates and inflation, with those risks being managed within pre-defined risk appetites using a combination of asset-liability matching and derivatives.

### C.2.3 Risk mitigation

The Company manages market risk within its market risk framework, within local regulatory constraints and in line with established Group policy, including minimum principles for matching liabilities with appropriate assets. As described in section C.2.1, the Company monitors exposures to market risks and uses derivatives to mitigate interest rate, inflation, foreign currency exchange rate and equity risks.

The Company only uses derivatives to reduce risks and facilitate efficient portfolio management. Risks arising from use of derivatives for hedging purposes include basis risk, which is the risk of an unexpected adverse financial impact arising because the exposure covered by a risk-mitigation technique, such as hedging using derivatives, does not correspond to the Company's risk exposure. The Company controls derivative basis risk by applying strict controls to its processes for their administration and valuation. The Company's control framework for derivative risk is consistent with market and industry practice.

In accordance with the requirements of its Financial Risk Mitigation Business Standard, the Company assesses and documents the effectiveness of arrangements to mitigate market risk. This assessment is initially undertaken prior to deciding whether or not to enter into an arrangement, and considers the impact of the proposed arrangement on key metrics including:

- Risk measures, including economic capital; and
- Financial measures, including cash flow, IFRS operating profit, liquidity and expenses.

If the initial assessment indicates that the impact on key metrics is material, further assessments are carried out at regular intervals throughout the duration of the arrangement. These assessments typically include stress testing and sensitivity analysis. Transactions to mitigate the same risk may be considered in aggregate (e.g. programmes to mitigate interest rate risk or foreign exchange risk).

The Company conducts on-going monitoring of the effectiveness of market risk mitigation techniques by reporting management information and analysis to the ALCO and the Board's Risk Committee. Processes are also in place to monitor key economic data against pre-defined trigger points to enable appropriate oversight and actions to take place if economic conditions deteriorate, as set out in the Company's pre-prepared response plans.

#### **C.2.4 Stress and scenario testing and sensitivity analysis**

Descriptions of the methods used, assumptions made and outcomes of stress and scenario testing and sensitivity analysis are provided in section C.7.1.

## C.3 Credit Risk

### C.3.1 Exposure

The Company's exposure to credit risk arises from the risk that it will incur a financial loss from the default or failure of third parties to meet their payment obligations to the Company, or variations in market values as a result of changes in expectations related to these risks. In addition to its own risks, the Company's SCR also includes the underlying risks within its subsidiaries, including its principal subsidiary ACI.

The Company's approach to managing credit risk recognises that there is a risk of adverse financial impact resulting from fluctuations in credit quality of third parties including default, rating transition and credit spread movements. The Company's credit risks arise principally from exposures to debt securities, loans, insurance debtors, reinsurance counterparties and other assets such as bank deposits and derivative and securities financing counterparties.

The Company's management of credit risk includes implementation of credit risk management processes (including limits frameworks), and detailed reporting and monitoring of exposures against pre-established risk criteria. The management of credit risk is overseen by the ALCO.

The principal basis used to measure the Company's exposure to counterparty risk is the SCR. QRT S.25.02.21 (Appendix F.1.7) shows that the Company's undiversified SCR for counterparty risk is £0.2bn (2016: £0.1bn). Counterparty risk relates to the risk associated with reinsurers and insurance debtors. The Company is additionally exposed to the credit risk associated with investment bond holdings included in the market risk SCR reported in the QRT as described in section C2.1. The following metrics are also used by the Company when measuring and assessing its credit risk exposure and to support risk management actions and investment decisions:

- Maximum exposure: credit exposure of the Company's financial assets to counterparties;
- External credit rating: available Moody, Standard & Poor and Fitch ratings;
- Market adjusted credit ratings: external credit ratings modified for the market price of the counterparty's credit default swap; and
- Internal credit ratings: determined for broker counterparties that are not externally rated, using methodologies broadly consistent with those used by external rating agencies.

There has been no material change to the measures used to assess credit risk during the reporting period and the Company's exposure to credit risk, including counterparty risk, has remained relatively stable throughout the year.

The overall credit quality of the Company's financial investments is strong. At 31 December 2017, investment grade debt securities (external credit rating AAA to BBB) comprised 100% (2016: 99.8%) of total debt securities. Reinsurance assets with external credit ratings of AA to A comprised 96.7% (2016: 98.5%) of total reinsurance assets.

### C.3.2 Risk concentration

The Company's credit limit framework restricts investment in individual issuers, geographies, sectors, and asset classes to ensure the Company is not exposed to significant concentrations of credit risk.

The Company's main concentration of external credit risk arises from holding UK government debt securities. At 31 December 2017 the Company held £1,430m (2016: £1,624m) of UK government debt. The Company's biggest industry sector exposure is to worldwide bank debt securities (£338m). The majority (92%) of the Company's holding of bank debt securities is senior debt or AAA rated covered bonds.

The Company's largest external reinsurance counterparty is Swiss Reinsurance Company Limited (including its affiliated companies). At 31 December 2017, the reinsurance asset recoverable is £764m (2016: £815m). This exposure is reduced by collateral comprising a portfolio of highly rated assets amounting to £206m (2016: £206m).

The Company's largest intra-group reinsurance counterparty is AILL. At 31 December 2017, the reinsurance asset recoverable from AILL (excluding unearned premium reserve) is £2,346m (2016: £2,355m). Credit risk is mitigated by a funds withheld arrangement, whereby the Company holds a balance equal to the higher of IFRS or SII technical provisions of the reinsured business.

The Company has a loan facility arrangement with AGH, the Company's immediate parent. During the year, the loan balance has been reduced by £144m to £1,369m at 31 December 2017 (2016: £1,513m). This reduction was settled via the transfer of investment properties to the Company of £94 million and an annual loan repayment of £50 million. The loan is secured on a range of Group undertakings. The range of undertakings was simplified during the year as part of a revision of the loan arrangement, which has had no material impact on the level of the excess of collateral over the value of the loan. The loan has a final maturity date of December 2042.

The Company has an inwards adverse reserve deterioration agreement with its subsidiary undertaking, Ocean Marine. This agreement provides Ocean Marine with an extra £1bn of reinsurance cover to protect against circumstances in which its reinsurance arrangement with NIC is exhausted or otherwise fails to satisfy claims. Ocean Marine's reinsurance arrangement with NIC provides substantial protection in excess of its current gross insurance liabilities.

The Company has an arrangement with UKLAP, a fellow Group company, for the outwards reinsurance of its obligations in respect of PPO. At 31 December 2017, the reinsurance asset recoverable from UKLAP is £556m (2016: £575m). The credit risk exposure is mitigated by a funds withheld arrangement. The Company retains legal title of the assets backing the reinsured liabilities whilst UKLAP retains beneficial ownership. The funds withheld are maintained quarterly to match the reinsurance asset.

The Company has a subordinated unsecured loan arrangement with ACI. The loan, with a carrying balance of CAD350m (2016: CAD350m), has a final maturity date of March 2045. In the event that ACI's minimum regulatory capital requirement falls below certain local trigger levels, ACI may redeem the loan in exchange for issuing equity whose aggregate value is equal to the principal amount outstanding on the loan.

The Company also entered into a subordinated unsecured loan from AGH of CAD480m and used the proceeds to provide a subordinated unsecured loan to ACI of CAD480m; both arrangements were entered into in 2016 and have a final maturity date of 2046.

The Company has entered into stock lending arrangements during the year in accordance with established market conventions, with the carrying amount of financial assets pledged for stock lending at 31 December 2017 of £930 million (2016: £1,073 million). The credit risk associated with the Company's securities financing operations is mitigated by over-collateralisation. The carrying amount of financial assets collateral received in this manner at 31 December 2017 was £987 million (2016: £1,155 million).

### **C.3.3 Risk mitigation**

Risk mitigation techniques are used where and when deemed appropriate. These are utilised, where possible, to remove residual unwanted risks, as well as to bring or keep exposure limits within appetite, and include methods such as collateralisation and funds withheld arrangements.

As described in section C3.1 and C.3.2, the Company has in place a credit control framework to manage credit risk, and uses techniques including collateralisation and funds withheld arrangements to mitigate unwanted credit risk.

In accordance with the requirements of the Group Financial Risk Mitigation Business Standard the Company assesses and documents the effectiveness of arrangements to mitigate credit risk. On-going monitoring is carried out by reporting management information to the ALCO and the Board's Risk Committee, against pre-defined trigger points, to enable appropriate oversight and to prompt action if effectiveness deteriorates, as set out in the Company's pre-prepared response plans.

### **C.3.4 Stress and scenario testing and sensitivity analysis**

Descriptions of the methods used, assumptions made and outcomes of stress and scenario testing and sensitivity analysis are provided in section C.7.1.



## C.4 Liquidity Risk

### C.4.1 Exposure

The Company's exposure to liquidity risk arises from the risk that its liabilities cannot be settled, in a timely and cost-effective manner, as they fall due because of insufficient liquid assets. Liquidity risk may arise from uncertainty of the value and timing of liabilities or the ability to realise assets to produce cash to meet obligations. The Company assesses liquidity risk under a range of scenarios and various levels of liquidity stress. Sources of liquidity risk include:

- Insurance underwriting e.g. catastrophe claims arising from adverse weather events;
- Variances of actual operational cash flow from shorter-term forecasts; and
- Other cash flow volatility e.g. derivative and collateral calls arising from the Company's risk mitigation activities.

The principal bases used to measure and assess the Company's exposure to liquidity risk are liquidity coverage ratios, absolute liquidity coverage relative to pre-defined liquidity risk appetites and the quantum of certain liquid assets. Liquidity coverage ratios measure the extent to which available liquidity is sufficient to meet expected liquidity requirements following an extreme liquidity-specific stress event over short-term and long-term stress scenarios. Liquidity is also monitored in the event of a stressed run-off of the Company's liabilities following closure to new business and managed within the Company's Stressed Run-Off Liquidity (STROL) risk appetite.

There has been no material change to the measures used to assess liquidity risk during the reporting period.

The Company's liquidity profile was maintained within appetite on both absolute and stressed liquidity coverage ratio bases, over going concern short-term and long-term scenarios, and under stressed run-off basis throughout the year, and overall there was no material movement in the Company's liquidity position against its risk appetite.

### C.4.2 Risk concentration

The credit limit framework described in section C.3.2 above also avoids concentrations of liquidity risk by preventing investment in a restricted number of issuers, asset classes and sectors. The Company has set its investment strategy to ensure it has sufficient liquid funds to meet its expected obligations as they fall due. The diversity of sources of liquidity available to the Company averts concentration of liquidity risk.

### C.4.3 Risk mitigation

The Company manages its liquidity risk by considering the liquidity impact before accepting new risks and managing its existing liquidity profile by:

- Daily monitoring of projected short-term cash flow needs;
- Setting an investment strategy which reflects liquidity requirements and the potential liquidity profile of liabilities;
- Setting liquidity risk appetites which require that sufficient liquid resources be maintained to cover net outflows in a stress scenario over a range of timeframes;
- Defining trigger levels that enable action to be taken before those levels are breached; and
- Maintaining a liquidity risk management plan and contingency funding plan which detail management actions to address liquidity funding requirements in a significant stress scenario.

In December 2017, the Company terminated its contingent capital facility arrangement that had previously provided access of up to £500m of cash in the event of a shortfall of the Company's STROL against risk appetite. As a result of changes to the loan facility arrangement with AGH, the contingent capital facility is no longer deemed necessary.

The Company monitors the effectiveness of liquidity risk mitigation techniques as follows:

- The internal controls, that enable effective liquidity risk management, are subject to assurance testing to ensure they operate effectively; and
- Actual and projected liquid resources, cash inflows and outflows, as well as maturity analyses on insurance liabilities and financial assets, in both normal and stressed scenarios, is regularly reported to and monitored by ALCO and the Board's Risk Committee, against pre-defined trigger points to enable appropriate oversight and identify any appropriate actions.

### C.4.4 Expected Profit Included in Future Premium (EPIFP)

The amount of EPIFP, calculated in accordance with Article 1 of the SII Regulations and included within the valuation of the Company's Technical Provisions as at 31 December 2017, is immaterial. (See the Own Funds QRT S.23.01.01, Appendix F.1.6).

### C.4.5 Stress and scenario testing and sensitivity analysis

Descriptions of the methods used, assumptions made and outcomes of stress and scenario testing and sensitivity analysis are provided in section C.7.1.

## C.5. Operational Risk

### C.5.1 Exposure

The Company's exposure to operational risk arises, in the UK, Ireland and Canada, from the risk of direct or indirect loss, caused by inadequate or failed internal processes, people and systems, or external events including changes in the regulatory environment. The Company has a limited appetite for operational risk and aims to reduce these risks as far as commercially sensible.

Conduct risk, an element of operational risk, is where the Company does not achieve positive or fair customer outcomes. Management of conduct risk was a key priority for the Company across the whole lifecycle of its products, and throughout the end to end journey of its customers in 2017, with robust governance and metrics embedded across the organisation.

The Company also seeks to manage its exposure to reputational risk, which is the risk of loss to the Company's franchise value from damage caused to the Company's brands or reputation. Examples of factors, regardless of whether authenticated or not, which could damage the Company's brands or reputation include litigation, employee misconduct, operational failures, the outcome of regulatory investigations, media speculation and negative publicity, disclosure of confidential client information or inadequate services.

The Company's strategy of digital customer interaction, its use of advanced data analytics and the increasing cyber security threat, together with regulators' attention to conduct issues, has increased its inherent exposure to risks such as data theft, conduct breaches and customer service interruption arising from IT systems failure. However, the Company has sought to contain and reduce exposure to these risks through on-going investment in programmes to improve IT security and resilience, disaster recovery, data governance and outsourcing. The Company has an Operational Risk and Control Management Framework, which integrates the results of the risk identification and assurance activities carried out across the Company's three lines of defence.

Operational risks are initially identified and assessed against implemented controls. Residual risk, outside tolerance, is given prioritised management action to reduce it within tolerance. Operational risk is quantitatively assessed on the basis of financial loss and misstatement. Potential reputational and conduct impacts are qualitatively assessed. There has been no material change to the measures used to assess operational risk during the reporting period.

The Company holds economic capital, based on the SII SCR, against residual operational risk, to the extent that it cannot be eliminated by management action. QRT S.25.02.21 (Appendix F.1.7) shows that the Company's undiversified SCR for operational risk is £0.4bn (2016: £0.4bn). The Company also produces specific conduct risk management information used to measure and analyse its exposure to conduct risk.

There have been no material changes in the operational risks that the Company is exposed to over the year.

### C.5.2 Risk concentration

The Company's scale and business model as a multi-business line, multi-geography and multi-channel business, creates diversification of risks and generally helps to reduce concentrations of risks particularly when risks across the Company and its subsidiaries are aggregated. The Company also works with a wide range of outsourcers to support delivery of its services and products. Further information is provided in section B.7.

The Company's operations are spread across a number of office locations that are geographically well spread, which would help ensure continuity of service in the event of catastrophe.

The majority of the Company's products are sold under the 'Aviva' brand, enabling leverage on the strength of the brand and supporting delivery of the Company's business strategy. The Company is therefore vulnerable to any operational failures that adversely impact public perception of the 'Aviva' brand.

### C.5.3 Risk mitigation

Operational risks are considered by the Company to be preventable and are managed through business controls. The Company's operational risk strategy is to improve its business processes to:

- Reduce operational risk and associated losses, thereby improving cost to income ratio and variability in financial performance;
- Improve customer outcomes and employee satisfaction; and
- Sustain customer confidence and a positive regulatory reputation.

The Company's business standards set out the minimum control objectives and controls that each business area is required to operate. Operational risk tolerances are quantitative boundaries that constrain specific risk-taking activities at an operational level.

The Company records and analyses operational risk events to ensure remedial action is taken, lessons are learnt and, if the event impacts customers, they are treated fairly. This includes risk events that do not give rise to a financial loss, such as near misses or fortuitous gains. This assessment enables the Company to highlight areas for improvement, implement corrective actions to avoid recurrence, and improve its understanding of operational risk.

The Company has identified business critical functions and has exit and termination plans and business continuity and disaster recovery plans in the event of supplier failure. These plans are reviewed at least annually.

The Company's three lines of defence all monitor the effectiveness of the controls that are in place against operational risk. Further details of the three lines of defence are included in section B.1.1, including the specific roles and responsibilities of each line. Operational risk is overseen by the Operational Risk Committee, which is a senior management committee, and the Board's Risk, Conduct and Audit Committees.

#### C.5.4 Stress and scenario testing and sensitivity analysis

Descriptions of the methods used, assumptions made and outcomes of stress and scenario testing and sensitivity analysis are provided in section C.7.1.

## C.6 Other Material Risks

The Company has no material information to disclose regarding other material risks.

## C.7 Any Other Information

### C.7.1 Stress and scenario testing and sensitivity analysis

Stress and Scenario Testing (SST) is a fundamental element of the Company's Risk Management Framework which is embedded within the Company's decision-making, strategy and planning activities. SST provides insight into key risk exposures and dependencies of the Company; considering resilience of potential changes to these exposures and dependencies; and anticipating a range of possible outcomes. The evaluation of the potential impacts on the Company's capital and liquidity positions enables the Company to identify and prepare for appropriate ways to mitigate and manage the realisation of such impacts.

There are two main components of SST: (1) sensitivity analyses which consider single factor standalone impacts at a point in time to changes in economic and non-economic assumptions; and (2) scenario analyses which consider impacts from specific potential events.

The Company's stress and scenario methodology is based on the following stages:

- Identify existing and emerging risks;
- Measure resilience to stress events and scenarios;
- Monitor the impact of the potential stress events and scenarios on actual and projected capital and liquidity positions;
- Manage the potential stress events and scenarios by setting risk appetites and defining management actions; and
- Report to the ALCO, the Board's Risk Committee, the Board and the PRA.

#### C.7.1.1 Stress and scenario testing

At least annually, a broad range of Company risk specific stress and scenario tests are defined in consultation with key stakeholders to assess the impact of a range of potential events of differing levels of severity on the capital and liquidity positions of the Company. The stress and scenario tests performed by the Company, during 2017, included adverse economic conditions, catastrophic events, reserve deterioration, counterparty default, operational failings and Regulator defined tests.

A range of assumptions are made in the development of potential events and the measurement of resilience to such events. These assumptions are defined by suitable experts and, where applicable, by the Regulators.

The outcome of the Company's 2017 SST serves to illustrate that the Company is resilient to a wide range of potential events and that the Company has a variety of plausible management actions that could be executed in a timely manner, to mitigate the potential impacts from Company-specific or market-wide events.

#### C.7.1.2 Sensitivity analysis

Management use sensitivity analyses to assess a range of single factor standalone impacts of differing levels of severity on the capital and liquidity positions of the Company and to ensure that the Company has a sufficient range of plausible management actions that could be executed in a timely manner to mitigate the potential impacts.

The SCR is the primary basis used by the Company to measure and assess its risks. The sensitivity analysis performed by the Company includes consideration of the sensitivity of its SCR cover ratio, determined according to the SII Regulations, to a range of economic assumptions.

The table below shows the absolute change in cover ratio, for each sensitivity, e.g. a 3% positive impact would result in an increase in the cover ratio by 3%. The sensitivities apply to the Company's SCR which includes its underlying exposure to ACI.

Sensitivity to assumptions	Impact on SCR cover ratio
<b><u>Economic assumptions</u></b>	
25bps increase in GBP interest rates	4%
25bps decrease in GBP interest rates	(3%)
50bps increase in corporate bond spreads	(1%)
50bps decrease in corporate bond spreads	1%
50bps increase in sovereign bond spreads	(3%)
50bps decrease in sovereign bond spreads	3%
100bps increase in GBP inflation rate	(11%)
100bps decrease in GBP inflation rate	7%
25% decrease in property values	(5%)
25% decrease in equity prices	(4%)
<b><u>Non-economic assumptions</u></b>	
10% increase in maintenance and investment expenses	(6%)
5% increase in gross loss ratios	(13%)

### Limitations of the sensitivity analyses

The table above demonstrates the effect of a change in a key assumption while other assumptions remain unchanged whereas in reality, sensitivities are dynamic in nature as they will vary in quantum due to interactions with other risks and changes in values of those risks.

Other limitations in the sensitivity analyses include:

- The economic assumptions are hypothetical market movements selected to represent the Company's view of possible near-term market changes but which cannot be predicted with certainty.
- The sensitivities are non-linear, and larger or smaller impacts cannot be interpolated or extrapolated from the outcome.
- The sensitivities assume that all interest and inflation rates move at the same rate at all durations.

### C.7.2 Prudent Person Principle

The Company ensures that its assets are invested in accordance with the Prudent Person Principle as set out in Article 132 (Directive 2009/138/EC) through the collective application of its risk policies and business standards. These ensure that the Company invests in assets whose risks it can properly identify, measure, monitor, manage, control and report, and appropriately take into account in the assessment of its overall solvency needs having regard to the term and nature of its liabilities. The Company's Asset Liability Management Business Standard and certain provisions of the Investment Management Business Standard contain mandatory requirements to ensure that the Company develops its own set of key risk indicators and takes into account the risks associated with its investments without relying only on the risk being adequately captured by the capital requirements. Risk appetites by risk type are also set and monitored by the Company. Other business standards set requirements for the quality of investment assets (including setting risk limits to control the market and credit risk within a portfolio), matching of assets to liabilities, diversification of invested assets and use of derivatives.

# Aviva Insurance Limited

## Solvency and Financial Condition Report 2017

### D. Valuation for Solvency Purposes

#### [In this Chapter](#)

D.1 Assets

D.2 Technical Provisions

D.3 Other Liabilities

D.4 Alternative Methods of Valuation

D.5 Any Other Information

## D. Valuation for Solvency Purposes

The 'Valuation for Solvency Purposes' section of the report provides a description of the bases, methods and main assumptions used in the valuation of assets, technical provisions and other liabilities for each material asset and liability class.

The Company's IFRS balance sheet is presented in column (b) of the following table, in accordance with the classification of assets and liabilities used in its financial statements. The references given in column (a) are to relevant accounting policies and notes provided in the financial statements.

A number of reclassifications, required to align the Company's IFRS balance sheet as shown in its financial statements, to the classifications required for the prescribed format of the SII balance sheet QRT, are given in column (c). The most significant reclassifications are:

- Under the SII Regulations cash flows relating to reinsurance premium are included within Reinsurance Recoverables, and cash flows relating to premium and policyholder tax are included within Technical Provisions. In the IFRS balance sheet these amounts are included within reinsurance payables, insurance and intermediaries receivables and other liabilities respectively.
- Loans and amounts receivable from, and payable to, Group companies under IFRS, are reclassified within the SII balance sheet to the relevant underlying nature of the balance. A material amount has been reclassified as Loans.
- Investments, including cash equivalents, are reclassified under SII. They also include accrued investment income which is classified within prepayments and accrued income under IFRS.

The Company's assets and liabilities, as valued under IFRS and reclassified in line with SII Regulations, are shown in column (d). The Company's SII balance sheet is summarised in column (e) and detailed in the balance sheet QRT S.02.01 included in Appendix F.1.1. Differences between the valuation of the Company's assets and liabilities under SII and IFRS are presented in column (f).

Where the valuation of assets and liabilities is the same under IFRS and SII, a description of the bases, methods and main assumptions can be found in the accounting policies and notes of the Company's financial statements. If the valuation is materially different, a description of the bases, methods and main assumptions used under SII is given in Sections D.1, D.2.1 and D.3 below. Where alternative methods of valuation have been used these are detailed in Section D.4.

Assets and other liabilities have been valued, according to the requirements of the SII Regulations, at the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction. The value of other liabilities is not adjusted to take account of the impact of changes in own credit standing of the Company.

The Company applied the following hierarchy of valuation approaches:

1. Quoted market prices in active markets for the same assets or liabilities;
2. Quoted market prices in active markets for similar assets and liabilities (with adjustments to reflect differences where necessary);
3. Alternative methods of valuation.

The Company considers markets to be active where transactions take place with sufficient frequency and volume for pricing information to be available on an ongoing basis. Where the Company has concluded that markets are not active, alternative methods for valuation are used. The assets classified as Level 1 and Level 2 under IFRS 13, are deemed as market consistent under SII. The assets classified as Level 3, for which there is no active market, are considered to use alternative valuation methods under SII.

In line with SII Regulations, the value of the Company's investment in its principal subsidiary, ACI, is included within participations in both the SII and IFRS balance sheets. The investment is not disaggregated into ACI's underlying assets, Technical Provisions and other liabilities. However, when considering the Company's risks and calculating the Company's SCR (unaudited) the underlying risks of ACI and the Company's other subsidiaries are taken into account.



## Balance Sheet – IFRS and SII

As at 31 December 2017 £m						
	Note in financial statements	IFRS balance sheet classified according to financial statements	Reclassification of IFRS balances to SII balance sheet categories	Reclassified IFRS balance sheet	SII balance sheet	Valuation differences between SII and IFRS
	(a)	(b)	(c)	(d) =(b)+(c)	(e)	(f) =(e)-(d)
Goodwill	M & 8	98	-	98	-	(98)
Deferred acquisition costs	Y & 16	548	-	548	-	(548)
Prepayments and accrued income	Y & 16	136	(136)	-	-	-
Intangible assets	M & 8	151	17	168	-	(168)
Deferred tax assets	CC & 17	118	15	133	65	(68)
Property, plant and equipment (own use)	N & 10	24	-	24	24	-
Property (other than own use)	O & 11	324	-	324	324	-
Participations	C&D & 9	2,469	-	2,469	1,093	(1,376)
Financial investments						
Equities	R & 14	492	(483)	9	9	-
Bonds	R & 14	3,210	35	3,245	3,245	-
Collective investment undertakings	R & 14	676	815	1,491	1,491	-
Derivatives	V & 14	101	6	107	107	-
Deposits other than cash equivalents	R & 14	-	43	43	43	-
Loans	W & 12	5	1,917	1,922	1,922	-
Reinsurance recoverables	L & 22	5,151	(67)	5,084	4,480	(604)
Receivables						
Insurance and intermediaries	S & 15	1,352	(1,350)	2	2	-
Reinsurance	S & 15	34	4	38	38	-
Trade, not insurance	S & 15	131	403	534	534	-
Amounts due from Group companies	S & 15	309	(309)	-	-	-
Loans due from Group companies	S & 15	1,859	(1,859)	-	-	-
Cash and cash equivalents	Z & 28	485	(375)	110	110	-
Other assets						
Group relief assets	17	295	(295)	-	-	-
Other assets		-	50	50	50	-
<b>Assets</b>		<b>17,968</b>	<b>(1,569)</b>	<b>16,399</b>	<b>13,537</b>	<b>(2,862)</b>
Technical provisions	K & 21	(8,648)	1,355	(7,293)	(6,533)	760
Other provisions	BB & 23	(17)	-	(17)	(17)	-
Deferred tax liabilities	CC & 17	-	(15)	(15)	(20)	(5)
Payables and other financial liabilities						
Deposits from reinsurers	T & 24	-	(3,237)	(3,237)	(3,237)	-
Derivatives	V & 24	(185)	16	(169)	(169)	-
Debts owed to credit institutions	T & 24	(317)	1	(316)	(316)	-
Financial liabilities other than debts owed to credit institutions	T & 24	(33)	-	(33)	(33)	-
Insurance and intermediaries payable	T & 24	(74)	-	(74)	(74)	-
Reinsurance payables	T & 24	(74)	66	(8)	(8)	-
Payables (trade, not insurance)	T & 24	-	(215)	(215)	(215)	-
Other payables	T & 24	(17)	17	-	-	-
Amounts due to Group companies	T & 24	(3,428)	3,428	-	-	-
Loans due to Group companies	T & 24	(283)	283	-	-	-
Subordinated liabilities		-	(283)	(283)	(283)	-
Other liabilities						
Current tax liabilities	CC & 17	(11)	11	-	-	-
Other liabilities	25	(831)	142	(689)	(373)	316
<b>Liabilities</b>		<b>(13,918)</b>	<b>1,569</b>	<b>(12,349)</b>	<b>(11,278)</b>	<b>1,071</b>
<b>Excess of assets over liabilities</b>		<b>4,050</b>	<b>-</b>	<b>4,050</b>	<b>2,259</b>	<b>(1,791)</b>

## D.1 Assets

Assets have been valued according to the requirements of the SII Directive and related guidance; the basis of the SII valuation principle is the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction. A description of the basis of valuation under SII along with valuation differences between the SII bases and the IFRS financial statements, by asset class, is provided below; if the valuation method has been described in the financial statements, or is an alternative method of valuation detailed in Section D.4, it has not been included in this section.

### D.1.1 Goodwill and intangible assets

Goodwill and intangible assets are valued at £nil under SII. The goodwill recognised in the IFRS balance sheet represents the excess of the cost of an acquisition over the fair value of the share of the net assets of the acquired entity at the date of acquisition. The intangible assets primarily consist of internally developed IT systems.

### D.1.2 Deferred acquisition costs

Deferred acquisition costs are recognised under IFRS reporting and deferred to the extent they are expected to be recoverable out of future margins in revenues on those contracts. Under SII these are not recognised and are therefore valued at £nil in the SII balance sheet. The associated cash flows are included in the valuation of SII Technical Provisions.

### D.1.3 Deferred tax assets and liabilities

Deferred tax is determined on a non-discounted basis in accordance with International Accounting Standard (IAS) 12, principles on temporary differences between the economic value of assets or liabilities on the SII balance sheet and their tax base.

Assets are recognised to the extent that it is probable that future taxable profits will be available against which they can be utilised. Future taxable profits include taxable liabilities and profits arising from new business. The release of the Risk Margin (unaudited) is not considered to be a source of future profits. Assets are recognised separately to the extent they cannot be offset against corresponding deferred tax liabilities.

The net deferred tax asset arises wholly on unused trading losses. In addition the Company has unrecognised gross tax losses (excluding capital losses) and other temporary differences of £450m to carry forward against future taxable profits. These trading losses and temporary differences have no expiry date.

The Company also has unrecognised capital losses of £221m. These have no expiry date.

The reduction in value of deferred tax assets of £68m under SII compared to IFRS arises because deferred tax asset recognition for SII purposes is subject to the more prudent requirements of PRA Supervisory Statement 2/14 compared to the principles of IAS 12 which govern recognition in the financial statements.

A deferred tax liability arises on unremitted earnings from overseas subsidiaries.

### D.1.4 Participations

Under SII participations are valued, using the adjusted equity method, at the Company's share of the excess of assets over liabilities of each entity, valued on a look through basis to the SII value of the assets and liabilities of the entity.

Under IFRS, subsidiaries are stated at their fair values, estimated using applicable valuation models. The fair value is the price that would be received from the sale of the entity, as a whole, in an orderly transaction between market participants at the measurement date. As noted above, under SII participations are valued by looking through to the underlying assets and liabilities of the entity valued on a SII basis.

The reduction in value of participations under SII mainly relates to the Company's investment in its principal subsidiary, ACI.

### D.1.5 Reinsurance recoverables

Reinsurance recoverables are calculated as the probability-weighted average of discounted future cash flows relating to reinsurance contracts, adjusted for the expected losses due to counterparty default. Although established separately, reinsurance recoverables are valued on the same basis and using the same methodology and assumptions used to derive Technical Provisions - Best Estimate Liabilities, as described in Section D.2, subject to the following:

- Internal expenses are only allowed if they are recoverable under the reinsurance agreement;
- Where the timing of recoveries diverges from that for payments a separate projection is used;
- Allowance for risk of default depends on the credit rating and exposure to the reinsurance counterparty; and
- Reinsurance assets take into account reinsurance commissions.

Reinsurance recoverables, consistent with the calculation of Technical Provisions - Best Estimate Liabilities, includes expected recoveries from pre-inception contracts where they occur within the premium or claims provisions.

Cash flows relating to future reinsurance arrangements comprise both expected recoveries and expected reinsurance premium payments. This means reinsurance contracts which are expected to be written are taken into account and thus assumptions in relation to the likely future reinsurance purchasing decisions are required.

The material differences between the SII and IFRS valuation bases for reinsurance recoveries are as follows:

- Only reinsurance cash flows relating to long tailed claims reserves are discounted under IFRS whereas all reinsurance cash flows are discounted under SII.
- The rate used to discount PPO cash flows is lower under SII than the equivalent rate used under IFRS.
- The unearned reinsurance premium reserve established under IFRS is replaced with a best estimate reinsurance premium provision. This is offset by the release of deferred reinsurance commissions from other liabilities (see section D.3.1).
- The SII valuation includes the additional reinsurance premium that is expected to be paid for reinsurance to cover business incepted at the valuation date. This is not accounted for under IFRS.

The Company does not have any Special Purpose Vehicles.

#### **D.1.6 Assets arising from leasing arrangements**

Future contractual aggregate minimum lease rentals receivable for investment properties leased to third parties under non-cancellable operating leases as at 31 December 2017 are £251m. Further detail is provided in note 27 to the financial statements.

#### **D.1.7 Changes made to recognition and valuation bases and estimations during the reporting period**

No material changes were made to the bases used to recognise and value assets, or to their estimations, during the reporting period.

## D.2 Technical Provisions

This section provides a definition of SII Technical Provisions, the methodology and main assumptions used in the valuation of the SII Technical Provisions, the total value of SII Technical Provisions split by material lines of business, a comparison of the valuation of SII Technical Provisions with IFRS Technical Provisions and a description of the level of uncertainty in Technical Provisions.

### D.2.1 Valuation of Technical Provisions

Technical provisions which comprise Best Estimate Liabilities and a Risk Margin (unaudited) are summarised in the table below. They are also detailed in the QRT S.17.01 (Non-life Technical Provisions) and S.12.01 (Life Technical Provisions), see Appendix F.1.3.

Whilst the Company only conducts non-life and health (similar to non-life) insurance activities, it has material life insurance obligations in the UK in relation to annuities stemming from non-life insurance contracts (PPO). PPO are classified as Technical Provisions - Life (excluding health and index-linked and unit-linked), within the prescribed format of the SII Balance Sheet.

As at 31 December 2017 £m	Best Estimate	Risk Margin (unaudited)	Technical Provisions
Line of Business			
Medical expense insurance	77	3	80
Motor vehicle liability	2,830	50	2,880
Other motor insurance	205	2	207
Fire and property damage	447	27	474
General liability insurance	1,883	89	1,972
Other	157	4	161
<b>Non-life insurance obligations</b>	<b>5,599</b>	<b>175</b>	<b>5,774</b>
PPOs other than health insurance	691	68	759
<b>Life insurance obligations</b>	<b>691</b>	<b>68</b>	<b>759</b>
<b>Total</b>	<b>6,290</b>	<b>243</b>	<b>6,533</b>

#### D.2.1.1 Non-life and health (similar to non-life) Best Estimate Liabilities

The following general principles apply to the valuation of Best Estimate Liabilities for non-life and health (similar to non-life) business:

- A Best Estimate is one that represents the expected outcome from the range of possible outcomes for the future and is reasonable and realistic taking account of all the uncertainties involved.
- A consistent approach has been applied across all non-life and health (similar to non-life) business.
- The calculation of Technical Provisions is performed on a going concern basis. This means that it can be assumed that contracts run to their conclusion and as a result a proportion of expected future costs will be covered by future business.
- Business written by intermediaries on a delegated authority basis has been included as if written directly by the Company.

The Company's Best Estimate Liabilities are valued based on the present value of future cash flows discounted using relevant risk-free interest rates adjusted for the EIOPA prescribed credit risk adjustment and Volatility Adjustment (see section D.2.4) at the valuation date. The cash flows that are considered when calculating the Best Estimate Liabilities derive from:

- In-force and expired contracts;
- Contracts that have not yet inception but that the Company has an obligation to enter into at the valuation date (pre-inception contracts); and
- Future cancellations or endorsements by the policyholder.

Best Estimate Liabilities comprise a claims provision and a premium provision. The claims provision includes cash flows relating to events that occurred before the valuation date, whether reported or not. The cash flows include premiums, net claims costs and expenses. The premium provision includes cash flows relating to future claim events that have not yet occurred, but that are covered by existing contracts and legally binding pre-inception contracts. The cash flows include premiums, net claims and expenses, in respect of future claim events. Where future premium cash flows are expected to exceed projected future claim and expense cash flows, the premium provision is negative.

When modelling these cash flows the inflows are considered separately from the outflows. Claims costs take into account recoveries from salvage and subrogation. Expenses include administrative, investment management, loss adjustment and acquisition expenses including commissions and premium taxes.

#### Claims costs

The ultimate cost of outstanding claims is estimated using a range of standard actuarial claims projection techniques. The main assumption underlying these techniques is that the Company's past claims experience can be used as a basis to project future claims. Therefore these methods extrapolate the development of paid and incurred losses, average costs per claim and claim numbers based on the observed development of earlier years. The estimation of ultimate claims costs is done at the level of homogeneous risk groups. These groups are mapped to SII lines of business.

Certain lines of business are also further analysed by claim type or type of coverage. For example latent claims require specialist actuarial techniques appropriate for the nature of the underlying liabilities. Given the long delay between writing the insurance policy and the claim arising, the techniques used for latent claims typically group claims data by the year claims are reported and project the future number and average cost of claims for homogeneous latent claim types based on a combination of own Company experience and industry-wide data. The Company participates on cross-industry working groups to help inform some of the projection assumptions for latent claims.

Qualitative judgement is used to reflect changes in external factors such as public attitudes to claiming, economic conditions, levels of claims inflation, judicial decisions and legislation, as well as internal factors such as portfolio mix, policy conditions and claims handling procedures.

#### Premium provisions

Premium provisions are estimated by selecting an exposure measure and using that to establish the unearned and pre-inception exposure. Claims cost projections are set for each future period using trends in historic claims data adjusted for known anomalies in the data that are not expected to be repeated in the future, changes in mix and volume of business and to allow for the impact of projected claims inflation. These cost projections are then applied to the predicted exposure to determine the cash flows.

#### Expenses

Expenses are adjusted for expense and claims inflation and allocated between the claims and premium provisions. They are analysed by homogeneous risk group or at a minimum by SII line of business. Future administrative costs and commission payments are projected using best estimate expense forecasts. Investment expenses are modelled as a percentage of Technical Provisions. Future unallocated loss adjustment expense provisions are set in relation to expected claims levels.

#### Events Not in Data (ENID)

ENID are events not deemed to be captured by the data which need to be separately allowed for within the best estimate calculations to take appropriate account of uncertainty. Two types of ENID are considered: "known unknowns", which are possible future scenarios that can be anticipated and "unknown unknowns", which are future scenarios that are completely unexpected. No allowance is made for "unknown unknowns" as by definition, they cannot be known or quantified.

Allowances for "known unknowns" are made using scenario analysis to cover any foreseeable event with a potentially material impact. A core list of events is specified which are considered as the starting point for the analysis. ENID are considered both at SII lines of business level, and at portfolio level with allocations to SII lines of business, depending on the scenario being considered.

#### Discounting

All cash flows are discounted using the appropriate SII yield curve in the relevant currency. The yield curve is based on the risk free rate at the valuation date and is adjusted for the EIOPA prescribed credit risk adjustment and Volatility Adjustment. Payments are assumed to occur either mid-month or mid-year. Cash flows are modelled in monthly time intervals for the first 10 years and annually thereafter.

#### Future management actions

There are no future management actions assumed in the calculation of the Company's gross of reinsurance Best Estimate Liabilities as at 31 December 2017.

### D.2.1.2 PPO Best Estimate Liabilities

The Company's Best Estimate Liabilities for PPO, in common with non-life business, are valued based on the present value of future cash flows discounted using the relevant risk-free interest rate adjusted for the EIOPA prescribed credit risk adjustment and Volatility Adjustment at the valuation date. The cash flows that are considered when calculating the Best Estimate Liabilities for PPO derive from:

- Payment of claims benefits: with the majority of PPO providing payments relating to care needs of the claimant, with a smaller number providing loss of earnings payments; and
- Expenses: these are relatively small (compared to the size of claims benefits) administrative costs in relation to each PPO.

PPO Best Estimate Liabilities use life insurance actuarial methods and techniques to estimate appropriate assumptions for each individual claimant.

#### Discounting

PPO cash flows are discounted using the appropriate SII yield curve adjusted for the EIOPA prescribed credit risk adjustment and Volatility Adjustment. The methods are consistent with those applied to non-life cash flows.

#### Longevity assumptions

Assumptions are made in relation to the future longevity of each PPO. These assumptions are based on the latest general mortality assumptions for the population as a whole (including future expected changes in mortality), as well as any impairment to life expectancy on individual PPO based on independent medical opinions.

#### Inflation assumptions

PPO payments escalate based on indices specified at the time of settlement of the PPO. The majority of PPO claims escalate based on an Annual Survey of Hours and Earnings index (ASHE) with a smaller number escalating in line with the RPI. Assumptions are therefore required for the future escalation of these indices. The Company assumes that, over the longer term, the future escalation of the ASHE indices will be linked to RPI within the UK economy and uses market consistent views of future RPI inflation as the basis to project future ASHE inflation. Adjustments are then made to allow for expected differences between future ASHE inflation and future RPI inflation.

### D.2.1.3 Risk Margin (unaudited)

The Risk Margin is an estimate of the amount, in addition to the Best Estimate Liability, that a third party would expect to receive in order to assume ownership of the Company's insurance obligations. The Risk Margin is calculated using a cost of capital approach allowing for diversification between lines of business and is on a net-of-reinsurance basis. The calculation of the Risk Margin is defined as the present value of the cost of capital applied to the SCR (unaudited) in respect of non-hedgeable risks in each future year.

The cost of capital rate is the cost in excess of the risk-free rate, to the third party taking over the liabilities, of raising and holding capital to support the non-hedgeable risks over the lifetime of the business. The same cost of capital rate is used for all insurance companies and is prescribed by EIOPA at 6% per annum.

#### Discount rate

The rate used to discount the projected non-hedgeable SCR (unaudited) is the basic risk-free rate (including credit risk adjustment), with no allowance for volatility or matching adjustments, where applicable.

#### Non-hedgeable risk

The SCR (unaudited) in the Risk Margin calculation takes the following risks into account:

- Underwriting risks (non-life, health and life);
- Non hedgeable market risk (except interest rate risk), where it is material;
- Counterparty default risk with respect to reinsurance contracts; and
- Operational risk.

All market risks in respect of investment assets are considered hedgeable. Careful consideration has been given to the extent to which inflation risk in respect of the liabilities should be regarded as hedgeable, consistent with the risk categorisation within the IM. Any inflation risk other than traded price inflation (defined as RPI for UK business and Euro Harmonised Index of Consumer Prices for Irish business) is regarded as non-hedgeable. This includes the excess of claims inflation over traded price inflation, which is considered within the assessment of insurance risk. There is a deep, liquid and transparent market in the UK for instruments whose value is linked to price inflation and so price inflation risk on the opening Best Estimate Liabilities is considered hedgeable. The additional price inflation risk arising from variation from the Best Estimate Liabilities is not however considered hedgeable.

While reinsurance credit risk, and some underwriting risks, may be hedgeable in practice using credit default swaps etc., the risk margin calculation assumes that these risks are not hedged after the business is transferred to the third party.

#### Projection of the non-hedgeable risk SCR (unaudited)

In order to project the non-hedgeable SCR which underpins the Risk Margin, simplifications are selected from the hierarchy set out by EIOPA to ensure that the Risk Margin calculation remains proportionate to the nature, scale and complexity of the business.

The projected risks are then aggregated using a correlation matrix approach at each future time period.

#### Loss absorbing capacity

The loss absorbing capacity of Technical Provisions assumed in the projection of the non-hedgeable risk SCR (unaudited) is consistent with the loss absorbing capacity of Technical Provisions assumed in the calculation of the SCR (unaudited). No allowance for the loss absorbency of deferred taxes is included in the Risk Margin.

#### Allocation of the Risk Margin to SII line of business

The Risk Margin is allocated across lines of business using an approximation to the Euler allocation method for IM business units. For SF business units, one of the two prescribed methods is adopted:

- Allocation according to time zero non-hedgeable SCRs (unaudited); or
- Allocation according to present value of non-hedgeable SCRs (unaudited).

#### Methodology

In projecting the non-hedgeable risk SCR (unaudited), the Company has adopted an enhanced version of the second approach in the EIOPA hierarchy. The SCR (unaudited) is projected by model calculation class and risk category and allows for an increase in relative volatility as the risks run-off to reflect that smaller portfolios are inherently more volatile.

### D.2.1.4 Simplifications

#### Best Estimate Liabilities

In some areas of the calculation of the SII Best Estimate Liabilities, simplified methods have been used. The simplifications used have been assessed and have no material impact on the value of SII Best Estimate Liabilities. Where simplified methods are used, these are documented and justified in the Company's reserving reports and documentation. The main simplifications within the calculation of SII Best Estimate Liabilities are:

- The majority of the Company's Best Estimate Liabilities are in sterling. As part of the calculation of Technical Provisions, the Company segments any material exposure to United States Dollars (USD) and Euro (EUR) currencies. On materiality grounds, exposure to currencies outside of sterling, USD and EUR are not separately segmented and are instead converted to sterling at prevailing exchange rates.
- Only material inwards reinsurance arrangements are separately modelled.
- The Company's Best Estimate Liabilities include a provision in relation to ENID. For the purposes of discounting cashflows, it is assumed that ENID have the same cashflow profile as other claims.
- Cashflows are modelled in monthly time intervals for the first 10 years and annually thereafter. For the purposes of discounting, all payments are assumed to occur mid-month or mid-year as dictated by the time intervals used.
- When calculating provisions for potential reinsurer default, reinsurance assets are grouped by reinsurer counterparty credit rating and within each credit rating the same probabilities of default are assumed.
- Gross premium debtors are split by class of business and payment date based on the split of written premium.
- The volume of Legally Obligated Unincepted business has been estimated based on a proportion of January's planned written premium for most classes of business. For corporate and speciality type business, the volume has been estimated individually for each class in conjunction with Aviva's underwriting teams to allow for business accepted under long-term agreements.

### D.2.1.5 Material changes in the relevant assumptions compared to the previous reporting period

There were no material changes in the relevant assumptions made in the calculation of technical provisions compared to the previous reporting period.

### D.2.2 Level of uncertainty

The actual cost of settling insurance obligations may differ from the Best Estimate Liabilities because experience may be worse than assumed or future claims inflation may differ from that expected. There are a number of potential developments that would have a material adverse impact on the Best Estimate Liabilities value including:

- Catastrophic weather events;
- New types of latent claims;
- Unanticipated legislative changes;
- Unanticipated inflation.

Specific areas of uncertainty are:

- In conducting its insurance business, the Company receives general insurance liability claims, and becomes involved in actual or threatened related litigation arising therefrom, including claims in respect of pollution and other environmental hazards. Amongst these are claims in respect of asbestos production and handling. Given the significant delays that are experienced in the notification of these claims, the potential number of incidents which they cover and the uncertainties associated with establishing liability, the ultimate cost cannot be determined with certainty. Gross of reinsurance the level of uncertainty within the Technical Provisions for latent claims is high. The Company has extensive reinsurance in place against these claims so net of reinsurance the level of uncertainty is insignificant.
- PPO represent a material part of Best Estimate Liabilities. They also represent one of the most uncertain elements of the Company's Technical Provisions due to their long-tailed nature and the sensitivity to changes in economic-related assumptions. Additional uncertainty arises due to potential differences in the life expectancy of claimants compared to that expected, as well as the potential uncertainty in the propensity for non-life large injury claims to settle as PPO as opposed to lump sum awards. Gross of reinsurance the level of uncertainty within the Technical Provisions for PPO is very high. The Company purchases reinsurance to mitigate longevity risk in relation to these claims, which materially reduces the level of uncertainty.
- There is continued uncertainty surrounding the cost of settlement for lump sum injury claims following developments in relation to the Ogden discount rate. On 7 September 2017, the Lord Chancellor set out a proposal for legislation to change the way the discount rate is set. Please see section A.1.2 for further details. The valuation of the Company's SII Technical Provisions have been maintained using the current Ogden discount rate of minus 0.75%.

### D.2.3 Material differences between the SII and IFRS valuation bases

The following table summarises gross of reinsurance SII Technical Provisions by material line of business and compares these to IFRS reclassified Technical Provisions. The information contained in this table is an extract from the SII Balance Sheet QRT S.02.01, presented in Appendix F.1.1.

Technical Provisions as at 31 December 2017 £m	Best Estimate Liability (BEL)	Risk Margin (unaudited) (RM)	SII Technical Provisions (BEL+RM)	IFRS reclassified Technical Provisions	Difference between SII and IFRS reclassified Technical Provisions
<b>Total Non-life (excluding health)</b>	<b>5,522</b>	<b>172</b>	<b>5,694</b>	<b>6,441</b>	<b>(747)</b>
- Motor vehicle liability	2,830	50	2,880	3,036	(156)
- Other motor insurance	205	2	207	272	(65)
- Fire and property damage	447	27	474	808	(334)
- General liability insurance	1,883	89	1,972	2,134	(162)
- Other Non-life	157	4	161	191	(30)
<b>Health (similar to non-life)</b>	<b>77</b>	<b>3</b>	<b>80</b>	<b>172</b>	<b>(92)</b>
<b>Life (excluding health and index-linked and unit-linked)(PPO)</b>	<b>691</b>	<b>68</b>	<b>759</b>	<b>680</b>	<b>79</b>
<b>Total</b>	<b>6,290</b>	<b>243</b>	<b>6,533</b>	<b>7,293</b>	<b>(760)</b>



On materiality grounds the Other Non-life row of this table groups together a number of the smaller non-life lines of business.

The material differences between the SII and IFRS valuation bases are summarised below:

- SII Technical Provisions include the Risk Margin (unaudited), which is not included within IFRS Provisions, and which increases SII Technical Provisions compared to IFRS Provisions. This impacts on all lines of business, but has the greatest impact on the Life, Motor Vehicle Liability and General Liability insurance lines of business;
- An explicit margin for uncertainty is included within IFRS Provisions but removed under SII. This impacts all lines of business and reduces SII Technical Provisions compared to IFRS Provisions;
- Only long-tailed claims reserves (predominantly latent claims within General Liability insurance and PPO claims) are discounted within IFRS Provisions, whereas all cash flows are discounted under SII. This difference reduces SII Technical Provisions compared to IFRS Provisions and affects all lines of business, but with the most material impact on the Motor Vehicle Liability and General Liability insurance lines of business given these classes typically contain longer duration cash flows which see relatively larger impacts from discounting under SII;
- The rate used to discount cash flows for PPO claims within IFRS Provisions is higher than that used under SII. This increases SII Technical Provisions compared to IFRS Provisions and impacts the Life line of business which contains the Company's PPO claims in payment, as well as the Motor Vehicle Liability and, to a lesser extent, General Liability insurance lines of business which include provisions for claims which are expected to settle as PPO claims in the future;
- The rate used to discount cash flows for latent claims within IFRS provisions is lower than that used under SII, which reduces SII Technical Provisions compared to IFRS provisions. This impacts the General Liability insurance line of business;
- The unearned premium reserve established under IFRS for all Non-life and Health lines of business is replaced with a Best Estimate premium provision which incorporates the expected cost of claims and expenses on the unearned periods of exposure. This typically leads to a lower premium provision under SII than the equivalent unearned premium reserves under IFRS. This difference impacts all non-life and health lines of business, but has proportionately larger impacts on the Fire and Property Damage and other non-life lines of business;
- Under SII, provisions are established for Legally Obligated Unaccepted Business, whereas these provisions are not included within the IFRS valuation basis. This difference impacts all Non-life and Health lines of business. This will reduce SII Technical Provisions compared to IFRS Provisions.

#### D.2.4 Volatility Adjustment

The Volatility Adjustment removes temporary distortions in spreads caused by illiquidity in the market or extreme widening of credit spreads, in particular in relation to government bonds. The PRA has approved the Company's application to apply a Volatility Adjustment (PRA reference number: 2191473). The impact of the Volatility Adjustment on Technical Provisions, Basic Own Funds, Eligible Own Funds to meet the SCR, the SCR (unaudited), Eligible Own Funds to meet the Minimum Capital Requirement (MCR) and the MCR is detailed in the Long Term Guarantees and Transitional measures QRT S.22.01 (see Appendix F.1.5). The impact of removing the Volatility Adjustment from gross SII Technical Provisions would be to increase their value by £74m.

#### D.2.5 Other reliefs

No transitional provisions have been applied in the calculation of SII Technical Provisions.



## D.3 Other Liabilities

Other liabilities have been valued according to the requirements of the SII Directive and related guidance; the basis of the SII valuation principle is the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction. A description of the basis of valuation under SII along with valuation differences between the SII bases and the IFRS financial statements, by material class, is provided below; if the valuation method has been described in the financial statements, or is an alternative method of valuation detailed in Section D.4, it has not been included in this section.

The Company's financial statements provide information about contingent liabilities and other risk factors in note 26. The Company has no additional material contingent liabilities to recognise under SII.

### D.3.1 Other liabilities

Reinsurers' share of deferred acquisition costs of £279m and deferred income of £37m, included within other liabilities under IFRS, are not recognised and therefore valued at £nil in the SII Balance Sheet. Material differences in the valuation of Technical Provisions are explained in Section D.2.3. There are no other material differences between the IFRS and SII valuation bases.

### D.3.2 Liabilities arising from leasing commitments

The future contractual aggregate minimum lease payment commitments under non-cancellable operating leases are £140m. Further detail is provided in note 27 to the financial statements.

### D.3.3 Assumptions, judgements and uncertainty

No material assumptions or judgements were applied to, nor is any material uncertainty associated with, the recognition and valuation of other liabilities.

### D.3.4 Changes made to recognition and valuation bases and estimations during the reporting period

No material changes were made to the bases used to recognise and value other liabilities, or to their estimations, during the reporting period.

## D.4 Alternative Methods of Valuation

The majority of the Company's assets and other liabilities are valued using quoted market information or observable market data. Maximum use has been made of market observable inputs when alternative methods of valuation have been adopted. The material assets and other liabilities, disclosed in the Balance Sheet QRT in Appendix F.1.1, that have alternative methods of valuation methods applied are as follows:

### Participations

Participations of £1,093m are valued at the Company's proportionate equity share of the excess of assets over liabilities of each subsidiary, valued on a look through basis to the SII value of the assets and liabilities of the entity. This method is used because quoted prices from active markets in the equity of the subsidiaries are not available. The Company's investment in participations largely relates to its principal subsidiary ACI. Most of ACI's assets and liabilities are valued using quoted market information or observable market data. However, ACI values net Defined Benefit Obligations of £97m, in accordance with the requirements of IAS19: Employee Benefits. The present value of future benefits is determined by projecting members' entitlements to the assumed retirement age. Expected payments are discounted to the valuation date reflecting future interest rates and mortality.

### Property (other than for own use)

Property (other than for own use) of £324m is recognised at its fair value as assessed by qualified external valuers using standard valuation practices. Values are calculated using a discounted cash flow approach and are based on current rental income plus anticipated uplifts at the next rent review, lease expiry, or break option taking into consideration lease incentives and assuming no growth in the estimated rental value of the property. This uplift and the discount rate are derived from rates implied by recent market transactions on similar properties. The valuation uncertainty of investment property has been assessed by reference to a range of estimated rental yields presented by a number of independent surveyors. This assessment indicates that the uncertainty relating to the valuation of property (other than own use) is immaterial.

### Property funds

Collective investment undertakings include property funds of £149m. The underlying properties are valued based on external valuation reports received from fund managers. As with directly held property, the underlying properties are valued by third party surveyors using a discounted cash flow approach. An assessment of the valuation uncertainty of property funds, in line with the assessment of directly held property, indicated that the valuation uncertainty is immaterial.

### Loans receivable

Loans receivable, of £1,922m under SII, principally comprise the Company's loans to its immediate parent AGH of £1,369m and the subordinated loans to its subsidiary ACI of CAD350m and CAD480m. The SII value of loans receivable includes accrued interest of £58m which is classified as accrued income under IFRS. These loans are valued using an income approach, which reflects the present value of contractual cash flows using discount rates calibrated as far as possible to relevant market observable parameters and taking into account any embedded features of the loan. In the absence of relevant market observable credit risk parameters, changes in credit risk are assessed according to any observable changes in the sufficiency of available collateral (including the surplus capital of the borrower) supporting the loans. The valuation uncertainty associated with loans receivable is considered to be immaterial.

### Subordinated loan payable

The subordinated loan payable to AGH is valued at £283m (translated from CAD480m at the year-end exchange rate) using an income approach which reflects the present value of contractual cash flows using discount rates calibrated as far as possible to relevant market observable parameters and taking into account any embedded features of the loan. In accordance with SII guidance, the discount rate is not adjusted for changes in credit risk of the borrower. The valuation uncertainty associated with the subordinated loan payable is immaterial.

### Derivatives

Derivative assets and liabilities, with SII values of £107m and £169m respectively, are stated at fair value under IFRS and SII but include accrued income under SII. This is classified separately under IFRS. The majority of derivatives are over-the-counter derivatives and are valued by the broker based on an income approach using either discounted cash flow models or option pricing models and applying market observable inputs. The valuations are validated against counterparty statements. The valuation uncertainty associated with derivatives is immaterial.

## D.5 Any Other Information

The Company has no other material information to disclose relating to the valuation of assets or liabilities.

# Aviva Insurance Limited

## Solvency and Financial Condition Report 2017

### E. Capital Management

#### [In this Chapter](#)

- E.1 Own Funds
- E.2 Solvency Capital Requirement (unaudited) and Minimum Capital Requirement
- E.3 Use of the duration-based equity risk sub-module in the calculation of the Solvency Capital Requirement (unaudited)
- E.4 Differences between the Standard Formula and any Internal Model used
- E.5 Non-Compliance with the Minimum Capital Requirement and Non-Compliance with the Solvency Capital Requirement (unaudited)
- E.6 Any Other Information

## E. Capital Management

The 'Capital Management' section of the report describes the objectives, policies and procedures employed by the Company for managing its Own Funds. The section also covers information on structure and quality of Own Funds and calculation of SCR (unaudited), including information about the Company's IM.

### E.1 Own Funds

#### E.1.1 Management of Own Funds

The Company's policy on capital and risk management is set out in its Risk Management Framework. The Company's capital and risk management objectives are closely interlinked and support earnings growth and dividend policy, whilst also recognising the critical importance of protecting policyholder and other stakeholder interests. The Company's primary objective of managing capital efficiently is to optimise the balance between return and risk, whilst maintaining economic and regulatory capital surplus in accordance with approved risk appetites.

In managing its Own Funds the Company also seeks to:

- Match the profile of its assets and liabilities, taking account of the risks inherent in the business;
- Maintain sufficient, but not excessive, financial strength to support new business growth and satisfy the requirements of its policyholders and its regulator, the PRA;
- Retain financial flexibility by maintaining sufficient liquidity; and
- Allocate capital efficiently, applying it to support value-adding growth and repatriating excess capital to its shareholder through dividends.

Own Funds are monitored via forecasts over a three year planning horizon. A number of stress and scenario tests are used to enable the Company to understand the volatility of its earnings and capital requirement, and therefore manage its capital more efficiently.

There have been no material changes in the objectives, policies or processes employed for managing Own Funds during the year.

#### E.1.2 Eligible Own Funds

An analysis of the Company's Own Funds by tier is presented in the Own Funds QRT S.23.01.01, (see Appendix F.1.6), and summarised below.

Own Funds £m	Total	Tier 1 (unrestricted)	Tier 2	Tier 3	Total	Tier 1 (unrestricted)	Tier 2	Tier 3
As at 31 December	2017	2017	2107	2107	2016	2016	2016	2106
Ordinary share capital	204	204	-	-	204	204	-	-
Reconciliation reserve	1,990	1,990	-	-	2,024	2,024	-	-
Subordinated loan	283	-	283	-	290	-	290	-
An amount equal to net deferred tax assets	65	-	-	65	117	-	-	117
<b>Total Basic Own Funds</b>	<b>2,542</b>	<b>2,194</b>	<b>283</b>	<b>65</b>	<b>2,635</b>	<b>2,228</b>	<b>290</b>	<b>117</b>

#### Tiering analysis

The Company's ordinary share capital and reconciliation reserve are available to absorb losses and have the Tier 1 features of permanence and subordination. As the Company's Articles of Association do not contain any restriction on the right of the Company to cancel dividends or other distributions at any time before they are paid, the Company's ordinary share capital is classified as unrestricted Tier 1.

The Company's subordinated loan from AGH has the Tier 2 features of subordination and duration, as detailed below.

An amount equal to the value of net deferred tax assets is classified as Tier 3, as prescribed by the SII Regulations.

#### Subordinated loan

The Company has a subordinated unsecured loan arrangement from AGH of CAD 480m. The loan accrues interest at 474 basis points above the Canadian Dealer Offered Rate and matures in 2046. The table below sets out the value of the subordinated loan:

	£m	£m
As at 31 December	2017	2016
Unsecured loan arrangement from AGH	283	290
<b>Total unsecured loans</b>	<b>283</b>	<b>290</b>

#### Significant changes in Own Funds during the year

Tier 1 Own Funds of £2,194m (2016: £2,228m) fell by £34m during the year. The reduction was mainly driven by dividends paid of £214m partly offset by capital generated from the Company's operations. Tier 3 Own Funds of £65m (2016: £117m) fell by £52m during the year, due to a reduction in net deferred tax assets attributable to legislation introduced during 2017 and effective from 1 April 2017 which restricts the relief for brought forward losses to 50% of future profits. The Company did not issue or redeem any Own Fund items in the year.

## Reconciliation reserve

The Company's capital comprises ordinary share capital, capital reserves and retained earnings. Capital reserves and retained earnings are not separately disclosed in Own Funds. They are notionally included in the reconciliation reserve, which reconciles the total excess of assets over liabilities with identifiable capital instruments included in Own Funds.

The table below sets out the constituent parts of the reconciliation reserve:

	£m	£m
As at 31 December	2017	2016
SII excess of assets over liabilities	2,259	2,345
Ordinary share capital	(204)	(204)
An amount equal to net deferred tax assets	(65)	(117)
<b>Reconciliation reserve</b>	<b>1,990</b>	<b>2,024</b>

## Eligibility of tiered capital

The eligibility of tiered capital, to cover the SCR (unaudited) and MCR depends upon the tiering shown above and a number of quantitative limits. The Company's Own Funds satisfy all limits applicable to the SCR (unaudited) and therefore the eligibility of the Company's capital to cover the SCR (unaudited) is unrestricted.

At least 80% of the MCR must be covered by Tier 1 capital and Tier 3 capital is not eligible to cover the MCR at all. As a result eligible funds to meet the MCR are restricted, as shown in the table below.

	£m	£m
As at 31 December	2017	2016
Total eligible Own Funds to meet the SCR	2,542	2,635
Total eligible Own Funds to meet the MCR	2,271	2,291

The ratio of eligible Own Funds to the SCR (unaudited) and the MCR is detailed below.

	2017	2016
Ratio of eligible Own Funds to the SCR	198%	209%
Ratio of eligible Own Funds to the MCR	588%	729%

## E.1.3 Material differences between equity on an IFRS basis and Own Funds

The Company's Own Funds are equal to the excess of assets over liabilities on a SII basis plus the subordinated loan as set out in the following table.

	£m	£m
As at 31 December	2017	2016
Excess of assets over liabilities on a SII basis	2,259	2,345
Subordinated loan	283	290
<b>Own Funds</b>	<b>2,542</b>	<b>2,635</b>

The Company's excess of assets over liabilities on a SII basis was £1,791m (2016: £1,949m) less than its total equity on an IFRS basis. The following table details the material differences between the excess of assets over liabilities on a SII basis and total equity on an IFRS basis.

As at 31 December 2017	£m	£m	See Section
Total equity on an IFRS basis		4,050	
Elimination of goodwill and other intangible assets	(266)		D.1.1
Elimination of deferred acquisition costs	(548)		D.1.2
Valuation adjustments to investments in participations	(1,376)		D.1.4
Valuation adjustments to reinsurance recoverables	(604)		D.1.5
Valuation adjustments to Technical Provisions	760		D.2.3
Valuation adjustments to other liabilities	316		D.3.1
Net deferred tax adjustments	(73)		D.1.3
		(1,791)	
<b>Excess of assets over liabilities on a SII basis</b>		<b>2,259</b>	

## E.1.4 Transitional arrangements and restrictions

The Company's Own Funds are unrestricted and fully transferable.

## E.2 Solvency Capital Requirement (unaudited) and Minimum Capital Requirement

### E.2.1 The amount of the SCR and MCR

The Company's SCR as at 31 December 2017 was £1.3bn (2016: £1.3bn). This is shown in the SCR QRT, S.25.02, see Appendix F.1.7.

The Company's MCR as at 31 December 2017 was £0.4bn (2016: £0.3bn). This is shown on the MCR QRT, S.28.01, see Appendix F.1.8.

The final amount of the SCR is subject to supervisory assessment and does not include any regulator-imposed capital add-ons.

### E.2.2 The composition of the SCR

The Company determines its SCR using a PIM. The SCR of the IM component, the SF component and the diversification benefit between the two is shown below:

	£bn	£bn
As at 31 December	2017	2016
IM component	1.2	1.1
SF component	0.1	0.3
Diversification between the IM and SF components	(0.0)	(0.1)
<b>Total SCR</b>	<b>1.3</b>	<b>1.3</b>

Material risk categories for the IM component are shown below. The SF components are given in section E.4.2. Further detail is shown in the SCR QRT S.25.02.

Diversified SCR by material risk category (per the SCR QRT)	£bn	£bn
As at 31 December	2017	2016
Market risk	0.9	0.8
Non-life underwriting risk	0.8	0.6
Operational risk	0.4	0.4
Counterparty party risk	0.2	0.1
Other	(0.1)	0.2
Diversification between risk categories	(0.9)	(0.8)
<b>Total SCR</b>	<b>1.3</b>	<b>1.3</b>

Diversification benefits between risks are primarily driven by the relative size of risks and the correlations between them. For example, two risks diversify more if they are similarly sized and diversify less the more highly correlated they are. Diversification is also influenced by the shape of risk distributions, in that risks where extreme events are more likely tend to diversify better. The diversification benefit of £0.9bn in the table above is the diversification between the risk categories listed in the table. In addition, each risk category includes the impact of diversification within that risk. For example the non-life underwriting risk includes underwriting and reserve risk along with the diversification between them.

### E.2.3 Simplifications, undertaking specific parameters and matching adjustment (unaudited)

Where the SCR is calculated using the SF, the SII regulations specify 23 simplified calculations that may be used across all of the SF risk modules except operational risk. The use of these simplifications is disclosed in QRT S.25.02.21 (Appendix F.1.7), where applicable. The Company has not used any of these simplified calculations to calculate the SCR at 31 December 2017.

Where the SCR is calculated using the SF, the SII Regulations specify certain undertaking-specific parameters that may be used in place of the standard parameters, subject to regulatory approval. These are available for non-life (including some health) premium and reserve risks. The use of these undertaking-specific parameters must be disclosed in QRT S.25.02.21 (Appendix F.1.7), where applicable. The Company has not used any undertaking-specific parameters to calculate the SCR at 31 December 2017.

### E.2.4 MCR calculation

The Company's MCR is calculated by applying prescribed factors to its written premium and its net Best Estimate Liabilities. In accordance with the SII Regulations, premium and Best Estimate Liabilities of subsidiary companies are not included in the calculation. The MCR is subject to two further constraints: it must lie in the range of 25% to 45% of the Company's SCR; and it cannot be less than an absolute minimum of £3.3m. The Company's MCR currently lies within this range.

At 31 December 2016, the Company's MCR was driven by the constraint that its MCR must lie in the range of 25% to 45% of the SCR. This was caused by the impact, on premiums, of the Company increasing its 5% quota share reinsurance arrangement with AIL to 50%, on 1 January 2016. At 31 December 2017, the premium payment on existing business is no longer an element of the MCR calculation.

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

The Company does not use the duration-based equity risk sub-module in the calculation of the Company's SCR.



## E.4 Differences between the Standard Formula and any Internal Model used (unaudited)

### E.4.1 Key uses of the IM

The IM provides input to a number of key business processes and activities. Therefore the outputs from the IM are used in day-to-day risk management and business decisions across the Company. "Use" does not imply that the IM is used to directly run the business, but rather that the outputs of the IM and the IM itself are used to support decision-making, whilst acknowledging its limitations and balancing against other elements of the Risk Management Framework.

The primary purpose of the Company's IM is to calculate the capital metrics, principally the SCR (unaudited), required for regulatory reporting under SII. The outputs of the Company's IM are also used in risk-based performance reporting and risk and financial strength reporting to senior management, the Board, the shareholder and rating agencies.

The granular metrics produced by the IM are used in setting the Company's strategy and support a series of other activities including:

- Business planning, capital allocation, measurement of the risk-adjusted return and setting risk appetites;
- Improving pricing and product design by assessing the level of capital required to support different types of product;
- Assessing the appropriateness of potential acquisitions or business investments through the impact on surplus capital;
- Identifying the need for targeted reinsurance contracts to mitigate undesirable risk exposures, through modelling potential adverse scenarios; and
- Measuring the impact of market changes on assets and liabilities to drive investment strategy.

### E.4.2 Scope of the IM and integration into the SF to derive the PIM

The Company uses a PIM to calculate its SCR (unaudited). The IM component covers all of the Company's risk categories and takes into account the underlying risks of the Company's subsidiaries, subject to the exclusions detailed below.

The SCR is calculated using SF for the following elements of the Company's business:

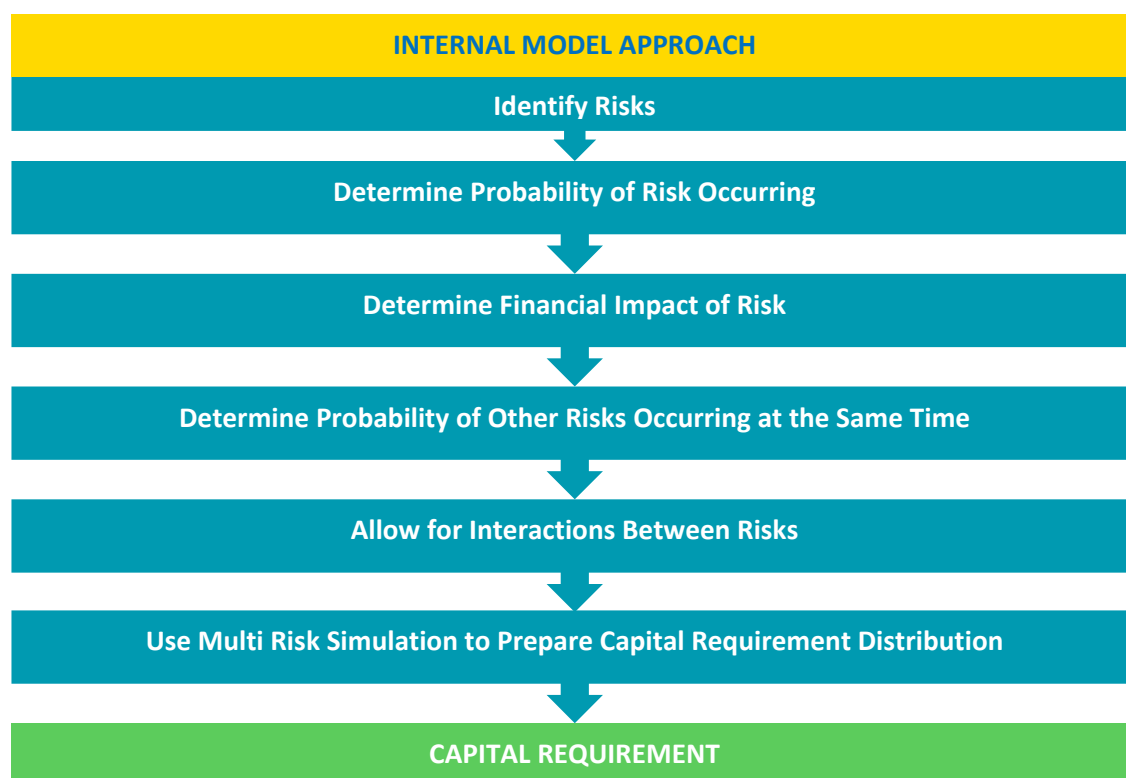
- Private medical insurance business;
- ACI's staff pension fund;
- Some of the Company's non-insurance participations; and
- Household business underwritten by the Company's subsidiary, Gresham, to the extent it has not been reinsured to the Company.

The SCR (unaudited) of the Royal Bank of Canada business, acquired by ACI during 2016, which was previously calculated using the SF, was determined using the IM as at 31 December 2017.

The Company has chosen to use Integration Technique 2 within Method 2 as detailed in Annex XVIII of the SII Delegated Regulations, to combine the results of its IM and SF calculations. This technique requires specifying upper and lower bounds for correlations between the entire IM block and each of the SF risk modules. A correlation matrix is then constructed with correlations between these bounds such that it maximises the Basic Solvency Capital Requirement.

### E.4.3 Method used in the IM for calculating the probability distribution forecast

The purpose of the IM is to identify the risks to which the Company is exposed, model these risks using suitably calibrated inputs and aggregate them to compute the SCR (unaudited). An overview of the Company's approach is shown below.



The Company's IM allows flexibility in determining which statistical distributions to use to represent risk factors. This flexibility is important as it ensures that the behaviour of the most important risks to the Company is modelled appropriately.

For the market risk factors standard statistical distributions are used which are fitted via the standard risk factor calibration process. However, for other risk types, such as non-life underwriting and operational risk, distributions are derived from further modelling processes. This approach is appropriate given both the materiality of these risk types and the desire to ensure the risk's behaviour is adequately captured.

The Company uses a wide range of testing and review processes to ensure that the calibrations are appropriate and the IM outputs are reasonable. These range from bottom-up reviews of the material assumptions used in the modelling process and the testing of the calibrations and loss functions, to top-down stress and scenario testing, back testing and benchmarking.

#### Risk measure and time period used in the IM

The IM produces an aggregate distribution of the change in Basic Own Funds over a one year time horizon from which the SCR (unaudited) can be directly derived, in line with Article 101 of the SII Directive. The SCR (unaudited) is the 99.5th percentile.

### E.4.4 Material differences between the SF and IM methodologies and assumptions

The key difference between SF and the IM is that the IM has been tailored to the Company's risk profile. The IM calibrates a distribution of losses for each risk and uses these, together with a set of correlations between these risks, to derive a joint distribution of losses for the Company. The SCR (unaudited) is derived from this and ensures the Company holds sufficient capital to withstand a 1 in 200 year event. Calibrating risks for the IM therefore requires detailed data analysis and use of statistical models. SF simply uses prescribed formulae to calculate the capital required for each risk exposure.

Material differences between the SF and IM methodologies and assumptions by risk type are:

#### Market risk

- The Company's IM includes the risk on sovereign bonds, which is not included in SF.
- In the Company's IM interest rates are modelled in more detail to ensure changes in the slope and shape of the yield curve are captured. SF only considers the change in the level of interest rates.

### Non-life underwriting risk

- Risks relating to latent claims and PPO are included in the IM using the Company's specific risk distributions. As SF does not explicitly address latent claims and PPO a company using SF would need to devise undertaking specific parameters.
- Man made catastrophes are allowed for in the IM as an ENID, using Company-specific parameters and taking into account diversification benefits. SF computes the impact of man made catastrophes formulaically.
- In SF the impact of inflation is implicitly captured in the calibration of the premium and reserve risks. The Company's IM separately identifies and calibrates RPI movements that can be traded.
- The Company's IM employs a finer level of granularity for material lines of business which allows for more distinction between material product types and in particular between commercial and personal lines which are grouped in SF.
- The Company's IM captures risks where the probability of extreme values is higher than normal, for example, PPO related to large personal injury claims. SF would not adequately capture the impact of these elements for the Company.

### Operational risk

- The Company's IM assesses operational risk using a scenario based approach. SF uses a simple formulaic approach.

### Counterparty risk

- SF considers all counterparty default risk under one module. The Company's IM takes into account both the type of the counterparty and the nature of the exposure.
- The Company's IM considers default risk in more detail, taking into account spread risks and diversification between various credit exposures. SF does not consider these elements.

### Aggregation, diversification and tax

- The Company's IM allows it to determine diversification at a more granular level and capture important features such as its geographical diversification.
- The Company's IM uses explicit correlation matrices to combine sub-module losses within each risk module, and then to combine the calculated losses of the different risk modules. The SF uses a simpler hierarchical correlations approach.
- The Company's IM assesses loss functions net of tax. The SF calculation requires tax relief to be deducted from the gross SCR.

## E.4.5 Data used in the IM

The data used in the Company's IM includes:

- Accounting data, computed on an IFRS basis, which is used in the valuation of assets and liabilities;
- Policy data from both policies in force and past policies that includes premium data, historic data on claims and exposure data covering potential catastrophic events such as on geographical concentrations;
- Operational risk data obtained from an external database covering industry operational risk losses, which is obtained from the Operational Risk Insurance Consortium;
- Financial market data, including asset data externally obtained such as from FTSE 100 index;
- Asset data including the market value of assets, most often derived from the accounting data; and
- Other data including numerical, census or classification information, but excluding qualitative information.

As part of the Company's data governance process the appropriateness of the data is considered before it is used in the IM. Data accuracy, appropriateness and completeness are monitored on an ongoing basis by the Company's Data Governance Council. The data used in the IM in 2017 was formally approved by the Company's Chief Risk Actuary, supported by the Data Governance Council, on 16 April 2018.

## E.5 Non-Compliance with the Minimum Capital Requirement and Non-Compliance with the Solvency Capital Requirement (unaudited)

The Company has complied continuously with both the MCR and the SCR (unaudited) throughout the reporting period.

## E.6 Any Other Information

The Company has no other material information to disclose.

# Aviva Insurance Limited

## Solvency and Financial Condition Report 2017

### F. Appendices

#### In this Section

F.1	Public Disclosure Quantitative Reporting Templates
F.1.1	S.02.01 Balance Sheet
F.1.2.1	S.05.01 Premium claims and expenses (by line of business) [life]
F.1.2.2	S.05.01 Premium claims and expenses (by line of business) [non-life]
F.1.2.3	S.05.02 Premium claims and expenses (by country) [life]
F.1.2.4	S.05.02 Premium claims and expenses (by country) [non-life]
F.1.3.1	S.12.01 Technical Provisions [life]
F.1.3.2	S.17.01 Technical Provisions [non-life]
F.1.4	S.19.01 Insurance claims [non-life]
F.1.5	S.22.01 Impact of transitional measures
F.1.6	S.23.01 Own Funds
F.1.7	S.25.02 Solvency Capital Requirement
F.1.8	S.28.01 Minimum Capital Requirement
F.2	Glossary of Abbreviations and Definitions
F.3	Directors' Statement
F.4	Auditors' Report

## Appendix F.1.1

### Annex I

#### S.02.01.02

#### Balance Sheet

Amounts in 000s

		Solvency II Value
		C0010
<b>Assets</b>		
Intangible assets	R0030	0
Deferred tax assets	R0040	65,200
Pension benefit surplus	R0050	
Property, plant & equipment held for own use	R0060	23,865
Investments (other than assets held for index-linked and unit-linked contracts)	R0070	6,310,836
Property (other than for own use)	R0080	323,553
Holdings in related undertakings, including participations	R0090	1,093,140
Equities	R0100	8,554
- Equities - Listed	R0110	
- Equities - Unlisted	R0120	8,554
Bonds	R0130	3,244,644
- Government Bonds	R0140	1,695,826
- Corporate Bonds	R0150	1,548,818
- Structured Notes	R0160	
- Collateralised securities	R0170	
Collective Investments Undertakings	R0180	1,491,322
Derivatives	R0190	106,913
Deposits other than cash equivalents	R0200	42,710
Other investments	R0210	
Assets held for index-linked and unit-linked contracts	R0220	
Loans & mortgages	R0230	1,921,554
- Loans on policies	R0240	
- Loans & mortgages to individuals	R0250	
- Other loans & mortgages	R0260	1,921,554
Reinsurance recoverables from:	R0270	4,480,335
- Reinsurance recoverables - Non-life and health similar to non-life	R0280	3,863,505
- Reinsurance recoverables - Non-life excluding health	R0290	3,715,309
- Reinsurance recoverables - Health similar to non-life	R0300	148,195
- Reinsurance recoverables - Life and health similar to life, excluding health and index-linked and unit-linked	R0310	616,830
- Reinsurance recoverables - Health similar to life	R0320	
- Reinsurance recoverables - Life excluding health and index-linked and unit-linked	R0330	616,830
- Reinsurance recoverables - Life index-linked and unit-linked	R0340	
Deposits to cedants	R0350	
Insurance & intermediaries receivables	R0360	2,363
Reinsurance receivables	R0370	37,536
Receivables (trade, not insurance)	R0380	533,559
Own Shares (held directly)	R0390	
Amounts due in respect of own fund items or initial fund called up but not yet paid in	R0400	
Cash and cash equivalents	R0410	109,894
Any other assets, not elsewhere shown	R0420	51,730
<b>Total assets</b>	R0500	13,536,871
<b>Liabilities</b>		
Technical provisions - Non-life	R0510	5,774,234
- Technical provisions - Non-life (excluding health)	R0520	5,659,623
- TP calculated as a whole - Non-life (excluding health)	R0530	
- Best Estimate - Non-life (excluding health)	R0540	5,488,792
- Risk margin - Non-life (excluding health)	R0550	170,831
- Technical provisions - Health (similar to non-life)	R0560	114,611
- TP calculated as a whole - Health (similar to non-life)	R0570	
- Best Estimate - Health (similar to non-life)	R0580	111,166
- Risk margin - Health (similar to non-life)	R0590	3,445
Technical provisions - Life (excluding index-linked and unit linked)	R0600	758,826
- Technical provisions - Health (similar to life)	R0610	
- TP calculated as a whole - Health (similar to life)	R0620	
- Best Estimate - Health (similar to life)	R0630	
- Risk margin - Health (similar to life)	R0640	
- Technical provisions - Life (excluding health and index-linked and unit-linked)	R0650	758,826
- TP calculated as a whole - Life (excl health, index-linked and unit-linked)	R0660	
- Best Estimate - Life (excl health, index-linked and unit-linked)	R0670	690,500
- Risk margin - Life (excl health, index-linked and unit-linked)	R0680	68,326
Technical provisions - Index-linked and unit-linked	R0690	
- TP calculated as a whole - Index-linked and unit-linked	R0700	
- Best Estimate - Index-linked and unit-linked	R0710	
- Risk margin - Index-linked and unit-linked	R0720	
Contingent liabilities	R0740	
Provisions other than technical provisions	R0750	17,464
Pension benefit obligations	R0760	
Deposits from reinsurers	R0770	3,237,332
Deferred tax liabilities	R0780	19,520
Derivatives	R0790	168,767
Debts owed to credit institutions	R0800	316,492
Financial liabilities other than debts owed to credit institutions	R0810	33,371
Insurance & intermediaries payables	R0820	73,513
Reinsurance payables	R0830	7,726
Payables (trade, not insurance)	R0840	214,685
Subordinated liabilities	R0850	283,203
- Subordinated liabilities not in BOF	R0860	
- Subordinated liabilities in BOF	R0870	283,203
Any other liabilities, not elsewhere shown	R0880	372,521
<b>Total liabilities</b>	R0900	11,277,654
<b>Excess of assets over liabilities</b>	R1000	2,259,217

## Appendix F.2.1

Annex I

S.05.01.02

Premiums, claims and expenses by line of business

Amounts in 000s

		Line of Business for: life insurance obligations						Life reinsurance obligations		
		Health [accepted non-proportional reinsurance]	Insurance with profit participation	Unit-linked or index-linked insurance	Other life insurance	Annuities stemming from non-life insurance contracts and relating to health insurance obligations	Annuities stemming from non-life insurance contracts and relating to insurance obligations other than health insurance	Health reinsurance	Life reinsurance	Total
		C0210	C0220	C0230	C0240	C0250	C0260	C0270	C0280	C0300
Premiums written										
Gross - Direct Business	R1410									
Reinsurers' share	R1420									
Net	R1500									
Premiums earned										
Gross - Direct Business	R1510									
Reinsurers' share	R1520									
Net	R1600									
Claims incurred										
Gross - Direct Business	R1610						-4,459			-4,459
Reinsurers' share	R1620						2,824			2,824
Net	R1700						-7,283			-7,283
Changes in other technical provisions										
Gross - Direct Business	R1710									
Reinsurers' share	R1720									
Net	R1800									
Expenses incurred	R1900									
Other expenses	R2500									
Total expenses	R2600									



Appendix F.1.2.2

Annex I  
S.05.01.02  
Premiums, claims and expenses by line of business  
Amounts in 000s

Line of Business for: non-life insurance and reinsurance obligations (direct business and accepted proportional reinsurance)											
Medical expense insurance [direct business]	Income protection insurance [direct business]	Workers' compensation insurance [direct business]	Motor vehicle liability insurance [direct business]	Other motor insurance [direct business]	Marine, aviation and transport insurance [direct business]	Fire and other damage to property insurance [direct business]	General liability insurance [direct business]	Credit and suretyship insurance [direct business]	Legal expenses insurance [direct business]	Assistance [direct business]	Miscellaneous financial loss [direct business]
C0010	C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100	C0110	C0120
Premiums written											
Gross - Direct Business	R0110	568,417	88,433	1,559,384	389,846	26,069	1,922,148	433,638	26,011	39,990	58,834
Gross - Proportional reinsurance accepted	R0120					12,908	156,441	9,200	4,765		
Gross - Non-proportional reinsurance accepted	R0130										
Reinsurers' share	R0140	284,208	46,135	794,076	198,519	20,287	1,149,424	226,742	19,305	19,995	30,733
Net	R0200	284,209	42,298	765,308	191,327	18,690	929,165	216,096	11,472	19,995	28,101
Premiums earned											
Gross - Direct Business	R0210	567,459	89,148	1,540,936	385,234	26,347	1,872,020	413,686	22,402	39,552	61,338
Gross - Proportional reinsurance accepted	R0220					12,908	165,941	8,902	4,765		
Gross - Non-proportional reinsurance accepted	R0230										
Reinsurers' share	R0240	283,730	46,492	785,628	196,407	20,400	1,123,350	215,514	16,464	19,776	31,985
Net	R0300	283,730	42,656	755,308	188,827	18,855	914,610	207,073	10,703	19,776	29,353
Claims incurred											
Gross - Direct Business	R0310	405,854	43,997	1,107,083	276,771	19,769	842,647	241,187	8,868	29,393	13,581
Gross - Proportional reinsurance accepted	R0320					7,455	65,728	3,948	1,643		
Gross - Non-proportional reinsurance accepted	R0330										
Reinsurers' share	R0340	192,853	24,583	566,968	141,742	15,068	509,172	132,189	6,032	14,697	6,991
Net	R0400	213,001	19,415	540,115	135,029	12,156	399,203	112,946	4,479	14,697	6,590
Changes in other technical provisions											
Gross - Direct Business	R0410		-341								-341
Gross - Proportional reinsurance accepted	R0420										
Gross - Non-proportional reinsurance accepted	R0430										
Reinsurers' share	R0440		-171								-171
Net	R0500		-171								-171
Expenses incurred	R0550	55,030	21,971	178,963	44,741	7,287	469,392	80,101	4,664	5,581	18,374
Other expenses	R1200										
Total expenses	R1300										

Line of Business for: accepted non proportional reinsurance					
	Non-proportional health reinsurance	Non-proportional casualty reinsurance	Non-proportional marine, aviation and transport reinsurance	Non-proportional property reinsurance	Total
	C0130	C0140	C0150	C0160	C0200
Premiums written					
Gross - Direct Business	R0110				5,112,772
Gross - Proportional reinsurance accepted	R0120				183,314
Gross - Non-proportional reinsurance accepted	R0130				
Reinsurers' share	R0140				2,789,424
Net	R0200				2,506,662
Premiums earned					
Gross - Direct Business	R0210				5,018,122
Gross - Proportional reinsurance accepted	R0220				192,515
Gross - Non-proportional reinsurance accepted	R0230				
Reinsurers' share	R0240				2,739,746
Net	R0300				2,470,891
Claims incurred					
Gross - Direct Business	R0310				2,989,151
Gross - Proportional reinsurance accepted	R0320				78,774
Gross - Non-proportional reinsurance accepted	R0330				
Reinsurers' share	R0340				1,610,295
Net	R0400				1,457,629
Changes in other technical provisions					
Gross - Direct Business	R0410				-682
Gross - Proportional reinsurance accepted	R0420				
Gross - Non-proportional reinsurance accepted	R0430				
Reinsurers' share	R0440				-341
Net	R0500				-341
Expenses incurred	R0550				886,104
Other expenses	R1200				70,218
Total expenses	R1300				956,323

### Appendix F.1.2.3

#### Annex I

#### S.05.02.01

#### Premiums, claims and expenses by Country

Amounts in 000s

		Home Country	Top 5 countries (by amount of gross premium written) - life obligations					Total Top 5 and home country
		C0150	C0160	C0170	C0180	C0190	C0200	C0210
R1400								
		C0220	C0230	C0240	C0250	C0260	C0270	C0280
<b>Premiums written</b>								
Gross	R1410							0
Reinsurers' share	R1420							0
Net	R1500							0
<b>Premiums earned</b>								
Gross	R1510							0
Reinsurers' share	R1520							0
Net	R1600							0
<b>Claims incurred</b>								
Gross	R1610	-4,459						-4,459
Reinsurers' share	R1620	2,824						2,824
Net	R1700	-7,283						-7,283
<b>Changes in other technical provisions</b>								
Gross	R1710							0
Reinsurers' share	R1720							0
Net	R1800							0
Expenses incurred	R1900							0
Other expenses	R2500							0
<b>Total expenses</b>	R2600							0

# Appendix F.1.2.4

## Annex I

### S.05.02.01

#### Premiums, claims and expenses by Country

Amounts in 000s

Home Country		Top 5 countries (by amount of gross premium written) - non-life obligations						Total Top 5 and home country
C0010		C0020	C0030	C0040	C0050	C0060	C0070	
R0010		IE	ES	NL	AE	DE		
C0080		C0090	C0100	C0110	C0120	C0130	C0080	
<b>Premiums written</b>								
Gross - Direct Business	R0110	4,565,674	463,319	26,524	12,965	10,244	6,897	5,085,623
Gross - Proportional reinsurance accepted	R0120	183,314						183,314
Gross - Non-proportional reinsurance accepted	R0130							0
Reinsurers' share	R0140	2,510,727	239,892	13,067	6,700	5,124	3,912	2,779,421
Net	R0200	2,238,262	223,428	13,457	6,264	5,121	2,985	2,489,516
<b>Premiums earned</b>								
Gross - Direct Business	R0210	4,483,175	451,150	26,526	12,885	10,555	6,780	4,991,071
Gross - Proportional reinsurance accepted	R0220	192,515						192,515
Gross - Non-proportional reinsurance accepted	R0230							0
Reinsurers' share	R0240	2,467,396	233,779	13,057	6,647	5,279	3,835	2,729,994
Net	R0300	2,208,295	217,371	13,469	6,237	5,276	2,945	2,453,592
<b>Claims incurred</b>								
Gross - Direct Business	R0310	2,664,525	255,685	12,576	8,501	10,747	8,521	2,960,555
Gross - Proportional reinsurance accepted	R0320	78,758	11		1			78,769
Gross - Non-proportional reinsurance accepted	R0330							0
Reinsurers' share	R0340	1,444,170	128,651	6,132	4,589	5,375	4,849	1,593,765
Net	R0400	1,299,113	127,045	6,444	3,913	5,373	3,672	1,445,559
<b>Changes in other technical provisions</b>								
Gross - Direct Business	R0410	-682						-682
Gross - Proportional reinsurance accepted	R0420							0
Gross - Non-proportional reinsurance accepted	R0430							0
Reinsurers' share	R0440	-341						-341
Net	R0500	-341						-341
<b>Expenses incurred</b>	R0550	785,518	75,475	7,681	3,757	2,784	1,641	876,856
<b>Other expenses</b>	R1200							70,218
<b>Total expenses</b>	R1300							947,074

## Appendix F.1.3.1

Annex I  
S.12.01.02  
Life and Health SLT Technical Provisions  
Amounts in 000s

	Insurance with profit participation	Unit-linked or index-linked insurance		Other life insurance			Annuities stemming from non-life insurance contracts and relating to insurance obligations other than health insurance	Accepted reinsurance	Total (Life other than health insurance, incl. Unit-Linked)	
	C0020	C0030	Contracts without options and guarantees C0040	Contracts with options or guarantees C0050	C0060	Contracts without options and guarantees C0070	Contracts with options or guarantees C0080	C0090	C0100	C0150
Technical provisions calculated as a whole	R0010									
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP as a whole	R0020									
Technical provisions calculated as a sum of BE and RM										
Best Estimate										
Gross Best Estimate	R0030							690,183	317	690,500
Total Recoverables from reinsurance and SPV after the adjustment for expected losses due to counterparty default	R0080							616,830		616,830
Best estimate minus recoverables from reinsurance and SPV - Total	R0090							73,353	317	73,670
Risk Margin	R0100							68,326		68,326
Amount of the transitional on Technical Provisions										
Technical Provisions calculated as a whole	R0110									
Best estimate	R0120									
Risk margin	R0130									
Technical provisions - Total	R0200							758,509	317	758,826

	Health [accepted non-proportional reinsurance]			Annuities stemming from non-life insurance contracts and relating to health insurance only	Health reinsurance	Total (Health similar to life insurance)
	Contracts without options and guarantees	Contracts with options or guarantees				
	C0160	C0170	C0180	C0190	C0200	C0210
Technical provisions calculated as a whole	R0010					
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP as a whole	R0020					
Technical provisions calculated as a sum of BE and RM						
Best Estimate						
Gross Best Estimate	R0030					
Total Recoverables from reinsurance and SPV after the adjustment for expected losses due to counterparty default	R0080					
Best estimate minus recoverables from reinsurance and SPV - Total	R0090					
Risk Margin	R0100					
Amount of the transitional on Technical Provisions						
Technical Provisions calculated as a whole	R0110					
Best estimate	R0120					
Risk margin	R0130					
Technical provisions - Total	R0200					

Appendix F.1.3.2

Annex I  
S.17.01.02  
Non-Life Technical Provisions  
Amounts in 000s

Technical provisions calculated as a whole  
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP as a whole  
Technical provisions calculated as a sum of BE and RM  
Best estimate  
Premium provisions  
Gross  
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default  
Net Best Estimate of Premium Provisions  
Claims provisions  
Gross  
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default  
Net Best Estimate of Claims Provisions  
Total Best estimate - Gross  
Total Best estimate - Net  
Risk margin  
Amount of the transitional on Technical Provisions  
Technical Provisions calculated as a whole  
Best estimate  
Risk margin  
Technical provisions - Total  
Technical provisions - Total  
Recoverable from reinsurance contract/SPV and Finite Re after the adjustment for expected losses due to counterparty default - Total  
Technical provisions minus recoverables from reinsurance/SPV and Finite Re - Total

	Medical expense insurance [direct business]	Income protection insurance [direct business]	Workers' compensation insurance [direct business]	Motor vehicle liability insurance [direct business]	Direct business and accepted Other motor insurance [direct business]	Marine, aviation and transport insurance [direct business]	proportional Fire and other damage to property insurance [direct business]	reinsurance General liability insurance [direct business]	Credit and suretyship insurance [direct business]	Legal expenses insurance [direct business]	Assistance [direct business]	Miscellaneous financial loss [direct business]
	C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100	C0110	C0120	C0130
R0010												
R0050												
R0060	22,835	2,364		286,842	115,280	3,045	-50,472	61,367	644		6,974	-1,965
R0140	91,787	6,485		268,920	106,392	5,290	250,054	69,079	3,419		3,007	6,341
R0150	-68,952	-4,122		17,921	8,888	-2,245	-300,527	-7,712	-2,775		3,968	-8,307
R0160	54,181	31,786		2,543,910	90,193	46,666	497,554	1,821,709	17,607		18,185	30,427
R0240	27,095	22,827		1,296,803	49,909	30,782	280,103	1,308,219	8,426		12,080	16,071
R0250	27,086	8,959		1,247,107	40,284	15,884	217,451	513,490	9,181		6,105	14,356
R0260	77,016	34,150		2,830,752	205,473	49,711	447,081	1,883,077	18,250		25,160	28,462
R0270	-41,866	4,837		1,265,029	49,172	13,639	-83,076	505,778	6,406		10,073	6,049
R0280	3,251	194		48,541	2,163	181	26,776	89,289	145		138	3,599
R0290												
R0300												
R0310												
R0320	80,267	34,344		2,879,293	207,636	49,891	473,857	1,972,366	18,396		25,298	32,060
R0330	118,883	29,313		1,565,723	156,301	36,072	530,157	1,377,299	11,844		15,087	22,412
R0340	-38,616	5,031		1,313,569	51,335	13,819	-56,300	595,067	6,551		10,211	9,648

Technical provisions calculated as a whole  
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP as a whole  
Technical provisions calculated as a sum of BE and RM  
Best estimate  
Premium provisions  
Gross  
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default  
Net Best Estimate of Premium Provisions  
Claims provisions  
Gross  
Total recoverable from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default  
Net Best Estimate of Claims Provisions  
Total Best estimate - Gross  
Total Best estimate - Net  
Risk margin  
Amount of the transitional on Technical Provisions  
Technical Provisions calculated as a whole  
Best estimate  
Risk margin  
Technical provisions - Total  
Technical provisions - Total  
Recoverable from reinsurance contract/SPV and Finite Re after the adjustment for expected losses due to counterparty default - Total  
Technical provisions minus recoverables from reinsurance/SPV and Finite Re - Total

	Accepted Health [accepted non-proportional reinsurance]	non-proportional Casualty [accepted non-proportional reinsurance]	reinsurance Marine, aviation, transport [accepted non-proportional reinsurance]	Property [accepted non-proportional reinsurance]	Total Non-Life obligation
	C0140	C0150	C0160	C0170	C0180
R0010					
R0050					
R0060					446,913
R0140					810,775
R0150					-363,862
R0160		824	2		5,153,045
R0240		412	1		3,052,730
R0250		412	1		2,100,315
R0260		824	2		5,599,958
R0270		412	1		1,736,453
R0280					174,276
R0290					
R0300					
R0310					
R0320		824	2		5,774,234
R0330		412	1		3,863,505
R0340		412	1		1,910,730

Appendix F.1.4

Annex I  
S.19.01.21  
Non-Life Insurance Claims Information  
Amounts in 000s

Total Non-Life Business

Accident year / Underwriting year	Z0020	AY
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Gross Claims Paid (non-cumulative)  
(absolute amount)

		Development Year											In Current year	Sum of years (cumulative)
		0	1	2	3	4	5	6	7	8	9	10&+		
		C0010	C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100	C0110	C0170	C0180
Prior	R0100											74,100	R0100	74,100
R0160	R0160	1,962,617	979,156	273,997	245,380	176,938	106,973	57,919	31,521	10,840	8,425		R0160	8,425
R0170	R0170	1,665,660	838,393	299,084	173,944	144,262	76,165	45,390		12,803			R0170	12,803
R0180	R0180	1,374,682	896,851	244,270	179,792	122,844	83,767	40,602	19,799				R0180	6,425
R0190	R0190	1,321,374	691,267	242,308	167,360	152,396	78,254	50,221	6,425				R0190	50,221
R0200	R0200	1,463,565	701,528	262,209	192,060	148,315	103,898						R0200	103,898
R0210	R0210	1,412,067	642,195	227,948	160,865	146,929							R0210	146,929
R0220	R0220	1,436,889	614,197	216,330	168,490								R0220	168,490
R0230	R0230	1,459,289	736,632	279,247									R0230	279,247
R0240	R0240	1,520,151	689,562										R0240	689,562
R0250	R0250	1,571,774											R0250	1,571,774
													Total	R0260
														3,111,875

Gross undiscounted Best Estimate Claims Provisions  
(absolute amount)

		Development Year											Year end (discounted data)	
		0	1	2	3	4	5	6	7	8	9	10&+		
		C0200	C0210	C0220	C0230	C0240	C0250	C0260	C0270	C0280	C0290	C0300	C0360	
Prior	R0100											1,251,573	R0100	1,064,270
R0160	R0160									42,096	32,455		R0160	31,611
R0170	R0170								12,908	57			R0170	-811
R0180	R0180							81,339	60,575				R0180	58,641
R0190	R0190						155,431	114,154					R0190	111,493
R0200	R0200					326,977	187,262						R0200	183,471
R0210	R0210				463,877	290,068							R0210	284,085
R0220	R0220			630,619	456,387								R0220	448,069
R0230	R0230		966,499	641,581									R0230	630,026
R0240	R0240	1,556,046	938,920										R0240	919,794
R0250	R0250	1,446,161											R0250	1,422,395
													Total	R0260
														5,153,045

## Appendix F.1.5

### Annex I

#### S.22.01.21

#### Impact of long term guarantees and transitional measures

Amounts in 000s

	Amount with LG measures and transitionals	Impact of transitional on technical provisions	Impact of transitional on interest rate	Impact of volatility adjustment set to zero	Impact of matching adjustment set to zero
	C0010	C0030	C0050	C0070	C0090
Technical Provisions	R0010	6,533,061		73,978	
Basic Own Funds	R0020	2,542,420		-14,674	
Eligible own funds to meet Solvency Capital Requirement	R0050	2,542,420	0	-14,674	0
Solvency Capital Requirement	R0090	1,283,130		46,000	
Eligible own funds to meet Minimum Capital Requirement	R0100	2,194,017	0	-14,674	0
Minimum Capital Requirement	R0110	386,123		1,000	

Amounts in 000s

**Ratio of eligible own funds to MCR**70



## Appendix F.1.7

### Annex I

#### S.25.02.21

#### Solvency Capital Requirement - For undertakings using the standard formula and partial internal mod

Amounts in 000s

Unique number of component	Component Description
C0010	C0020
100000	Market Risk
200000	Counterparty Risk
300000	Life underwriting risk
400000	Health underwriting risk
500000	Non-life underwriting risk
701000	Operational risk
801000	Other risks
802000	Loss-absorbing capacity of technical provisions
803000	Loss-absorbing capacity of deferred tax
804000	Other adjustments

Calculation of the Solvency Capital Requirement	Amount modelled	USP	Simplifications
C0030	C0070	C0090	C0120
874,811	806,616		None
158,001	146,126		
41,029		None	None
843,488	843,488	None	None
384,530	369,255		
-149,010	-149,010		
-6,947	-6,947		

#### Calculation of Solvency Capital Requirement

Total undiversified components	R0110
Diversification	R0060
Capital requirement for business operated in accordance with Art. 4 of Directive 2003/41/EC	R0160
<b>Solvency Capital Requirement excluding capital add-on</b>	R0200
Capital add-ons already set	R0210
<b>Solvency capital requirement</b>	R0220

#### C0100

2,145,903
-862,773
1,283,130
1,283,130
1,283,130

<b>Other information on SCR</b>	
Amount/Estimate of the overall loss-absorbing capacity of technical provisions	R0300
Amount/Estimate of the overall loss-absorbing capacity of deferred taxes	R0310
Capital requirement for duration-based equity risk sub-module	R0400
Total amount of Notional Solvency Capital Requirements for remaining part	R0410
Total amount of Notional Solvency Capital Requirements for ring fenced funds	R0420
Total amount of Notional Solvency Capital Requirements for matching adjustment portfolios	R0430
Diversification effects due to RFF nSCR aggregation for article 304	R0440

## Appendix F.1.8

### Annex I

#### S.28.01.01

#### Minimum Capital Requirement - Only life or only non-life insurance or reinsurance activity

Amounts in 000s

#### Linear formula component for non-life insurance and reinsurance obligations

MCRNL Result	R0010	C0010
		384,576

#### Linear formula component for life insurance and reinsurance obligations

MCRL Result	R0200	C0040	
		1,547	

#### Overall MCR calculation

		C0070	
Linear MCR	R0300	386,123	
SCR	R0310	1,283,130	
MCR cap	R0320	577,408	
MCR floor	R0330	320,782	
Combined MCR	R0340	386,123	
Absolute floor of the MCR	R0350	3,251	
		C0070	
Minimum Capital Requirement	R0400	386,123	

## F.2 Glossary of Abbreviations and Definitions

99.5% percentile	An event that would be expected to occur once in every 200 years
ACI	Aviva Canada Inc.
AGH	Aviva Group Holdings Limited
AIL	Aviva Insurance Limited
AiIL	Aviva International Insurance Limited
ALCO	Asset & Liability Committee
Alternative valuation methods	Valuation methods that are consistent with Article 75 of the SII Directive other than those which solely use the quoted market prices for the same or similar assets or liabilities <sup>iii</sup>
ASHE	Annual Survey of Hours and Earnings Index
Basis risk	The risk resulting from the situation in which the exposure covered by the risk-mitigation technique does not correspond to the risk exposure of the insurance or reinsurance undertaking <sup>iii</sup>
CAD	Canadian Dollars
CEO	Chief Executive Officer
CFO	Chief Finance Officer
Collateral arrangements	Arrangements under which collateral providers do one of the following: (a) transfer full ownership of the collateral to the collateral taker for the purposes of securing or otherwise covering the performance of a relevant obligation; or (b) provide collateral by way of security in favour of, or to, a collateral taker, and the legal ownership of the collateral remains with the collateral provider or a custodian when the security right is established <sup>iii</sup>
Concentration risk	All risk exposures with a loss potential which is large enough to threaten the solvency or the financial position of insurance and reinsurance undertaking <sup>ii</sup>
Credit risk	The risk of loss or of adverse change in the financial situation, resulting from fluctuations in the credit standing of issuers of securities, counterparties and any debtors to which insurance and reinsurance undertakings are exposed, in the form of counterparty default risk, or spread risk, or market risk concentrations <sup>ii</sup>
CRO	Chief Risk Officer
GCS	Global Corporate Specialty
Diversification benefit	The reduction in the risk exposure of insurance and reinsurance undertakings and groups related to the diversification of their business, resulting from the fact that the adverse outcome from one risk can be offset by a more favourable outcome from another risk, where those risks are not fully correlated <sup>ii</sup>
EIOPA	European Insurance and Occupational Pensions Authority: The EIOPA is an independent advisory body to the European Parliament, the European Commission and the Council of the European Union. The core responsibilities are to support the stability of the financial system, transparency of markets and financial products, ensure consistent level of regulation as well as the protection of policyholders, pension scheme members and beneficiaries.
ENID	Events Not in Data: These are events not deemed to be captured by the data which need to be separately allowed for within the best estimate calculations to take appropriate account of uncertainty.
EPIFP	Expected profit included in future premium: This is the expected present value of future cash flows which result from the inclusion in technical provisions of premiums relating to existing insurance and reinsurance contracts that are expected to be received in the future, but that may not be received for any reason, other than because the insured event has occurred, regardless of the legal or contractual rights of the policyholder to discontinue the policy <sup>iii</sup>
EU	European Union
EUR	Euros
FCA	Financial Conduct Authority
GAAP	Generally accepted accounting principles
Gresham	Gresham Insurance Company Limited
The Group	Aviva plc and its subsidiary companies

IAS	International Accounting Standards
IFRS	International Financial Reporting Standards as adopted by the European Union and used to prepare the Company's financial statements
IFRS 13	IFRS covering Fair Value Measurement
IM	Internal Model
IMIV	Internal Model Independent Validation
IMMMR	Identify, measure, manage, monitor and report risks
IT	Information Technology
Latent claims	General insurance claims that are often not made until many years after the period of cover provided, due to the impact of perils or causes not becoming evident for a number of years. Sources of latent claims include asbestos-related diseases, environmental pollution and industrial deafness. <sup>i</sup>
LIBOR	London Interbank Offered Rate
Liquidity risk	The risk that insurance and reinsurance undertakings are unable to realise investments and other assets in order to settle their financial obligations when they fall due <sup>ii</sup>
Longevity risk	The risk associated with annuitants living longer than expected
Look through	The Company considers the risks, assets, liabilities of its subsidiary as if they were its own
Market risk	The risk of loss or of adverse change in the financial situation resulting, directly or indirectly, from fluctuations in the level and in the volatility of market prices of assets, liabilities and financial instruments <sup>ii</sup>
MCR	Minimum Capital Requirement
NED	Non-Executive Director
NIC	National Indemnity Company
Ocean Marine	The Ocean Marine Insurance Company Limited
Operational risk	The risk of loss arising from inadequate or failed internal processes, personnel or systems, or from external events <sup>ii</sup>
ORSA	Own Risk and Solvency Assessment
Outsourcing	An arrangement of any form between an insurance or reinsurance undertaking and a service provider, whether a supervised entity or not, by which that service provider performs a process, a service or an activity, whether directly or by sub-outsourcing, which would otherwise be performed by the insurance or reinsurance undertaking itself <sup>ii</sup>
Over-the-counter derivatives	Contracts that are traded (and privately negotiated) directly between two parties, without going through an exchange or other intermediary. Products such as swaps and forward rate agreements are almost always traded in this way.
PIM	Partial Internal Model
PPO	Periodic Payment Orders (annuities stemming from non-life insurance contracts)
PRA	Prudential Regulatory Authority
Probability distribution forecast	A mathematical function that assigns to an exhaustive set of mutually exclusive future events a probability of realisation <sup>ii</sup>
QRT	Quantitative Reporting Templates
Qualifying holding	A direct or indirect holding in an undertaking which represents 10% or more of the capital or of the voting rights or which makes it possible to exercise a significant influence over the management of that undertaking <sup>ii</sup>
Risk Margin	An estimate of the amount, in addition to the Best Estimate Liability, that a third party would expect to receive in order to assume ownership of the Company's insurance obligations.
Risk-mitigation techniques	All techniques which enable insurance and reinsurance undertakings to transfer part or all of their risks to another party <sup>ii</sup>
RPI	Retail Prices Index
Scenario analysis	The analysis of the impact of a combination of adverse events <sup>iii</sup>
SCR	Solvency Capital Requirement

SF	Standard Formula
SFCR	Solvency and Financial Condition Report
SII	Solvency II Regulatory Regime
SII Directive	Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 which was subsequently amended by Directive 2014/51/EU of the European Parliament and of the Council of 16 April 2014 (the so-called "Omnibus II Directive"). This Directive lays down rules concerning the following: (1) the taking-up and pursuit, within the Community, of the self- employed activities of direct insurance and reinsurance; (2) the supervision of insurance and reinsurance groups; (3) the reorganisation and winding-up of direct insurance undertakings.
SII Regulations	The directly applicable EU Regulations adopted in accordance with the Solvency II Directive
SPV/Special Purpose Vehicle	Any undertaking, whether incorporated or not, other than an existing insurance or reinsurance undertaking, which assumes risks from insurance or reinsurance undertakings and which fully funds its exposure to such risks through the proceeds of a debt issuance or any other financing mechanism where the repayment rights of the providers of such debt or financing mechanism are subordinated to the reinsurance obligations of such an undertaking <sup>ii</sup>
SST	Stress and Scenario Testing
Subordinated loan	A subordinated loan is a debt which ranks after other debts if a company falls into liquidation or bankruptcy.
Subrogation	Subrogation is the right for an insurer to legally pursue a third party that caused an insurance loss to the insured. This is done as a means of recovering the amount of the claim paid by the insurance carrier to the insured for the loss.
The commission delegated regulation	The Commission Delegated Regulation (EU) 2015/35 supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking up and pursuit of the business of Insurance and Reinsurance (Solvency II) ("the Delegated Acts").
UK	United Kingdom
UKLAP	Aviva Life and Pensions UK Limited
USD	United States Dollars
Underwriting risk	The risk of loss or of adverse change in the value of insurance liabilities, due to inadequate pricing and provisioning assumptions <sup>iii</sup>
Volatility Adjustment	The Volatility Adjustment removes temporary distortions in spreads caused by illiquidity in the market or extreme widening of credit spreads, in particular in relation to government bonds

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i [www.aviva.com](http://www.aviva.com)

ii Article 13 SII Directive

iii Article 1 SII Delegated Acts

### F.3 Directors' Statement

We acknowledge our responsibility for preparing the Solvency and Financial Condition Report of Aviva Insurance Limited at 31 December 2017 in all material respects in accordance with the PRA Rules and the Solvency II Regulations.

The Board is satisfied that to the best of its knowledge and belief:

(a) throughout the financial year to 31 December 2017, the Company has complied in all material respects with the requirements of the PRA rules and Solvency II Regulations as applicable to the Company; and

(b) it is reasonable to believe that in respect of the period from 31 December 2017 to the date of the publication of the SFCR, the Company has continued so to comply and that it will continue so to comply for the remainder of the financial year to 31 December 2018.

J M Windsor

Director

3 May 2018

**Report of the external independent auditors to the Directors of Aviva Insurance Limited ('the Company') pursuant to Rule 4.1 (2) of the External Audit Part of the PRA Rulebook applicable to Solvency II firms**

**Report on the Audit of the relevant elements of the Solvency and Financial Condition Report**

**Opinion**

Except as stated below, we have audited the following documents prepared by the Company as at 31 December 2017:

- The 'Valuation for Solvency Purposes' and 'Capital Management' sections of the Solvency and Financial Condition Report of the Company as at 31 December 2017, (**'the Narrative Disclosures subject to audit'**); and
- Company templates S.02.01.02, S.12.01.02, S.17.01.02, S.22.01.21, S.23.01.01 and S.28.01.01 (**'the Templates subject to audit'**).

The Narrative Disclosures subject to audit and the Templates subject to audit are collectively referred to as the **'relevant elements of the Solvency and Financial Condition Report'**.

We are not required to audit, nor have we audited, and as a consequence do not express an opinion on the **Other Information** which comprises:

- Information contained within the relevant elements of the Solvency and Financial Condition Report set out above which is, or derives from the Solvency Capital Requirement, as identified in the Appendix to this report;
- The 'Summary', 'Business and Performance', 'System of Governance' and 'Risk Profile' elements of the Solvency and Financial Condition Report;
- Company templates S.05.01.02, S.05.02.01, S.19.01.21 and S.25.02.21;
- The written acknowledgement by management of their responsibilities, including for the preparation of the Solvency and Financial Condition Report (**'Directors' Statement'**).

To the extent the information subject to audit in the relevant elements of the Solvency and Financial Condition Report includes amounts that are totals, sub-totals or calculations derived from the Other Information, we have relied without verification on the Other Information.

In our opinion, the information subject to audit in the relevant elements of the Solvency and Financial Condition Report of the Company as at 31 December 2017 is prepared, in all material respects, in accordance with the financial reporting provisions of the PRA Rules and Solvency II regulations on which they are based as supplemented by supervisory approvals.

**Basis for opinion**

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) including ISA (UK) 800 and ISA (UK) 805, and applicable law. Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the relevant elements of the Solvency and Financial Condition Report* section of our report. We are independent of the Company in accordance with the ethical requirements that are

relevant to our audit of the Solvency and Financial Condition Report in the UK, including the FRC's Ethical Standard as applied to public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### **Conclusions relating to going concern**

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the directors' use of the going concern basis of accounting in the preparation of the Solvency and Financial Condition Report is not appropriate; or
- the directors have not disclosed in the Solvency and Financial Condition Report any identified material uncertainties that may cast significant doubt about the Company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the Solvency and Financial Condition Report is authorised for issue.

### **Emphasis of Matter - Basis of Accounting**

We draw attention to the 'Valuation for Solvency Purposes' and 'Capital Management' sections of the Solvency and Financial Condition Report, which describe the basis of accounting. The Solvency and Financial Condition Report is prepared in compliance with the financial reporting provisions of the PRA Rules and Solvency II regulations, and therefore in accordance with a special purpose financial reporting framework. The Solvency and Financial Condition Report is required to be published, and intended users include but are not limited to the Prudential Regulation Authority. As a result, the Solvency and Financial Condition Report may not be suitable for another purpose. Our opinion is not modified in respect of this matter.

### **Other Information**

The Directors are responsible for the Other Information.

Our opinion on the relevant elements of the Solvency and Financial Condition Report does not cover the Other Information and we do not express an audit opinion or any form of assurance conclusion thereon.

In connection with our audit of the Solvency and Financial Condition Report, our responsibility is to read the Other Information and, in doing so, consider whether the Other Information is materially inconsistent with the relevant elements of the Solvency and Financial Condition Report, or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the relevant elements of the Solvency and Financial Condition Report or a material misstatement of the Other Information. If, based on the work we have performed, we conclude that there is a material misstatement of this Other Information, we are required to report that fact. We have nothing to report in this regard.

### **Responsibilities of Directors for the Solvency and Financial Condition Report**

The Directors are responsible for the preparation of the Solvency and Financial Condition Report in accordance with the financial reporting provisions of the PRA rules and Solvency II regulations which have been supplemented by the approvals made by the PRA under the PRA Rules and Solvency II regulations on which they are based, as detailed below:



- Approval to use the volatility adjustment in the calculation of technical provisions; and
- Approval to use a partial internal model and the approval of subsequent major changes thereto.

The Directors are also responsible for such internal control as they determine is necessary to enable the preparation of a Solvency and Financial Condition Report that is free from material misstatement, whether due to fraud or error.

### **Auditors' Responsibilities for the Audit of the relevant elements of the Solvency and Financial Condition Report**

It is our responsibility to form an independent opinion as to whether the information subject to audit in the relevant elements of the Solvency and Financial Condition Report is prepared, in all material respects, in accordance with financial reporting provisions of the PRA Rules and Solvency II regulations on which they are based.

Our objectives are to obtain reasonable assurance about whether the relevant elements of the Solvency and Financial Condition Report are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but it is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decision making or the judgement of the users taken on the basis of the Solvency and Financial Condition Report.

A further description of our responsibilities for the audit is located on the Financial Reporting Council's website at: [www.frc.org.uk/auditorsresponsibilities](http://www.frc.org.uk/auditorsresponsibilities). This description forms part of our auditors' report.

This report, including the opinion, has been prepared for the Directors of the Company to comply with their obligations under External Audit rule 2.1 of the Solvency II firms Sector of the PRA Rulebook and for no other purpose. We do not, in providing this report, accept or assume responsibility for any other purpose save where expressly agreed by our prior consent in writing.

### **Other Matter**

The Company has authority to calculate its Solvency Capital Requirement using a partial internal model ("the Model") approved by the Prudential Regulation Authority in accordance with the Solvency II Regulations. In forming our opinion (and in accordance with PRA Rules), we are not required to audit the inputs to, design of, operating effectiveness of and outputs from the Model, or whether the Model is being applied in accordance with the Company's application or approval order.

## **Report on Other Legal and Regulatory Requirements**

In accordance with Rule 4.1 (3) of the External Audit Part of the PRA Rulebook for Solvency II firms we are also required to consider whether the Other Information is materially inconsistent with our knowledge obtained in the audit of the Company's statutory financial statements. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

PricewaterhouseCoopers LLP  
Chartered Accountants  
London  
3 May 2018

## **Appendix – relevant elements of the Solvency and Financial Condition Report that are not subject to audit**

The relevant elements of the Solvency and Financial Condition Report that are not subject to audit comprise:

- The following elements of template S.02.01.02:
  - Row R0550: Technical provisions - non-life (excluding health) - risk margin
  - Row R0590: Technical provisions - health (similar to non-life) - risk margin
  - Row R0640: Technical provisions - health (similar to life) - risk margin
  - Row R0680: Technical provisions - life (excluding health and index-linked and unit-linked) - risk margin
  - Row R0720: Technical provisions - Index-linked and unit-linked - risk margin
- The following elements of template S.12.01.02
  - Row R0100: Technical provisions calculated as a sum of BE and RM - Risk margin
- The following elements of template S.17.01.02
  - Row R0280: Technical provisions calculated as a sum of BE and RM - Risk margin
- The following elements of template S.22.01.21
  - Row R0010 – Technical provisions
  - Row R0090 – Solvency Capital Requirement
- The following elements of template S.23.01.01
  - Row R0580: SCR
  - Row R0740: Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fenced funds
- The following elements of Company template S.28.01.01
  - Row R0310: SCR
- Elements of the Narrative Disclosures subject to audit identified as 'unaudited'.