Aviva plc

Solvency and Financial Condition Report 2021

Contents

The reporting currency we use is £ sterling.

Unless otherwise stated, all figures referenced in this report relate to Group.

A glossary explaining key terms used in this report is available on www.aviva.com/glossary

The Company's registered office is St Helen's, 1 Undershaft, London, EC3P 3DQ

Executive summary

The Solvency II regulatory framework, which governs industry regulation and prudential capital requirements within the European Union, became effective from 1 January 2016. In the United Kingdom (UK) the Prudential Regulation Authority (PRA) continues to apply the Solvency II regulatory framework, following the end of the Brexit transitional period on 31 December 2020.

The purpose of the Solvency and Financial Condition Report (SFCR) is to provide information required by the Solvency II regulatory framework in respect of the Aviva plc Group (the Group) at 31 December 2021. This report sets out aspects of the Group's business and performance, system of governance, risk profile, valuation methods used for solvency purposes and its capital management practices. The SFCR has been prepared in accordance with the relevant PRA rules and Solvency II regulations.

Business and performance

Aviva plc, a public limited company incorporated under the laws of England and Wales, is the holding company of the Group. The Group is the UK's leading Savings, Retirement, Investments and Insurance business, helping 18.5 million customers across our core markets of the UK, Ireland and Canada.

The Group's purpose is to be 'with you today, for a better tomorrow'. We exist to be with people when it really matters, throughout their lives. And we are here to help them make the most of life. The Group has made clear strategic progress, completing divestments generating £7.5 billion of proceeds and realising excellent value for our shareholders. As a result, the Group is now much leaner, simpler, and focused on the UK, Ireland and Canada, where we have market-leading positions and clear plans to deliver stronger returns.

The Group uses a number of financial and non-financial metrics to help the Board and senior management assess performance against our strategic priorities. These metrics include Alternative Performance Measures (APMs) which are non-GAAP measures that are not bound by the requirements of IFRS.

Total Solvency II Own Funds Generation (OFG)[1] decreased marginally to £1,645 million (2020: £1,691 million) due to lower Solvency II OFG from discontinued operations. In the UK, Ireland, Canada and Aviva Investors Solvency II operating own funds generation decreased by £39 million to £1,660 million (2020: £1,699 million). See note A.2.1 for further details on Solvency II OFG.

Solvency II return on equity (RoE)[1] has been amended following a review of the basis of preparation. In the numerator, Transitional Measures on Technical Provisions (TMTP) run-off has been replaced with the economic cost of holding equivalent capital to the opening value of TMTP on a shareholder basis, and the denominator has been adjusted to exclude excess capital above the Group's target Solvency II shareholder cover ratio[1]. This approach improves comparability of Solvency II return across Life and General Insurance business whilst removing distortions that would otherwise arise where the Group is temporarily holding excess capital. Using this revised methodology, Solvency II RoE was 11.3%. This was 1.0pp lower than the restated 2020 Solvency II RoE (2020 restated: 12.3%), mainly reflecting the impact of lower interest rates in 2020 on the 2021 opening capital position. Solvency II RoE on a continuing basis was 10.7% (2020 restated: 11.7%). The Group's ambition is for Solvency II RoE on a continuing basis to improve to greater than 12% by 2024.

Group adjusted operating profit[1] of £2,265 million (2020: £3,161 million) and operating earnings per share[1] of 43.8 pence (2020: 60.8 pence) decreased largely owing to the Group's divestments with reduced adjusted operating profit from discontinued operations. In 2021 the Group completed disposals of all discontinued operations which concludes the divestment programme.

IFRS profit for the year was £2,036 million (2020: £2,910 million) while basic earnings per share decreased to 50.1 pence (2020: 70.2 pence) driven by the reduction in adjusted operating profit combined with non-operating items. Non-operating items included a profit on disposals of £1,572 million (2020: £725 million) following the sale of discontinued operations which was partially offset by economic variances of £(1,039) million (2020: positive impact of £6 million). Higher interest rates and strong equity returns resulted in an adverse economic variance impact as the Group's hedging programme is run on an economic basis, protecting the solvency position.

Cash remittances[1] are received by the Group from our markets, comprising dividends and interest on internal loans. Cash remittances during 2021 were £1.9 billion (2020: £1.5 billion). The growth in 2021 remittances largely reflects lower remittances in 2020 due to the decision to retain cash in our subsidiaries to maintain balance sheet strength.

At end February 2022, centre liquidity[1] was £6.6 billion (February 2021: £4.1 billion) with the increase primarily driven by disposal proceeds of £6.2 billion and cash remittances of £1.9 billion offset by debt repayments of £2.7 billion, ordinary divided payment of £0.8 billion, share buyback of £0.9 billion and centre costs of £0.8 billion.

In March 2022 the Group announced a final dividend per share for 2021 of 14.70 pence (2020: 14.00 pence). Together with an interim of 7.35 pence (2020: 7.00 pence) this brings total dividends for the year to 22.05 pence (2020: 21.00 pence), up 5% with a cash cost of c. £831 million.

The Group's financial results are affected by a number of external factors, including demographic trends, general economic and market conditions, government policy and legislation and exchange rate fluctuations. In addition, our financial performance includes the impact of corporate actions taken by the Group, including acquisitions, disposals, debt issuance and repayment and other actions aimed at achieving our stated strategy. Further information on this and other significant events that impacted the Group's Solvency II position during the year are outlined in Section A of this report.

1 This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information can be found in the Other information - Alternative Performance Measures section of the 2021 Group Annual Report and Accounts.

System of governance

The Board is collectively responsible for promoting the long-term, sustainable success of the Company through seeking to generate value for shareholders whilst fulfilling our responsibilities to all of our stakeholders and contributing positively to the societies in which we operate. This includes ensuring that an appropriate system of risk governance is in place throughout the Group. To discharge this responsibility, the Board has established frameworks for risk management and internal control using a 'three lines of defence' model and reserves for itself the setting of the Group's risk appetite.

In the first line, the Group Executive Committee and each market Chief Executive Officer are responsible for the application of the risk management framework (RMF), for implementing and monitoring the operation of the system of internal control and for providing assurance to the Audit, Customer, Conduct, Reputation and Risk Committees and the Board.

The second line, consisting of the Risk function, is accountable for the quantitative and qualitative oversight and challenge of the identification, measurement, monitoring and reporting of principal risks and for developing the RMF. The Actuarial function is accountable for the Group-wide actuarial methodology, reporting to the relevant governing bodies on the adequacy of reserves and the appropriateness of the Solvency II internal model, as well as underwriting and reinsurance arrangements. The Compliance function supports and advises the business on the identification, measurement and management of its regulatory, financial crime and conduct risks. It is accountable for maintaining the compliance standards and framework within which the Group operates and monitoring and reporting on its compliance risk profile.

The third line relates to internal audit where independent and objective assessment on the robustness of the RMF and the appropriateness and effectiveness of internal control is provided to the Audit, Customer, Conduct, Reputation and Risk Committees, market audit committees and the Board.

The RMF is designed to identify, measure, manage, monitor and report the principal risks to the achievement of the Group's business objectives and is embedded throughout the Group. It is codified through risk policies and business standards which set out the risk strategy, appetite, framework and minimum requirements and controls for the Group's operations.

Section B of this report describes the system of governance in place throughout the Group by which the operations are overseen, directed, managed and controlled and explains the compliance with the requirements of Solvency II.

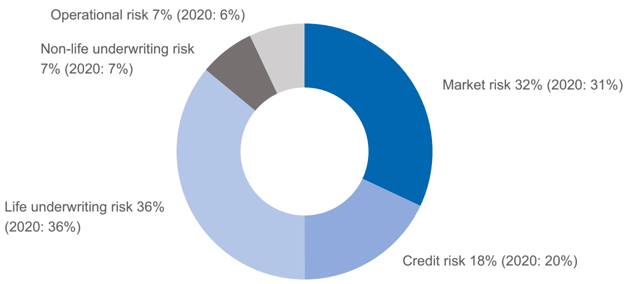
Risk profile

For the purposes of risk identification and measurement, and aligned to the Group's risk policies, risks are typically grouped by risk types: underwriting for both life insurance (including long-term health) and general insurance (including short-term health) businesses, market, credit, liquidity, operational and asset management risk (see sections C.1 to C.6). The types of risk to which the Group is exposed have not changed significantly over the year and remain as those mentioned above.

Risk identification is carried out on a regular basis, it is embedded in the business planning process, drawing on a combination of internal and external data, covering both normal conditions and stressed environments. The primary sources for identifying risks include risk events analysis, external and internal trends analysis and management information as well as other risk governance processes and input from executive teams and internal committees.

The Solvency II Capital Requirement (SCR) and cover ratio are the bases on which the Group sets Solvency II capital risk appetites and limits. These are used to assess the significance of risks and to appropriately direct resources to their management.

The chart below shows the composition of the Group's undiversified SCR as at 31 December 2021 and 31 December 2020:



Risk profile	Section reference
Life and non-life underwriting	**C.1**
Market risk	**C.2**
Credit risk	**C.3**
Liquidity risk	**C.4**
Operational risk	**C.5**
Asset Management risk	**C.6**

On 24 February 2022, on-going tensions between Russia and Ukraine developed into full-scale armed conflict between the two countries. The Group is monitoring and responding to this dynamic situation. Section C.7.3 reflects how the Russia-Ukraine conflict has impacted Aviva.

Following the Group's divestment programme, the absolute risk exposure of the Group has reduced and the mix of these risks remains broadly unchanged. The Group's exposure to life underwriting risks, as measured by undiversified SCR, remained stable in 2021. The Group's most significant life underwriting risks are longevity and persistency risk in the UK. Longevity risk decreased over the year due to higher interest rates, as result of the higher impact of discounting, but was offset by disposals (primarily France) which increased the Group's exposure to life insurance risks from the UK.

The Group's most significant exposures to market risk are interest rate risk, equity risk and property price risk. The Group's exposure to market risk against other risk types increased in 2021 driven by an increase in market interest rates, which decreased the Group's exposure to longevity risk, and increases in equity risk driven by assumption changes in Singapore.

Credit risk, including spread risk, fell in 2021. This fall was due to divestments and higher interest rates, which reduce SCR as a result of the higher impact of discounting. There was also a reduction in our UK business due to run-off of corporate credit risk on existing business.

Section C of this report further describes the risks to which the Group is exposed and how we measure, monitor, manage and mitigate these risks, including any changes in the year to our risk exposures and specific risk mitigation actions taken.

Valuation for solvency purposes

There have been no material changes in the valuation methods of the Group during the year.

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

At 31 December 2021, the Group's excess of assets over liabilities was £22,279 million (2020: £24,014 million) on a Solvency II regulatory basis which is £2,825 million (2020: £3,454 million) higher than the equivalent value under IFRS, primarily due to the difference in the valuation of technical provisions. Aviva applies the transitional measure on technical provisions, while also applying matching and volatility adjustments allowable under Solvency II.

The vast majority of the Group's assets measured at fair value 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. Although the Solvency II valuation hierarchy differs from IFRS, the methodology for valuing assets and liabilities measured at fair value remains consistent.

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/liability class. In addition, it also provides an explanation of the material differences between the IFRS and Solvency II bases of valuation.

Capital management (SCR unaudited)

Group capital is represented by Solvency II own funds. The Group manages capital in conjunction with its SCR and in line with an updated dividend policy and capital framework that was approved on 1 March 2022 and is aligned to our strategic priorities. At the core of the capital framework is financial strength and efficient deployment of capital.

Key elements of the framework are as follows:

- We aim to operate a sustainable dividend policy with a level of dividend that is resilient in times of stress and is covered by capital and cash generated from our businesses. Our performance shows Aviva has what it takes to deliver strong, sustainable returns for shareholders and this has allowed us to update our dividend policy, with clear guidance on dividends for the next two financial years.
  - For the 2022 financial year we estimate a dividend payment of approximately £870 million, equivalent to an estimated per share amount of c.31 pence, calculated using the consolidation ratio announced 5 April 2022[1,2].
  - For 2023 we estimate a dividend payment of approximately £915 million, equivalent to an estimated per share amount of c.32.5 pence, calculated using the share consolidation ratio announced 5 April 2022[1,2].
  - Thereafter, we anticipate low-to-mid single digit growth in dividends per share. These dividend estimates are subject to market conditions and Board approval.
- We actively manage our centre liquidity in order to support our dividend and capital management ambitions. We expect to maintain centre liquid assets of c.£1.5 billion in the normal course of events, broadly representing a year's worth of centre costs, debt interest and dividend payments.
- In terms of capital deployment, we aim to maintain Solvency II debt leverage ratio[3] below 30%. Solvency II debt leverage ratio at 31 December 2021 is 27% (2020: 31%).
- Thereafter, to the extent that we have both excess capital above the top of our working capital range for the Solvency II shareholder cover ratio[3] of 180% and excess centre cash not used for investment in the business, we will consider additional returns to shareholders over time.

1 There are important notices relating to the B Share Scheme and share consolidation ratio in Section A.5.2. Please read those notices in full in order to obtain a comprehensive understanding of the Company's proposals.
2 Estimated dividends are for guidance. These are calculated using the consolidation ratio announced 5 April 2022 and are subject to change. The Board has not approved or made any decision to pay any dividend in respect of any future period.
3 This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information can be found in the Other information - Alternative Performance Measures section of the 2021 Group Annual Report and Accounts.

Capital and liquidity management supports strategic decision making, such as mergers and acquisitions, business capital allocation, pricing, hedging, reinsurance, asset allocation and transformation projects.

The Group calculates its Solvency II position on a regulatory basis and on a 'shareholder view' basis. The shareholder view is considered by management to be more representative of the shareholders' risk exposure and the Group's ability to cover the SCR with eligible own funds and aligns with management's approach to dynamically manage its capital position. In arriving at the shareholder position, a number of adjustments are typically made to the regulatory Solvency II position.

The Group Solvency II capital position, including these adjustments, is summarised in the table below:

	Own funds 2021 £m	SCR 2021 £m	Surplus 2021 £m	Own funds 2020 £m	SCR 2020 £m	Surplus 2020 £m
Solvency II regulatory surplus at 31 December	**25,573**	**(12,499)**	**13,074**	29,262	(16,441)	12,821
Adjustments for:						
Fully ring-fenced with-profit funds	**(2,205)**	**2,205**	**—**	(2,492)	2,492	—
Staff pension schemes in surplus	**(1,218)**	**1,218**	**—**	(1,179)	1,179	—
PPE[1]	**—**	**—**	**—**	(385)	—	(385)
Notional reset of TMTP	**—**	**—**	**—**	564	—	564
Solvency II shareholder surplus at 31 December	**22,150**	**(9,076)**	**13,074**	25,770	(12,770)	13,000

1 French insurers are permitted to place a part of the Provision pour Participation aux Excédents (PPE) into Solvency II own funds. At 31 December 2020 PPE of £0.4 billion was included within Group regulatory own funds but remained excluded from the shareholder position as agreed with the regulator. At 31 December 2021 this is no longer included following the disposal of France.

At 31 December 2021, the total regulatory eligible own funds to meet Group SCR was £25,573 million (2020: £29,262 million), of which £19,120 million (2020: £20,850 million) was represented by unrestricted tier 1 capital. The SCR is calculated using a partial internal model and was £12,499 million at 31 December 2021 (2020: £16,441 million). The regulatory cover ratio was 205% at 31 December 2021 (2020: 178%).

Movement in Solvency II surplus (shareholder view)

Shareholder view	Own funds 2021 £m	SCR 2021 £m	Surplus 2021 £m
Solvency II surplus at 1 January	**25,770**	**(12,770)**	**13,000**
Solvency II operating capital generation (OCG)[1,2]	**1,645**	**(84)**	**1,561**
Non-operating capital generation	**(1,310)**	**1,156**	**(154)**
Dividends	**(874)**	**—**	**(874)**
Share buyback	**(1,000)**	**—**	**(1,000)**
Hybrid debt repayment	**(1,506)**	**—**	**(1,506)**
Acquired/divested business	**(575)**	**2,622**	**2,047**
Solvency II surplus at 31 December	**22,150**	**(9,076)**	**13,074**

1 OCG measures the amount of Solvency II capital the Group generates from operating activities and incorporates an expected return on investments supporting the life and non-life insurance businesses. OCG includes the effect of variances in experience for non-economic items, such as mortality, persistency and expenses, the effect of changes in non-economic assumptions (for example, longevity), model changes that are non-economic in nature and the impact of capital actions, for example, strategic changes in asset mix including changes in hedging exposure.
2 This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information can be found in the Other information - Alternative Performance Measures section of the 2021 Group Annual Report and Accounts.

At 31 December 2021, the shareholder view surplus is £13,074 million (2020: £13,000 million) with a cover ratio of 244% (2020: 202%). The increase in surplus since 31 December 2020 is mainly due to disposals of France, Italy, Poland, Turkey and Vietnam and operating capital generation, largely offset by repayment of debt, share buyback and the payment of the 2020 dividend and 2021 interim dividend. Non-operating capital generation includes the impact of market movements which result in a broadly consistent reduction in both Own funds and SCR due to our hedging strategy.

Our pro forma Solvency II shareholder cover ratio at 31 December 2021 allowing for the further capital return of £3.75 billion[1,2], £1 billion further debt reduction over time (of which £500 million was redeemed on 21 April 2022) and £75 million one-off payment in relation to our staff pension schemes, announced on 2 March 2022, is estimated at 191%. The acquisition of Succession Wealth (see section A.5.2 for further details) will have an estimated five percentage points adverse impact on the cover ratio once completed, and would reduce the pro forma Solvency II cover ratio to 186%. We have also set out plans for reinvestment into the businesses to further accelerate growth. We will be investing £300 million over the next three years into growth and £200 million to drive efficiency improvements. Any build up in surplus capital above 180% Solvency II shareholder cover ratio that is not reinvested into the business, is available for return to shareholders over time (subject to market conditions, and Board and regulatory approvals).

Section E of this report further describes the objectives, policies and procedures applied by the Group for managing its own funds. The section also covers information on structure and quality of own funds, calculation of SCR, and includes information on the Group's partial internal model.

1 Subject to shareholder approval and customary conditions including no material deterioration in market conditions or the Company's financial position.
2 There are important notices relating to the B Share Scheme and share consolidation ratio in Section A.5.2. Please read those notices in full in order to obtain a comprehensive understanding of the Company's proposals.

Section A

Business and performance

In this section

Section A: Business and performance

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

A.1 Business

A.1.1 Business overview

Aviva plc, a public limited company incorporated and domiciled in the UK, is the holding company of the Group. The Group is the UK's leading Savings, Retirement, Investments and Insurance business. The Group operates through businesses in the UK, Ireland and Canada, serving 18.5 million customers, and our international investments in joint ventures in Singapore and China, and associate Aviva India. The Group employs over 22,000 people.

In 2021 the Group delivered substantial progress on its strategy: focusing the portfolio, transforming performance and rebuilding financial strength:

- **Focus the portfolio**: In 2020 we made a decisive plan to refocus Aviva. We have swiftly executed on this plan, completing all of our targeted disposals and realising excellent value for shareholders. We are now leaner and simpler, focused on our core markets in the UK, Ireland and Canada, where we have market-leading positions and meaningful growth opportunities.
- **Transform performance**: In 2021 we have made good progress on our journey to transform our performance. We have built strong growth momentum across our core businesses, enhanced our customer experience and materially reduced our cost base. At the same time, we have strengthened the Aviva masterbrand, invested in innovation and launched a market-leading sustainability ambition. Looking ahead to 2022, our focus will be on accelerating the next phase of our transformation.
- **Financial strength:** We have strengthened our financial position by bringing our leverage ratio in line with our target and reducing our capital volatility following disposals. We have also returned material capital to shareholders, whilst maintaining capacity to reinvest for growth and efficiency. From this position of financial strength, our cash generation and dividend outlook is both attractive and sustainable.

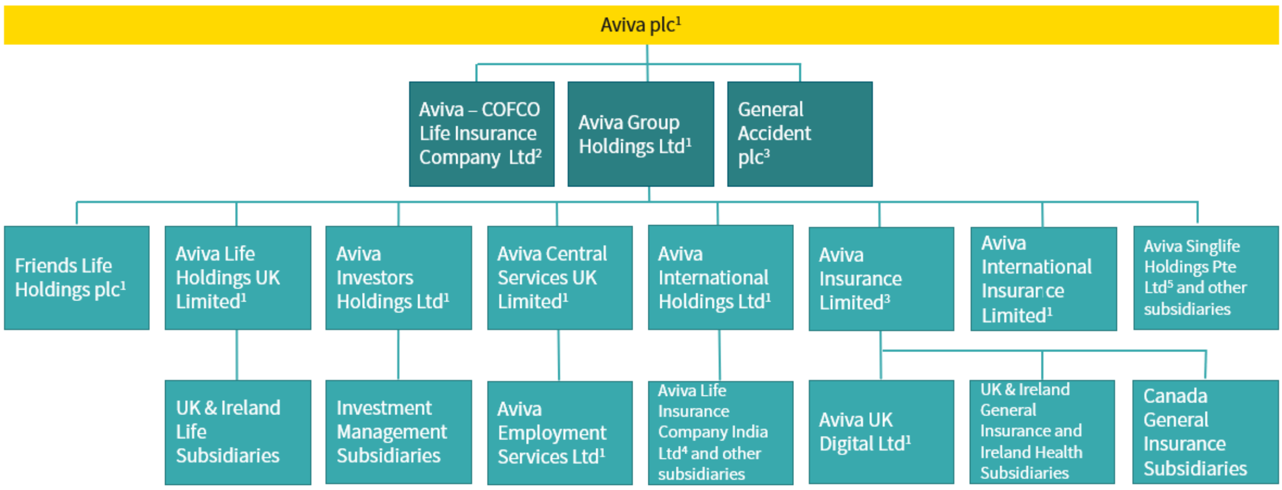
In the 2021 SFCR we report the results of our businesses by market reporting lines with supplementary information being given by business activity on the basis on which they were managed in 2021. This is also in line with the Group's consolidated financial statements prepared in accordance with IFRS. The material Solvency II lines of business are disclosed in section A.2.4.

A.1.2 Organisational structure of the Group

As a UK listed company, Aviva has adopted a governance structure based on the principles of the UK Corporate Governance Code (the Code). The Group Board has ultimate power over the system of governance which is described in detail in section B of this report. A simplified Group structure as at 31 December 2021 is shown in Chart 1 below. Aviva plc is the holding company of the Group.

A complete list of the Group's related undertakings comprising subsidiaries, joint ventures, associates and other significant holdings along with the country of incorporation, registered address, classes of shares held and the effective percentage of equity owned at 31 December 2021 is included in note 62 of the 2021 Annual Report and Accounts and in public disclosure Quantitative Reporting Template (QRT) S.32.01 'Undertakings in the scope of the Group' in section F.2 of this report.

Chart 1: Organisational structure of the Aviva Group



1 Incorporated in England and Wales
2 Incorporated in People's Republic of China
3 Incorporated in Scotland
4 Incorporated in India
5 Incorporated in Singapore

The scope of the entities which make up the Group is consistent between IFRS and Solvency II. However, there are differences in the consolidation approach, where the consolidation under IFRS is driven by the level of control over entities in the scope of the Group, while the consolidation under Solvency II additionally takes into account the business activity of these entities. Differences between the IFRS consolidation and Solvency II consolidation have been presented in Section D Overview D.1 Balance sheet – IFRS and SII and D.2 Method of consolidation.

A.1.3 Significant events in the reporting period

Our financial results are affected by a number of external factors, including demographic trends, general economic and market conditions, government policy and legislation and exchange rate fluctuations. In addition, our 2021 financial performance includes the impact of corporate actions taken by the Group, including acquisitions and disposals, and other actions aimed at achieving our stated strategy. The impact of these events on IFRS performance and Solvency II may differ due to their different measurement and recognition criteria.

The following significant events impacted our business during the year:

Group key appointments

- During 2021 there have been several changes to the composition of the Board. On 1 January 2021, Pippa Lambert joined the Board as a Non-Executive Director, and on 14 September 2021 Pippa became Chair of the Remuneration Committee. Martin Strobel was appointed as a Non-Executive Director on 22 October 2021 and Shonaid Jemmett-Page was appointed as a Non-Executive Director on 20 December 2021. Refer to note B.1 for key appointments made after the reporting period.

Group acquisitions and disposals

During the year, the Group has disposed of the following businesses:

- On 23 February 2021, Aviva announced the sale of its entire shareholding in Aviva France to Aéma Group for cash consideration of €3,200 million (approximately £2,752 million), including €1,100 million (approximately £957 million) in respect of Aviva France's intra-group debt. The transaction completed on 30 September 2021, resulting in a profit on disposal of £128 million and a net £410 million charge over the year.
- On 23 November 2020, Aviva announced the sale of its entire 80% shareholding in the Italian Life Insurer Aviva Vita S.p.A. (Aviva Vita) to its partner UBI Banca. The transaction completed on 1 April 2021 and resulted in a profit on disposal of £65 million.
- On 4 March 2021, the Group entered into agreements to sell its remaining Italian Life and General Insurance businesses (Aviva Italy). The sale of the remaining life businesses primarily comprised the entire 100% shareholding in Aviva Life S.p.A. and the 51% shareholding in Aviva S.p.A. to CNP Assurances for cash consideration of €543 million (approximately £466 million). The sale of the General Insurance business comprised the entire 100% shareholding in Aviva Italia S.p.A. to Allianz for cash consideration of €330 million (approximately £283 million). The transactions to sell the General Insurance and Life Insurance businesses completed on 1 October 2021 and 1 December 2021 respectively, with a total profit on disposal of £233 million.
- On 26 March 2021, Aviva announced the sale of its entire shareholding in its life insurance business in Poland and Lithuania, and its Polish general insurance, asset management and pensions businesses, to Allianz for net cash consideration of €2,369 million (approximately £2,034 million). The transaction completed on 30 November 2021 resulting in a profit on disposal of £1,671 million.
- On 24 February 2021, Aviva announced the sale of its entire 40% shareholding in its joint venture in Turkey, AvivaSA Emeklilik ve Hayat AS (AvivaSA), to Ageas Insurance International N.V. for cash consideration of £122 million. The transaction completed on 6 May 2021, resulting in a loss on disposal of £41 million, which included a £112 million loss in relation to recycling of the currency translation reserve to the income statement.
- On 14 December 2020, Aviva announced the sale of its entire shareholding in Aviva Vietnam Life Insurance Limited to Manulife Financial Asia Limited. The transaction completed on 29 December 2021 and resulted in a profit on disposal of £32 million which included a £9 million loss in relation to the recycling of the currency translation reserve to the income statement.

There were no material acquisitions made by the Group during the year. See section A.5.2 for details of subsequent acquisitions in 2022.

Other key transactions

- On 12 August 2021, the Group announced a share buyback of ordinary shares for an aggregate purchase price of up to £750 million. On 16 December 2021, the Group announced the increase and extension of the share buyback programme to £1 billion. In the year ended 31 December 2021, £663 million of shares had been purchased and shares with a nominal value of £42 million have been cancelled, giving rise to an additional capital redemption reserve of an equivalent amount.
- The Group has redeemed £1.9 billion of subordinated debt and senior notes during the year 2021.
- On 16 March 2021 the Group completed a £1.0 billion tender offer and redeemed the following:
  - €185 million of the Group's 0.625% €500 million senior notes;
  - €286 million of the Group's 1.875% €750 million senior notes;
  - €349 million of the Group's 6.125% €650 million Tier 2 subordinated debt;
  - £298 million of the Group's 6.125% £800 million restricted Tier 1 subordinated debt;
  - On 10 May 2021 the Group's 4.500% C$450 million Tier 3 subordinated notes reached their final maturity and were redeemed;
  - On 21 May 2021 the Group's 12.000% £162 million Tier 2 subordinated notes reached their final maturity and were redeemed; and
  - On 3 June 2021 the Group redeemed its 6.625% £450 million Tier 2 subordinated notes in full at the first call date.
- During the period the Aviva Staff Pension Scheme (ASPS) completed further bulk annuity buy-in transactions with Aviva Life & Pensions UK Limited, a Group Company. Due to different measurement bases applying for accounting purposes, the premiums paid by the scheme exceeded the valuation of the plan assets recognised. This has been recognised as a loss in the actual return on assets within other comprehensive income. The plan assets recognised are transferable and so have not been subject to consolidation within the Group's financial statements.

A.1.4 Other information

Supervisor

The Group's supervisor is the PRA which is part of the Bank of England. Contact details for the PRA are as follows:

Address:	20 Moorgate, London, EC2R 6DA
Telephone number:	+44(0)2076014444

External auditor

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

Address:	7 More London Riverside, London, SE1 2RT
Telephone number:	+44 (0) 20 7583 5000

Qualifying holdings

The Group's shares and the associated voting rights are widely dispersed among institutional and individual investors and therefore there are no qualifying holdings in the Group as defined by Article 13(21) of Directive 2009/138/EC.

A.1.4.1 Rounding convention

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

A.2 Underwriting performance

Measurement of performance from underwriting and other activities

In order to fully explain the performance of our business, we discuss and analyse our results in terms of financial measures which include a number of Alternative Performance Measures (APMs). These are non-GAAP measures which are used to supplement the disclosures prepared in accordance with other regulations such as IFRS and Solvency II. These measures provide useful information to enhance the understanding of our financial performance. However, APMs should be viewed as complementary to, rather than as a substitute for, the figures determined according to other regulations.

The Group is a regulated entity under the Solvency II regulatory framework and therefore uses a number of APMs that are derived from Solvency II measures. Solvency II operating own funds generation, Solvency II return on capital[1] / equity and Solvency II operating capital generation (Solvency II OCG) are non-GAAP APMs. In 2021 Solvency II return on equity has been amended following a review of the basis of preparation. In the numerator, Transitional Measures on Technical Provisions (TMTP) run-off has been replaced with the economic cost of holding equivalent capital to the opening value of TMTP on a shareholder basis and the denominator has been adjusted to exclude excess capital above our target Solvency II shareholder cover ratio. This approach improves comparability of Solvency II return across Life and General Insurance business whilst removing distortions that would otherwise arise where the Group is temporarily holding excess capital. Further information on these Solvency II metrics are outlined in the Other information section of the 2021 Annual Report and Accounts.

Group adjusted operating profit is an APM that incorporates an expected return on investments supporting the life and non-life insurance businesses. The various items excluded from operating profit, but included in IFRS profit before tax, are outlined in the Other information section of the 2021 Annual Report and Accounts.

1 This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information can be found in the Other information - Alternative Performance Measures section of the 2021 Group Annual Report and Accounts.

A.2.1 Solvency II operating own funds generation, return on capital/equity and operating capital generation

Solvency II operating own funds generation is used by the Group to assess sustainable growth across the UK, Ireland and Canada.

Solvency II operating own funds generation	2021 £m	2020 £m
UK & Ireland Life	**953**	1,057
UK & Ireland General Insurance	**339**	329
Canada	**332**	287
Aviva Investors	**36**	26
UK, Ireland, Canada and Aviva Investors	**1,660**	1,699
International investments	**124**	63
Corporate centre costs and Other[1]	**(342)**	(278)
Group external debt costs	**(255)**	(296)
Continuing operations	**1,187**	1,188
Discontinued operations[1]	**458**	503
Solvency II operating own funds generation at 31 December	**1,645**	1,691

1 Following a review of Group adjustments in respect of discontinued operations, comparative amounts for the 12 months ended 31 December 2020 have been amended to reclassify these as Discontinued operations from Corporate centre costs and Other.

Solvency II operating own funds generation has decreased by £46 million to £1,645 million (2020: £1,691 million).

UK, Ireland, Canada and Aviva Investors Solvency II operating own funds generation decreased by £39 million to £1,660 million (2020: £1,699 million).

In the UK & Ireland Life businesses, Solvency II operating own funds generation has decreased by £104 million to £953 million (2020: £1,057 million) mainly due to a reduction in margins on BPA business primarily as a result of lower spreads available and a lower impact from Management actions and other operating own funds generation.

In the UK & Ireland General Insurance businesses, Solvency II operating own funds generation has increased by £10 million to £339 million (2020: £329 million). This is primarily due to improved underlying performance in commercial lines and lower expenses reflecting the simplification of our personal lines business, reduction in IT costs and lower one-off expenses compared to 2020. These improvements were partly offset by higher weather costs from the July flooding in the UK and a reduction in the long-term investment return due to a combination of de-risking in 2020 in response to COVID-19 and lower yields.

In Canada, Solvency II operating own funds generation has increased by £45 million to £332 million (2020: £287 million), mainly due to reduced business interruption claims related to COVID-19 and beneficial prior year reserve developments.

Solvency II operating own funds generation from our International investments has increased by £61 million to £124 million (2020: £63 million), largely due to the inclusion of our joint venture in Singapore (following its formation on 30 November 2020) where there was strong performance arising from a new long-term care product and also growth in China.

Solvency II operating own funds generation from Discontinued operations has decreased by £45 million to £458 million (2020: £503 million), primarily due to disposals in 2020 and 2021.

Solvency II return on capital/equity measures return generated on shareholder capital at our market level and Group level and is used by the Group to assess performance, as we look to transform our business and deliver long-term value for our shareholders.

Solvency II return on capital/equity	2021 %	Restated 2020[1] %
Market Solvency II return on capital		
UK & Ireland Life	**6.6 %**	7.7 %
UK & Ireland General Insurance[2]	**14.1 %**	13.1 %
Canada	**21.6 %**	19.9 %
Aviva Investors	**9.3 %**	6.3 %
UK, Ireland, Canada and Aviva Investors	**8.8 %**	9.4 %
International investments	**13.6 %**	9.8 %
Discontinued operations[3]	**7.2 %**	6.8 %
Group Solvency II return on equity		
Group Solvency II return on equity at 31 December	**11.3 %**	12.3 %
Group Solvency II return on equity at 31 December on a continuing basis[4]	**10.7 %**	11.7 %

1 Following a review of the basis of preparation of Group Solvency II return on equity and Market Solvency II return on capital, comparative amounts for the year ended 31 December 2020 have been restated. In the numerator, TMTP run-off has been replaced with the economic cost of holding equivalent capital to the opening value of TMTP on a shareholder basis and, for Group Solvency II return on equity only, the denominator has been adjusted to exclude excess capital above our target Solvency II shareholder cover ratio.
2 For UK General Insurance only, capital held for internal risk appetite purposes is used instead of opening shareholder Solvency II own funds to ensure consistency in measuring performance across markets. This is only applicable to UK General Insurance Solvency II return on capital and not to the aggregated Group Solvency II return on equity.
3 Following a review of Group adjustments in respect of discontinued operations, comparative amounts for the 12 months ended 31 December 2020 have been amended to reclassify these as Discontinued operations from Corporate centre costs and Other. The change has no impact on the Group's Solvency II return on equity.
4 Group Solvency II return on equity on a continuing basis excludes our discontinued operations.

Solvency II RoE has decreased by 1.0pp to 11.3% (2020: 12.3%) over 2021. Whilst Solvency II operating own funds generation is stable over the period, Solvency II RoE reduced by 0.9pp due to the impact of lower interest rates in 2020 on the 2021 opening capital position.

Solvency II OCG measures the amount of Solvency II capital the Group generates from operating activities. Capital generated enhances Solvency II surplus which can be used to support sustainable cash remittances from our businesses, which in turn supports the Group's dividend as well as funding further investment to generate sustainable growth.

Solvency II operating capital generation	2021 £m	2020 £m
UK & Ireland Life	**1,219**	1,259
UK & Ireland General Insurance	**296**	357
Canada	**338**	262
Aviva Investors	**53**	29
UK, Ireland, Canada and Aviva Investors	**1,906**	1,907
International investments	**55**	4
Corporate centre costs and Other[1]	**(342)**	(365)
Group external debt costs	**(255)**	(296)
Continuing operations	**1,364**	1,250
Discontinued operations[1]	**197**	682
Group Solvency II operating capital generation	**1,561**	1,932

1 Following a review of Group adjustments in respect of discontinued operations, comparative amounts for the 12 months ended 31 December 2020 have been amended to reclassify these as Discontinued operations from Corporate centre costs and Other.

Solvency II OCG has decreased by £371 million to £1,561 million (2020: £1,932 million).

UK, Ireland, Canada and Aviva Investors Solvency II OCG reduced slightly by £1 million to £1,906 million (2020: £1,907 million).

In the UK & Ireland Life businesses, Solvency II OCG reduced by £40 million to £1,219 million (2020: £1,259 million) primarily due to lower Management actions and other OCG than in 2020. Management actions and other OCG in 2021 includes the impact of additional equity hedging and the beneficial impact of longevity assumption changes while 2020 included the beneficial impact of assumption changes, a change to the mix of business included in our reinsurance vehicle and de-risking activity which took place in response to COVID-19. New business strain was stable despite lower BPA margins reflecting a lower proportion of corporate bonds and existing business benefitting from positive experience on our Protection and Health business.

In the UK & Ireland General Insurance businesses, Solvency II OCG has reduced by £61 million to £296 million (2020: £357 million). The increase in Solvency II operating own funds generation due to strong underlying performance is more than offset by increases in capital requirements due to re-risking activity in the final quarter of 2021 (2020 Solvency II OCG benefitted from SCR reductions following de-risking in 2020 also in response to COVID-19).

In Canada, Solvency II OCG has increased by £76 million to £338 million (2020: £262 million), mainly due to a lower COVID-19 impact, beneficial prior year reserve developments and an improved profit outlook.

Solvency II OCG in respect of our International investments increased by £51 million to £55 million (2020: £4 million) for the year ended 31 December 2021, largely due to growth in China and the inclusion of our joint venture in Singapore where there was strong performance.

Solvency II OCG in respect of Discontinued operations reduced by £485 million to £197 million (2020: £682 million) for the year ended 31 December 2021 due to disposals over 2020 and 2021.

A.2.2 Operating profit for the year

Overall, operating profit decreased by 28% to £2,265 million (2020: £3,161 million) largely owing to the Group's divestments and reduced operating profit from Discontinued operations. Operating profit can be further analysed by insurance (which includes long-term business, general insurance and health, and fund management) and non-insurance activities as outlined in the table below:

Operating profit	2021 £m	2020[1] £m
Insurance activities operating profit (See section A.2.3)	**2,959**	3,813
Non-insurance activities operating loss (See section A.4)	**(694)**	(652)
Total	**2,265**	3,161

1 The 2020 comparatives have been re-presented from those previously published due to a change in presentation of segmental information. For further details see sections A.2.3 and A.4.

A.2.3 Operating profit/(loss) from insurance activities by geographical region and line of business

The table below sets out the Group's operating profit/(loss) arising from its insurance activities.

					2021					2020[1]
Operating profit/(loss) from insurance activities[2] (£m)	Long-term business	General insurance and health	Fund management	Other	Total operating profit from insurance activities	Long-term business	General insurance and health	Fund management	Other	Total operating profit from insurance activities
UK & Ireland	**1,384**	**403**	**—**	**(3)**	**1,784**	1,873	256	—	(9)	2,120
Canada	**—**	**406**	**—**	**—**	**406**	—	287	—	—	287
Aviva Investors	**—**	**—**	**41**	**—**	**41**	—	—	25	—	25
Europe	**555**	**48**	**41**	**(42)**	**602**	840	186	60	(43)	1,043
Asia	**121**	**5**	**—**	**—**	**126**	342	(4)	—	—	338
Total	**2,060**	**862**	**82**	**(45)**	**2,959**	3,055	725	85	(52)	3,813

1 The 2020 comparatives have been re-presented from those previously published due to a change in presentation of segmental information and to reclassify the amounts relating to discontinued operations.

Details of performance from other activities can be found in section A.4.

UK & Ireland

UK & Ireland long-term business operating profit decreased by 26% to £1,384 million (2020: £1,873 million) primarily driven by lower BPA margins, which were adversely impacted by low spreads compared to the higher corporate spreads available in 2020.

UK & Ireland General insurance and health operating profit was £403 million (2020: £256 million). UK & Ireland General insurance experienced improved underwriting performance and a reduction in COVID-19 related claims compared to the prior year, partly offset by lower frequency benefits in motor lines as the UK emerged from lockdown restrictions in the second half of 2021.

Canada

In Canada operating profit increased by 41% to £406 million (2020: £287 million) due to reduced business interruption claims related to COVID-19, as well as actions around pricing, indemnity management and risk selection.

Aviva Investors

Aviva Investors operating profit increased to £41 million, driven by a combination of increased revenue and cost reduction initiatives. Aviva Investors revenue grew by 6% helped by a 50% increase in origination volumes and higher asset levels reflecting net inflows and positive market movements.

Europe

Europe insurance activities is comprised of the Group's discontinued operations in France, Italy, Poland and Turkey, and includes Aviva Investors' fund management discontinued operations in France and Poland. Operating profit decreased by 42% to £602 million (2020: £1,043 million) driven by the completion of the disposals in 2020 and 2021. Operating profit in France and Italy was lower in the period to the disposal date compared to the equivalent period in the prior period. For France this was mainly due to adverse conditions in the general insurance business, and for Italy largely as a result of adverse claims experience due to higher mortality rates and a non-recurring loss on dormant policies.

Asia

Asia insurance activities comprises the Group's joint ventures in Singapore (Aviva Singlife) and China, associate investment in India and discontinued operations in Vietnam. Operating profit decreased 63% to £126 million (2020: £338 million) driven by the completion of the disposal of Friends Provident International Limited (FPIL) and Hong Kong, and the sale of the Group's majority holding in Aviva Ltd (Aviva Singapore) in 2020. In 2021 Aviva Singlife had strong performance arising from a long-term care product, alongside improved volumes and margins in China.

A.2.4 Solvency II line of business

The material Solvency II lines of business by reference to IFRS net written premiums, a component of underwriting performance, are outlined below. The Group's results can be analysed into products which comprise long-term business and general insurance and health. Detailed information on premiums, claims, changes in technical provisions and expenses by Solvency II line of business and country is presented in public disclosures S.05.01.02 and S.05.02.01 within section F.2.

Long-term business

Our long-term business segment includes life insurance, participating and non-participating investment business. The Group's long-term business represents 72% (2020: 73%) of total net written premiums. The material long-term Solvency II lines of business pertaining to insurance and participating business for the year ended 31 December 2021 are as follows, based on contribution to long-term business net written premiums:

- Insurance with-profits participation – 21% *(2020: 23%)*
- Other life insurance (mainly annuity and protection business) – 20% *(2020: 23%)*
- Unit-linked or index-linked insurance – 57% *(2020: 52%)*

General insurance and health

Our general insurance and health business represents 28% (2020: 27%) of total net written premiums. The material Solvency II lines of business within the general and health insurance sector based on contribution to general insurance and health net written premiums are as follows:

- Fire and other damage to property insurance – 37% *(2020: 35%)*
- Motor vehicle liability insurance – 27% *(2020: 28%)*
- Other motor insurance – 12% *(2020: 13%)*
- Medical expense insurance – 7% *(2020: 9%)*
- General liability insurance – 11% *(2020: 10%)*

A.3 Investment performance

Measurement of investment performance

Net investment income as disclosed in the Group's financial statements represents the Group's overall investment performance and includes investment return attributable to both policyholders and shareholders. Net investment income consists of dividends, interest and rents receivable for the year, movements in amortised cost on debt securities, realised gains and losses, and unrealised gains and losses on fair value through profit or loss (FVTPL) investments. For certain types of life business, including unit-linked and with-profits funds, movements in asset values are offset by corresponding changes in liabilities, limiting the net impact on profit.

The Group asset portfolio is invested to generate competitive investment returns while remaining within the Group's appetite for market and credit risk.

Our aim is to match the investments held to support a line of business to the nature of the underlying liabilities, while at the same time considering local regulatory requirements, the level of risk inherent within different investments, and the desire to generate superior investment returns, where compatible with this stated strategy and risk appetite.

A.3.1 Investment performance by asset class

(i) Net investment income

The following table provides an analysis of the Group's net investment income by asset class:

Net investment income/(expense) – Total 2021	**Debt Securities £m**	**Equity Securities £m**	**Loans £m**	**Investment property £m**	**Other financial investments[1] £m**	**Total £m**
Dividends	**—**	**3,008**	**—**	**—**	**1,628**	**4,636**
Interest	**3,517**	**—**	**979**	**—**	**487**	**4,983**
Net realised (losses)/gains[2]	**(3,984)**	**3,431**	**(12)**	**(10)**	**4,039**	**3,464**
Net unrealised (losses)/gains[2]	**(2,042)**	**8,079**	**(987)**	**1,190**	**(970)**	**5,270**
Rental income less expenses	**—**	**—**	**—**	**344**	**—**	**344**
Other income less management charges[3]	**—**	**—**	**—**	**(14)**	**(115)**	**(129)**
Total	**(2,509)**	**14,518**	**(20)**	**1,510**	**5,069**	**18,568**

Net investment income/(expense) – Total 2020	Debt Securities £m	Equity Securities £m	Loans £m	Investment property £m	Other financial investments[1] £m	Total £m
Dividends	—	1,890	—	—	1,574	3,464
Interest	4,489	—	970	—	285	5,744
Net realised gains[2]	3,213	567	224	—	1,450	5,454
Net unrealised gains/(losses)[2]	4,225	833	569	—	(753)	4,874
Rental income less expenses	—	—	—	118	(55)	63
Other income less management charges[3]	—	—	—	(51)	(101)	(152)
Total	**11,927**	**3,290**	**1,763**	**67**	**2,400**	**19,447**

1 Other financial investments include unit trusts and other investment vehicles, derivative financial instruments, deposits with credit institutions, minority holdings in property management undertakings and other investments.
2 Net realised (losses)/gains and unrealised (losses)/gains include foreign exchange gains and losses on investments other than trading of £177 million loss (2020: £241 million loss). In addition, net realised (losses)/gains and unrealised (losses)/gains include £nil million gain (2020: £2 million loss) on owner-occupied property taken to the income statement.
3 Other income less management charges primarily comprises of other investment expenses in respect of investment management fees and net income charge relating to the Group's pension schemes.

Net investment income was £18,568 million (2020: £19,447 million). The decrease from the prior year is largely driven by fair value losses on debt securities in line with the decline in market indices, partially offset by gains on equity securities arising from favourable market conditions in 2021.

Analysis of investments

The Group's asset portfolio reflects the nature of the underlying liabilities they back. Asset allocation decisions are taken at a legal entity level and in many cases by fund within a legal entity to distinguish between the different objectives of policyholder, participating fund and shareholder investments.

Policyholder assets are invested in line with the fund choices made by our unit-linked policyholders and the investment risk is borne by the policyholder. This results in a high allocation to assets such as equity and property. Aviva's shareholder exposure to these assets arises from the fact that the income we receive is a proportion of the assets under management.

Participating funds comprise relatively long-term contracts with policyholders participating in pooled investment performance subject to some minimum guarantees. Smoothed returns are used to declare bonuses to policyholders. Aviva's shareholder exposure to these assets arises through the requirement to achieve the guarantees and through a small proportion of the investment return, which is fixed at the outset of the policy. The assets to which policyholder bonuses are linked are invested in line with their expectations with the remainder of the portfolio invested to mitigate resultant shareholder risk. This leads to a higher proportion of equities and property than our other business lines although there are still material allocations to fixed income assets.

Shareholder funds comprise general insurance, health, annuity business, along with other non-profit funds not classified as either policyholder or participating funds. All the investment risk is borne by Aviva's shareholders. The annuity liabilities have a long duration but are also illiquid as customers cannot surrender their policies. The assets held to support these liabilities are principally composed of long maturity bonds and loans. Other shareholder liabilities are generally shorter in duration and the portfolio held to cover these contains a high proportion of fixed income securities.

The following table provides an analysis of the Group's net investment income by policyholder, participating and shareholder exposures.

Net investment income/(expense) – Total 2021	Debt Securities £m	Equity Securities £m	Loans £m	Investment property £m	Other financial investments[1] £m	Total
Policyholder	**(845)**	**13,210**	**(61)**	**851**	**5,870**	**19,025**
Participating	**(1,413)**	**1,291**	**(6)**	**554**	**(45)**	**381**
Shareholder[1]	**(251)**	**17**	**47**	**105**	**(756)**	**(838)**
Total	**(2,509)**	**14,518**	**(20)**	**1,510**	**5,069**	**18,568**

Net investment income/(expense) – Total 2020	Debt Securities £m	Equity Securities £m	Loans £m	Investment property £m	Other financial investments[1] £m	Total
Policyholder	4,790	3,024	1,650	(68)	1,340	10,736
Participating	5,283	265	(2)	115	655	6,316
Shareholder[1]	1,854	1	115	20	405	2,395
Total	11,927	3,290	1,763	67	2,400	19,447

1 Shareholder net investment return includes movements on assets backing annuity and other non-linked business, which is partially offset by corresponding movements in the liabilities which these assets are backing, which are not included within this disclosure.

(ii) Gains and losses recognised directly in equity

In the Group's IFRS financial statements, changes in the fair value of securities classified as available for sale (AFS) are recognised in other comprehensive income and recorded in a separate investment valuation reserve within equity. The AFS category is used where the relevant long-term business liability (including shareholders' funds) is passively managed, as well as in certain fund management and non-insurance operations. When securities classified as AFS are sold or impaired, the accumulated fair value adjustments are transferred out of the investment valuation reserve to the income statement with a corresponding movement through other comprehensive income. The Group's portfolio of securities classified as AFS were previously held by businesses which were disposed of during 2021. The Group had no investments classified as AFS at 31 December 2021.

For the year ended 31 December 2021, fair value losses of £62 million (2020: £22 million gains) were recognised directly in equity in the reporting period and £16 million gains (2020: £7 million gains) has been transferred from equity to profit on disposals.

A.3.2 Investment performance: other information – investments in securitisations

The Group holds investments in securitisation vehicles that are not originated by the Group in the form of debt securities. These securities consist of residential mortgage backed securities (RMBS), commercial mortgage backed securities (CMBS), asset backed securities (ABS), wrapped credit securities (WCS) and collateralised loan obligation securities (CLO). The majority of debt securities are investment grade held by the UK business.

The fair value of structured debt securities as at 31 December 2021 was £4,454 million (2020: £4,504 million).

A.4 Performance from other activities

The table below presents the operating losses from the Group's non-insurance activities for the year ended 31 December 2021.

Non-insurance activities include other Group operations (predominantly the results of our internal reinsurance businesses, the investment return on centrally held assets and other operations), corporate centre costs and Group debt costs and other interest. During the year there were no material leasing arrangements involving the Group as the lessor or the lessee.

Operating losses from non-insurance activities	2021 £m	2020[1] £m
Other operations	**(19)**	(32)
Corporate centre costs	**(360)**	(250)
Group debt costs and other interest	**(315)**	(370)
Total	**(694)**	**(652)**

1 The 2020 comparatives have been re-presented from those previously published due to a change in the presentation of segmental information.

Analysis of the operating profit from non-insurance activities

Other operations

Total losses in relation to Other operations of £19 million (2020 restated: £32 million) includes investment return on centrally held assets, the results of our internal reinsurance businesses and the results of other operations.

Corporate centre and Group debt costs and other interest

Corporate centre costs and Other operations of £379 million (2020: £282 million) increased due to higher cost reduction implementation, IFRS 17 costs and project costs. This is partially offset by the £34 million of COVID-19 charitable donations in 2020.

Group debt costs and other interest

Decrease in Group debt costs and other interest of £55 million is largely due to interest savings following the large external debt repayment in March 2021 as well as interest savings following maturity of three sub debt borrowings in the year.

A.5 Any other information

A.5.1 Analysis of the Group's adjusting items

The Group's IFRS profit before tax attributable to shareholders for the year was £2,329 million (2020: £3,474 million). Operating profit (as shown in section A.2.2) excludes adjusting items before tax of £(64) million (2020: £(313) million) details of which can be found in the Other information section of the 2021 Annual Report and Accounts.

A.5.2 Subsequent events

On 1 March 2022, the Group entered into an agreement to acquire Succession Jersey Limited ("Succession Wealth") for consideration of £385 million. The transaction significantly enhances the Group's presence in the fast-growing UK wealth market as more people seek advice for their retirement options. The transaction is subject to regulatory approval and is expected to complete in 2022. The transaction is not expected to have a material impact on the Group's Solvency II net asset value.

On 1 March 2022, Aviva plc approved a proposed capital return of £3.75 billion to the holders of its ordinary shares by way of a B share scheme and share consolidation, subject to approval at a general meeting of the ordinary shareholders which is expected to be held on 9 May 2022 and customary conditions including no material deterioration in market conditions or the financial position of the Company[1]. The B share scheme involves the bonus issue of new B shares to holders of ordinary shares at the record time which the Company will subsequently redeem for cash. To maintain comparability between the market price for Aviva ordinary shares before and after implementation of the B share scheme (subject to market fluctuations), it is proposed that the B share scheme will be accompanied by a share consolidation. Full details of the B share scheme and the share consolidation are set out in the circular which the Company published on 5 April 2022. The proposed capital return will reduce IFRS net asset value and Solvency II own funds by £3.75 billion.

On 21 April 2022, the Group's 8.25% £500 million subordinated tier 2 note issued by Friends Life Holdings Ltd reached its maturity date and was redeemed. This forms part of the £1 billion debt reduction announced as part of the Group's capital deployment plans.

[1] Important information regarding B share scheme and consolidation ratio:

The share consolidation referenced in this document refers to a ratio of 76 for 100. The aim of the consolidation is to seek to ensure comparability (subject to normal market fluctuations) between the market price for Aviva ordinary shares before and after the implementation of the B share scheme. This consolidation ratio may be adjusted by the directors at their discretion to ensure that the correct ratio is applied in order to maintain comparability (subject to normal market fluctuations) as intended. The expected proceeds under the B share scheme of 101.69 pence per existing ordinary share are subject to change. If, at the record time, the number of existing ordinary shares in issue multiplied by the expected redemption payment per existing ordinary share stated above would result in a return in excess of £3.75 billion, then the redemption amount payable by reference to each existing ordinary share may be subject to a downward adjustment at the discretion of the Board. Full details of the B share scheme (including mechanics, eligibility, consolidation ratio and proceeds) are set out in an explanatory circular, published on 5 April 2022. The B share scheme and share consolidation remain subject to shareholder approval and customary conditions including no material deterioration in market conditions or the company's financial position.

Section B

System of governance

In this section

Section B: System of governance

Details of the structure of the undertaking's administrative, management or supervisory body (AMSB, defined by the Group as the Aviva plc Board and Board Committees) are provided, in addition to the roles, responsibilities and governance of Aviva's key control functions (defined as the risk, compliance, internal audit and actuarial functions). Other components of the Group's system of governance are also outlined, including, but not limited to, the risk management system and internal control system implemented by the Group.

B.1 General Information on the system of governance

B.1.1 Overview of the AMSB and the Group's system of governance

Role and responsibilities of the Board

The Board is collectively responsible for promoting the long-term, sustainable success of the Company through seeking to generate value for shareholders whilst fulfilling our responsibilities to all of our stakeholders and contributing positively to the societies in which we operate.

One of the Board's key roles is to determine our shared purpose and to set and uphold the Group's values, standards and ethics which combine to create our corporate culture. We recognise that there is a clear link between our culture and our conduct, both with regards to our customers and to the way in which governance operates in the Group. The Board is also responsible for setting the Group's risk appetite and monitoring the operation of our risk management and controls framework. It also seeks to maintain an appropriate dialogue with shareholders on strategy and remuneration.

The Board is responsible for ensuring that an appropriate system of risk governance is in place throughout the Group. To discharge this responsibility, the Board has established frameworks for risk management and internal control using a 'three lines of defence' model and reserves for itself the setting of the Group's risk appetite. Further details are contained on the following pages.

In-depth monitoring of the establishment and operation of prudent and effective controls in order to assess and manage risks associated with the Group's operations is delegated to the Risk, Customer, Conduct and Reputation and Audit Committees which report regularly to the Board. However, the Board retains ultimate responsibility for the Group's systems of internal control and risk management and has reviewed their effectiveness during the year. The frameworks for risk management and internal control play a key role in the management of risks that may impact the fulfilment of the Board's objectives. They are designed to identify and manage, rather than eliminate, the risk of the Group failing to achieve its business objectives and can only provide reasonable and not absolute assurance against material misstatement or losses. The frameworks are regularly reviewed and were in place for the financial year under review and up to the date of this report. They help ensure the Group complies with the Financial Reporting Council's (FRC) guidance on Risk Management, Internal Controls and related financial and business reporting.

The Risk Committee, on behalf of the Board, conducted a robust annual assessment of the Group's emerging and principal risks. The outcome of the assessment was reported to and discussed at the Board. In addition to this annual assessment, the Risk Committee regularly conducted an assessment of the principal risks facing the Company, the conclusions of which was also shared with and discussed by the Board. The annual assessment included those emerging risks that could impact the Group's business model, future performance, solvency and liquidity and therefore required management prioritisation and action. Specifically the Board considered the principal risks facing the Company when approving the Group business plan.

During 2021, the Risk Committee received updates on a number of emerging risks and sources of economic uncertainty and associated mitigating actions by management. Likewise, the Customer, Conduct and Reputation Committee also received updates on emerging threats to the Group's reputation and conduct risk profile.

Emerging risks were also taken into account by the Risk Committee and management in the design of scenarios which are intended to stress test the Group's three-year business plan, recovery plan, climate change impacts, decisions on the return of capital to shareholders and operational resilience.

As at the date of this report the Board is comprised of the Non-Executive Chair, two Executive Directors and ten independent Non-Executive Directors (NEDs). A number of changes to our Board composition were made during 2021. On 1 January 2021, Pippa Lambert joined the Board as an Independent Non-Executive Director, and on 14 September 2021 Pippa became Chair of the Remuneration Committee. Pippa also joined the Nomination and Governance and Customer, Conduct and Reputation Committees. On 22 October 2021 Martin Strobel was appointed as an Independent Non-Executive Director and also joined the Audit Committee, Nomination and Governance Committee and Risk Committee. On 20 December 2021 Shonaid Jemmett-Page was appointed to the Board and has joined the Audit, Customer, Conduct and Reputation, Nomination and Governance and Risk Committees. Finally, Andrea Blance joined the Board on 21 February 2022 and has joined the Audit, Nomination and Governance, Remuneration and Risk Committees. On 13 January 2022 we announced that Jason Windsor had resigned as Group Chief Financial Officer (CFO) with effect from July 2022. We also announced on 21 February 2022 that Patricia Cross and Belén Romana García would retire from the Board at the 2022 Annual General Meeting. On 4 April 2022 we announced the appointment of Charlotte Jones as CFO and Executive Director with effect from 5 September 2022, subject to approval by the PRA and the Financial Conduct Authority (FCA).

Role profiles for the Non-Executive Chair, Senior Independent Director (SID), Group Chief Executive Officer (CEO), Group CFO and Non-Executive Directors are available at www.aviva.com/about-us/roles. The Chair is tasked with leadership of the Board, setting its agenda, ensuring its effectiveness, and enabling the constructive challenge of the performance and strategic plans of the Executive Directors by the NEDs. The Chair also plays a key role in working with the Board to establish our culture, purpose and values. The Group CEO is the senior executive of the Company and has overall accountability for the development and execution of the Group's strategy in line with the policies and objectives agreed by the Board.

The role of the SID is to provide a sounding board for the Chair and to serve as an intermediary for the other directors where necessary. The SID should be available to shareholders should they have concerns they have been unable to resolve through normal channels, or when such channels would be inappropriate.

In order to ensure there is a clear division of responsibilities between the running of the Board and the running of the business, the Board has identified certain 'reserved matters' for its approval. In relation to other matters, unless they are specifically reserved for shareholder approval in a general meeting, the Board delegates responsibility for these to our Group CEO, who then delegates responsibility for specific operations to members of the Group Executive Committee (ExCo).

The Board has established committees to assist in fulfilling its oversight and other responsibilities, providing dedicated focus on the areas set out below. Each committee chair reports to the Board on the committee's activities after each meeting.

During the year the remits of these Committees were reviewed and the respective Committee Terms of Reference were updated. A summary of the Committee remits are outlined below.

Committee's purpose

Name of Committee	Committee Purpose
Audit Committee	Assists the Board in its oversight of financial reporting by assessing the integrity of the Company's financial statements and related announcements; monitoring the adequacy of controls over financial reporting; monitoring the Group's whistleblowing policies; and monitoring the independence and performance of the Internal Audit function and the External Auditors.
Nomination and Governance Committee	Assists the Board in its oversight of Board composition; Board and executive succession; talent development; diversity and inclusion initiatives; operation of the Group's governance framework and Aviva's subsidiary governance principles.
Customer, Conduct and Reputation Committee	Assists the Board and Risk Committee in their oversight of customer, conduct and reputation issues including operational risks related to customer and business conduct; the Group's customer strategy and customer conduct obligations; customer data governance, oversight of the Group's brand reputational risk profile and Aviva's Sustainability Ambition.
Remuneration Committee	Assists the Board in its oversight of remuneration by reviewing the Group Remuneration Policy; the Directors' Remuneration Report; approving remuneration packages for the Non-Executive Chair and ExCo; remuneration approaches for the remuneration of regulated employees and reviewing wider workforce remuneration and policies. Works with the Risk Committee to ensure that risk management is considered in setting the Remuneration Policy through the alignment of incentive and rewards with risk management.
Risk Committee	Assists the Board in its oversight of risk by assessing the effectiveness of the Group's Risk Management Framework, risk strategy, risk appetite and risk profile; the methodology used in determining the Group's capital requirements and stress testing these requirements; assessing the adequacy of the Group's system of non-financial reporting controls; ensuring due diligence appraisals are carried out on strategic or significant transactions; and compliance with prudential regulatory requirements.

The duties of the Board and of each of its committees are set out in the respective Terms of Reference. Our committees' Terms of Reference can be found on the Company's website at www.aviva.com/committees and are also available on request from the Group Company Secretary. The Terms of Reference list both matters that are specifically reserved for decision by our Board and those matters that must be reported to it.

The 'three lines of defence model' and roles and responsibilities of key functions
Roles and responsibilities for risk management in Aviva are based around the 'three lines of defence model' where ownership for risk is taken at all levels in the Group. Line management in the business is accountable for risk management, including the implementation of the risk management framework (RMF) and embedding of the risk culture.

The first line: management monitoring
In the first line, the Group Executive Committee and each market Chief Executive Officer are responsible for the application of the RMF, for implementing and monitoring the operation of the system of internal control and for providing assurance to the Audit, Customer, Conduct and Reputation and Risk Committees and the Board.

The second line: risk management, compliance and actuarial functions
The second line, consisting of the Risk Management function is accountable for the quantitative and qualitative oversight and challenge of the identification, measurement, monitoring and reporting of principal risks and for developing the RMF. The Actuarial function is accountable for the Group-wide actuarial methodology, reporting to the relevant governing body on the adequacy of reserves and the appropriateness of the Solvency II internal model, as well as underwriting and reinsurance arrangements. The Compliance function supports and advises the business on the identification, measurement and management of its regulatory, financial crime and conduct risks. It is accountable for maintaining the compliance standards and framework within which the Group operates and monitoring and reporting on its compliance risk profile. See sections B.3, B.4 and B.6 for further details on the roles, responsibilities, authority, resources, independence and reporting lines of the Group's risk management, compliance and actuarial functions respectively, and how their independence is ensured.

The third line: internal audit
The third line relates to internal audit where independent and objective assessment on the robustness of the RMF and the appropriateness and effectiveness of internal control is provided to the Audit, Customer, Conduct and Reputation and Risk Committees, market audit committees and the Board. Refer to section B.5 of this report for details on the roles, responsibilities, authority, resources, independence and reporting lines of the Group's internal audit function.

Aviva's system of governance during 2021
There have been no material changes in the system of governance during 2021.

Implementation and assessment of system of governance
Risk management framework
The RMF is designed to identify, measure, manage, monitor and report the principal risks to the achievement of the Group's business objectives and is embedded throughout the Group. The RMF has been in place for the year under review and up to the date of the approval of this report. It is codified through risk policies and business standards which set out the risk strategy, appetite, framework and minimum requirements and controls for the Group's worldwide operations.

Internal controls
Internal controls facilitate effective and efficient operations, the development of robust and reliable internal reporting and compliance with laws and regulations. Group reporting manuals in relation to IFRS and Solvency II reporting requirements and a Financial Reporting Control Framework (FRCF) are in place across the Group. The FRCF relates to the preparation of reliable financial reporting, covering both IFRS, Solvency II, APM and local reporting activity.

The FRCF process follows a risk-based approach, with management identification, assessment (documentation and testing), remediation (as required), reporting and certification over key financial reporting related controls.

In 2021, the Group has continued its focus on improving operational resilience by completing its annual programme of disaster recovery testing, including those applications hosted in the Cloud, the strengthening of its cyber security controls and regular programme of cyber scenario testing. Significant control investment has been made during 2021 to ensure Aviva's IT environment remains protected against security vulnerabilities, including any exposures arising from Aviva's divestments. Further information on the internal control system is provided in section B.4.1.

Assessment of effectiveness
Each business unit market Chief Executive Officer (BU CEO) is required to make a declaration that the Group's governance, and system of internal controls are effective and are fit for purpose for their business and that they are kept under review throughout the year.

Any material risks not previously identified, control weaknesses or non-compliance with the Group's risk policies or local delegations of authority must be highlighted as part of this process. This is supplemented by investigations carried out at Group level and a Group CEO and Chief Risk Officer (CRO) declaration for Aviva plc.

The effectiveness assessment draws on the regular cycle of assurance activity carried out during the year, as well as the results of the annual assessment process. During 2021, this has been supported by the application of the Group's Operational Risk & Control Management (ORCM) framework.

The details of key failings or weaknesses are reported to the Risk and Audit Committees and the Board on a regular basis and are summarised annually to enable them to carry out an effectiveness assessment.

The Risk Committee, working closely with the Audit Committee, on behalf of the Board carried out a full review of the effectiveness of the systems of internal control and risk management during the year, covering all material controls, including financial, operational and compliance controls and the RMF. In addition, Internal Audit plays a significant role in contributing to the routine ongoing assessment of the Group's Risk & Control Management framework. There has been regular reporting to the committees throughout the year to ensure that outstanding areas of improvement are both identified and remediated.

The reports to the Audit and Risk Committees also enabled ongoing oversight of the management of any risks associated with the businesses divested during the year. Areas of continued focus remain the operational risk and control environment risk profile, cyber security and risk management through major change. Specific areas for improvement were also identified in India. The Risk Committee, working in conjunction with the Audit Committee, on behalf of the Board, will continue to monitor the effectiveness of risk management throughout 2022.

The RMF of a small number of our joint ventures and strategic equity holdings can differ from the RMF outlined in this report but with a strong focus on local regulatory compliance. We continue to work with these entities to ensure appropriate management of risks and to align them, where possible, with our framework.

B.1.2 Remuneration policy
Aviva'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 Group's approach to sound and effective risk management. Aviva's remuneration policy aligns Group strategy and Executive Director (EDs) remuneration. The remuneration policy provides market competitive remuneration, and incentivises EDs to achieve the annual business plan and the Group's longer-term strategic objectives. Significant levels of deferral and shareholding requirements align EDs' interests with those of shareholders and aid retention of key personnel. Variable remuneration can be zero if performance thresholds are not met. Remuneration payments to directors can only be made if they are consistent with the approved Policy.

The Annual Report on remuneration contained in the 2021 Annual Report and Accounts sets out how Aviva has implemented its policy for Executive Directors during the course of 2021. Note 60 of the 2021 Annual Report and Accounts notes that key management personnel of the Company may from time to time purchase insurance, savings, asset management or annuity products markets by group companies on equivalent terms to those available to all employees in the Group. In 2021, other transactions with key management personnel were not deemed to be significant either by size or in the context of their individual financial positions. Note 60 shows total compensation to those employees classified as key management, being those having authority and responsibility for planning and controlling the activities of the Group, including the executive and non-executive directors.

Our Remuneration Policy was approved by shareholders at our AGM on 6 May 2021. The full and definitive Policy is therefore set out in our 2021 Annual Report and Accounts, which can be found on our website at https://www.aviva.com/investors/reports/.

B.2 Fit and proper policy

Description of specific requirements concerning skills and knowledge

For persons responsible for running the undertaking subject to regulatory approval/notification, an assessment of fitness and propriety must consider their allocated responsibilities and skills and experience across a skills matrix which covers the following areas as appropriate:

- Insurance and financial markets;
- Business strategy and business models;
- Systems of governance;
- Financial and actuarial analysis where applicable to the role; and
- Regulatory framework and requirements.

The Nomination and Governance Committee identifies the skills and experience that it would like to have at Board level. A skills matrix for Board members has been developed and it supports the Committee's discussions during the Board and committee appointment process. The skills matrix sets out the expertise and experience of each Board member. The Nomination and Governance Committee also monitors the development of the Group Executive Committee to ensure there is a diverse supply of senior executives with the appropriate skills and experience.

Description of policies and processes for assessing fitness and propriety

The Group has policies in place to ensure that individuals employed within the Group or acting on behalf of the Group are both 'fit' and 'proper' in line with the PRA and FCA fit and proper requirements for individuals subject to the Senior Manager Certification Regime (SMCR), this means:

- Fit – 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.
- Proper – 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 (F&P) of individuals spans across the employee lifecycle including recruitment, performance management and training. To ensure the Group protects itself against employing individuals who potentially could threaten our people, customers, properties, facilities or reputation, the majority of F&P activities take place within recruitment and more specifically in pre-employment screening.

A policy to apply a minimum set of basic screening requirements has been agreed and implemented in order to support the recruitment activity for all staff across the Group. Additional enhanced screening requirements and ongoing F&P requirements are also applied for individuals who are subject to regulatory approval by the PRA and FCA.

B.3 Risk management system including the own risk and solvency assessment

B.3.1 Overall risk management framework: strategies, processes and reporting procedures

Aviva's RMF is at the heart of every business decision and is key to ensuring a robust control environment and the Group's sustainable success. The key elements of our RMF comprise:

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

A risk taxonomy is maintained to ensure a consistent approach to risk identification, measurement and reporting, and to determine application of the Group Risk Appetite Framework and the risks for which a Risk Policy is required. The taxonomy is arranged in a hierarchy with more granular risk types grouped into the following principal risk categories: credit & market, liquidity, life insurance, general insurance (including health), operational and strategic risk. Risks falling within these types may affect a number of outcomes including those relating to solvency, liquidity, profit, reputation and conduct.

To promote a consistent and rigorous approach to risk management across all businesses we have a set of risk policies and business standards which set out the risk strategy, appetite, framework and minimum requirements for the Group's worldwide operations. The BU CEOs make an annual declaration supported by an opinion from the business unit chief risk officers that the system of governance and internal controls was effective and fit for purpose for their business throughout the year. The Group's Risk Appetite Framework was refreshed during the year, with revised and new risk appetites, preferences and tolerances considered and approved by the Risk Committee. Climate risk has been integrated and defined within the risk appetite framework to be incorporated into risk-based decision-making.

Risk models are an important tool in our 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. We carry out 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 to evaluate their impact on the business and the management actions available to respond to the conditions envisaged. For those risk types managed through the holding of capital, being our principal risk types except for liquidity risk, we measure and monitor our risk profile on the basis of the Solvency II solvency capital requirement.

Risk appetites are set at an aggregate level sometimes covering multiple risk types and act as hard constraint requiring management action if breached. The group has risk appetites for solvency, liquidity, operational, climate, conduct and reputational risk. Risk tolerances expressed as quantitative or qualitative boundaries are set for individual risk types or combinations of risk types to constrain specific risk-taking activities. Risk tolerances include solvency ratio risk tolerances which are expressed for some of the Group's most material risks (e.g. longevity risk), risk capital tolerances that are used to monitor the capital exposure for other individual risk types (e.g. inflation risk) and operational risk tolerances that are set for individual operational risk. The Group's position against risk appetite and capital tolerances is monitored and reported to the Board on a regular basis.

The oversight of risk and risk management at the Group level is supported by the Asset Liability Committee (ALCO), which focuses on the management of the Group's balance sheet within risk appetite, capital management decisions and management of financial risks, and the Group Executive Risk Committee (GERC) which focuses on the development and on-going maintenance of an effective risk management framework and oversight of the Group's risk profile in line with the risk appetite framework. Similar committee structures with equivalent terms of reference exist in the business units.

The risk management framework of a small number of our joint ventures and strategic equity holdings differs from the Aviva framework outlined above. We work with these entities to understand how their risks are managed and to align them, where possible, with Aviva's framework.

B.3.2 Risk function

The risk function is responsible for the design and implementation of the RMF described above in section B.3.1, in addition to the design, implementation and validation of Solvency II capital models requiring regulatory approval. Material risks identified through this process are reported to the Board, together with any other specific information concerning risk requested by the Board. A further responsibility is to support the Board and first line management to ensure the effective operation of the RMF, through 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 is engaged on all key decisions and the Group CRO has the power of veto.

Reporting lines

The Group CRO leads Aviva's risk function, supported by CROs within the business units, and reports directly to the Group CEO. The principal Board committees that oversee risk management and control are the Risk Committee, the Audit Committee, and the Customer, Conduct and Reputation Committee. The Risk Committee is responsible for the review of the adequacy and quality of the risk and compliance functions, setting with the CEO the objectives and remuneration of the CRO and evaluating his/her performance, and recommending to the Board the appointment or dismissal of the CRO.

Authority and resources of the risk function

The risk function has authority to review all areas of the Aviva Group and business units and has full, free and unrestricted access to all activities, records, property and personnel necessary to complete its work. The scope of the risk function's activities extends to all legal entities, joint ventures and other businesses, partnerships, outsourcing and reinsurance arrangements. In the case of some joint ventures, contractual arrangements may limit the scope of risk function's activities. In line with Aviva's remuneration business standard, the performance and remuneration of risk function staff is assessed against functional objectives. Taken together, the measures support the independence of the risk function.

B.3.3 Integration of risk management into the decision making processes

Sections B.3.1 and B.3.2 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'. ExCo members and BU CEOs are responsible for the implementation of Group 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. The ALCO assists the Chief Financial Officer (CFO) and Chief Capital Officer (CCO) to meet the responsibility delegated to them to manage our Group's balance sheet within risk appetite set by the Board, capital allocation, capital management decisions and management of financial risks. The GERC provides oversight, challenge, support and advice on the development and on-going maintenance of an effective risk management framework and oversight of the Group's risk profile in line with the risk appetite framework.

B.3.4 Risk management system: Own risk and solvency assessment (ORSA)

The Group's ORSA comprises all processes and procedures employed to identify, measure, monitor, manage and report the short-term and long-term risks Aviva faces or may face, and determine its own funds necessary to ensure that Aviva's overall solvency needs are met at all times. The ORSA underpins the consideration of risk and capital implications in key decisions and, in particular, in strategy setting and business planning. The goal of the ORSA is to provide a continuous and forward-looking assessment of the short-term and long-term risks that the business faces, or may face, ensuring that the Group's solvency requirements are met at all times.

The ORSA is a continuous and dynamic process, the outcomes of which are reported to the senior management and the Board or its sub-committees throughout the year. It comprises a number of elements of the RMF which are embedded in the business through the requirements of supporting risk policies and business standards around capital allocation, strategy, planning and stress testing.

In combination, these elements create a holistic overview of the risks that may impact the business, and which should be taken into account by the management of business units in day-to-day decision-making. These ORSA processes provide the Board with insights on the key risks and current and future capital requirements of the Group and legal entities.

Consistent with the ‘three lines of defence model’, CEOs are responsible for the majority of the underlying ORSA processes set out above. The risk function, however, is responsible for the design of the RMF (which includes the ORSA), as well as specifically the top down risk assessment process, independent model validation and the Annual ORSA Report.

B.3.4.1 Management review and approval of the ORSA

The output from the ORSA processes is reported to the Aviva plc Board and the Board Risk Committee regularly during the year. The ORSA Report brings together and summarises a high level description of the key components of ORSA and key developments and outcomes during the year. The ORSA Report is produced annually and may be updated in the event ORSA triggers are met as defined by the Group’s ORSA Policy, for example in the event of an actual or potential material change in the Group’s risk profile and own funds.

B.3.4.2 Determination of own solvency needs

The Board has approved that for the purpose of ORSA, capital resources and requirements are measured on the basis of Solvency II requirements for determining Solvency II own funds and Solvency II capital requirement (SCR).

B.3.4.3 Interaction between capital management and risk management

Solvency II capital (as a risk based capital measure) is embedded at the heart of the Group’s risk and capital evaluation and is used as a key input to a wide range of business and strategic decisions. The RMF, sets out the areas where businesses are expected to use Solvency II capital management information as part of their decision-making and risk management processes. This ensures that requirements to use Solvency II capital are embedded within the instructions of how the relevant processes (including, but not limited to, asset liability management, capital allocation and performance management, strategy and planning) are to be performed. Solvency II capital is calculated at a business unit level using either the Group’s internal model or through the Solvency II standard formula calculation, and aggregated to determine the Group’s SCR.

B.3.5 Governance over the Group’s internal model

The Group’s Solvency II model and data governance business standards and associated guidance, manuals, logs and reports, are part of Aviva’s overall RMF, as well as the Group's Internal Model Independent Validation business standard. These ensure that our businesses operate in accordance with Solvency II requirements within a controlled environment when developing internal model methodologies or assumptions, and when running processes and systems.

The model governance business standard sets out the minimum business controls and objectives to demonstrate that the internal model remains fit for purpose (including clear roles and responsibilities, model governance, weakness and limitation management, results validation etc.) and has not materially changed during the reporting period. The data governance business standard details the relevant business controls and objectives to ensure completeness, accuracy, appropriateness, and consistency of the data supporting the internal model results production. Both standards are key elements of Aviva’s governance framework.

The Group and legal entity Board Risk Committees (or delegates) are responsible for approving major internal model changes before submission to the Prudential Regulation Authority. We anticipate one model change application a year (around June). The quarterly model change reports and supporting evidence provide the required information to support the Board Risk Committee approval when required.

The Group CRO is the ultimate internal model owner. In practice the day-to-day responsibilities are delegated to the Group and business unit Chief Actuaries, as they have the accountability to give assurance to the Group and legal entity Boards that Aviva’s internal model is fit for purpose on an ongoing basis; adequately reflects Aviva’s risk profile; takes into account new information as it becomes available and is accurate and works effectively. This enables the Boards to conclude whether the internal model is fit for purpose while also ensuring it is used to provide information for important strategic and business decisions; capital management; business planning; risk mitigation; investment allocation and product development.

The internal model independent validation review (as described further below) also allows an opinion to be provided to the Group and legal entity Boards whether the internal model is suitably accurate and fit for purpose and whether approval is recommended. Since Aviva’s internal model application approval, work has continued to refine the model change process and update the Solvency II model governance business standard in accordance with regulatory feedback. This business standard clarifies how changes or updates to our internal model should be treated to ensure appropriate documentation, validation and governance can be applied before implementation for regulatory reporting.

Validation processes

As a key part of Aviva’s capital assessment and capital management, Aviva’s internal model is rigorously validated using a series of tests. This suite of tests includes both validation of the individual calibrations and methodologies underlying the model and validation of the model using its results. The validation tests applied comprise both mathematically defined tests and those based on qualitative judgement, to ensure that the model and its components are both accurate and reflect management opinion. Key tests include back-testing and sensitivity testing. The validation tests are run, documented and assessed against criteria set by the actuarial function at both a legal entity and a Group-wide level, with the results made available to the relevant Group and legal entity Boards (or delegate) and committees.

An opinion is provided to the appropriate Group and legal entity Board sub-committees as to whether the internal model materially complies with the relevant Solvency II requirements, reflects the relevant entity's risk profile and is fit for purpose for calculating the SCR and for wider use of the model. Business unit CROs define the scope and approach for each annual independent validation cycle in line with the internal model independent validation framework.

B.4 Internal control system

B.4.1 Description of the internal control system

Internal controls facilitate effective and efficient business operations, the development of robust and reliable internal reporting and compliance with laws and regulations.

The Group's suite of business standards sets out Aviva's required control objectives and minimum control requirements for effective internal control across the Group. These control objectives are:

- Ensure the business demonstrates a commitment to integrity and ethical behaviour and promotes Aviva's desired culture and values, with the Group CEO and Senior Management.
- Reduce future losses and detriment to customers arising from failures in operational risk management and controls.
- Support reliable reporting on the operational risk and control environment at all levels of the business, to increase the confidence of the Board, Regulator and Customers in the effectiveness and efficiency of our operational processes.

B.4.2 Compliance function

The primary purpose of the compliance function is to assess and manage the business' exposure to regulatory risk. The compliance function is an integral part of Aviva's RMF and constitutes a key part of the Group's corporate governance, including relationships with the FCA and the PRA, and other regulatory bodies.

Two key processes comprise Aviva's legal and regulatory compliance activity:

- Oversight of conduct, financial crime and regulatory compliance is performed by the compliance function and includes activities such as:
  - Setting conduct and regulatory risk framework; and
  - Providing advice, support, guidance and challenge on conduct and effective regulatory compliance.
- The Compliance function, supported by the Legal function, assess the possible impact of any changes in the legal and regulatory environment on the operations of the Group. and the identification and assessment of compliance risk.

Through these processes the compliance and legal functions also take responsibility for reporting information and advising the Board and its committees.

Reporting lines

Responsibility and reporting lines for the compliance activities and processes noted above are as follows:

- The Group CRO has overall responsibility for conduct, financial crime and regulatory compliance activity. At a business unit level, the business unit CROs are also responsible for conduct, financial crime and regulatory compliance activity throughout the year; and
- The Group General Counsel is responsible for monitoring legal developments, supported by business unit General Counsels.

At the Board level, compliance (except for prudential regulatory risk) is oversighted by the Customer, Conduct and Reputation Committee, whose main purpose is to oversee the customer and conduct obligations, our data governance, compliance with our corporate governance principles, our broader compliance activities and shaping the culture and ethical values of the Group and Group's approach to corporate responsibility. Compliance with prudential regulatory requirements is overseen by the Board Risk Committee.

Authority and resources of the compliance function

Those carrying out conduct, financial crime and regulatory compliance activities have authority to review all areas of the Group and business units and have full, free and unrestricted access to all activities, records, property and personnel necessary to complete their work (where appropriate). The scope of compliance function's activities extends to all legal entities, joint ventures and other businesses, partnerships, outsourcing and reinsurance arrangements. In the case of some joint ventures, contractual arrangements may limit the scope of compliance function's activities.

B.5 Internal audit function

Role and responsibilities

Internal Audit's (IA) purpose is to help the Board and Executive Management to protect the assets, reputation and sustainability of Aviva by providing independent and objective assurance designed to add value and improve Aviva's operations.

IA does this by assessing and reporting (to group and business unit audit, risk and governance committees and to management as appropriate) on the effectiveness of the design and operation of the framework of controls, the effectiveness of management actions to address the deficiencies in the framework of controls and whether all significant risks are identified, managed appropriately reported by management to the Board and executive management.

IA undertakes this work in accordance with its IA Charter and in conformance with the Institute of Internal Audit (IIA) Standards and the Chartered Institute of Internal Auditors (CIIA) code for Effective Audit in Financial Services.

B.5.1 Independence and objectivity of the internal audit function
IA must always be independent from management in order to be effective in performing its activities. The arrangements to protect the independence of IA are set out below:

- In accordance with the IA Charter, the IA team is led by the Chief Audit Officer (CAO) who has a direct reporting line into the chair of the Group Audit Committee (GAC) and a functional reporting line to the Group CEO. The CAO also has direct and unlimited access to the Group Board Chair, the Chair of the GAC, the Chair of the Group Risk Committee (GRC), the Chair of the Customer, Conduct and Reputation Committee (CCRC) and the chairs of business unit Audit Committees.
- All IA directors working in the business units report directly to the CAO and form part of IA (except where IA services are provided by the joint venture partners), and have a dotted reporting line to the local Audit Committee Chair.
- The Chair of the GAC is responsible for recommending the appointment and removal of the CAO to the Board. Board Audit Committees for business units have a duty to recommend the appointment or dismissal of the CAO to the respective business unit Board and to participate, jointly with the CAO or designee, in the determination of the objectives of the CAO and the evaluation of their levels of achievement, including consultation with the CEO.
- The Head of Quality Assurance (QA) monitors and evaluates the function's adherence to all relevant Internal Audit standards of practice and Internal Audit methodology and has direct access to the Group Audit Committee Chair. An independent external assessment of the Internal Audit function is performed every three years.
- Independence is confirmed through a declaration form signed annually by all members of internal audit staff. Staff working in IA have no direct responsibility or authority over any operational activities reviewed and should not relieve others of such responsibilities, and IA manage a staff rotation process to ensure that independence is maintained.
- IA staff who previously worked in Aviva Group, but outside of IA, will not perform or manage reviews in the business area for which they were previously responsible for a period of at least one year after the end of their role within the business. This excludes similar business areas in other legal entities or operating units. Internal auditors on rotation from a business unit will not perform or manage reviews in the business area for which they were previously responsible.

B.5.2 Authority and resources of the internal audit function
IA is authorised to review all areas of the Group and has full, free, and unrestricted access to all activities, records, property, and personnel necessary to complete their work. The scope of IA activities extends to all legal entities, joint ventures and other business partnerships, outsourcing and reinsurance arrangements. The CAO shall propose a budget which ensures that IA has appropriate skills and resources to discharge its responsibilities.

B.6 Actuarial function
Role and responsibilities
The actuarial function is accountable for Group-wide actuarial methodology, reporting to the relevant governing body on the adequacy of reserves and capital requirements, as well as underwriting and reinsurance arrangements. As the day-to-day owner of the Group's internal model, the actuarial function also has responsibility for ensuring that the Group's internal model remains fit for purpose at all times.

The independence of the actuarial function is derived through its membership in the wider global risk function. Appointment of the Group Chief Actuary and the setting of his/her objectives and the evaluation of his/her performance is made by the Group CRO. In addition, the actuarial function works closely with the Group finance function to agree a number of principles in respect of the calculation of technical provisions (best estimate liabilities) and capital requirements to further ensure independence.

The Group Chief Actuary leads Aviva's global actuarial function, supported by Chief Actuaries within the business units. The Group Chief Actuary's reporting line is through the Group CRO where the actuarial function combines with the risk function and elements of the compliance function to form global risk, supported by the CRO's membership of the Executive Committee and attendance at the Risk and Audit Committees.

Business unit actuarial functions are required to confirm to the Group actuarial function the appropriate use of methodologies and underlying models, and assumptions made in the calculation of provisions.

Authority and resources of the actuarial function
The actuarial function has authority to review all areas of the Group and has full, free and unrestricted access to all activities, records, property and personnel necessary to complete its work. The scope of actuarial activities extends to all legal entities, joint ventures and other businesses, partnerships, outsourcing and reinsurance arrangements. In the case of some joint ventures, contractual arrangements may limit the scope of the actuarial function activities. All persons employed by the actuarial function in a defined actuarial role, are subject to the Group's fit and proper minimum requirements to ensure they have the required skills and knowledge to comply with their role and responsibilities.

B.7 Outsourcing

The Aviva Procurement and Outsourcing business standard contains information on Aviva's outsourcing policy, setting out the relevant responsibilities, objectives, processes and monitoring arrangements to be applied in cases of outsourcing, all of which shall be consistent with the overall business strategy. The standard applies equally to any externally or internally (intra-group) outsourced activity and is benchmarked against relevant regulatory expectations. The objective of the standard is to ensure that minimum control objectives and controls for supplier related activities are followed by all Aviva businesses, to ensure that supply risk is managed effectively, customer's best interests are protected and they continue to receive good outcomes, as well as mitigating potential financial, operational, contractual and brand damage caused by inadequate management. The standard requires a global Outsourcing Landscape document to be produced bi-annually which captures details of all critical or important outsourced operational functions and activities.

The standard applies to all staff involved in supplier related activities. It provides clarity to businesses on the definition of outsourcing, including where activity is delegated to an intermediary, and whether a function or activity outsourced is assessed as critical or important.

Aviva's Board Risk Committee approves the control objectives 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;
- Supplier management – risk based approach to management of supply contracts; and
- Business contingency and exit plans – to support operational resilience and recovery and a means to safely exit the arrangement without material harm to the business.

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

The standard and the associated controls have been updated as appropriate to align to the Prudential Regulation Authority (PRA) Regulations for Outsourcing and Third Party Risk Management (PRASS2/21) from January 2022.

Outsourced functions and activities

Aviva outsources a range of operational functions and activities. The nature of critical or important arrangements primarily includes policy administration, claims handling, fund administration/management and investment services, document services and system development/IT support services (which includes networks, storage, hosting and telecoms). Service providers for these activities are mostly based in the UK and Canada, but also in other jurisdictions consistent with Aviva's global footprint during 2021. This includes service providers in Europe (primarily Ireland, France and Italy), India and China.

Material intra-group outsourcing arrangements

Material intra–group outsourcing arrangements for the year ended 31 December 2021 primarily comprise fund/asset management, and a range of shared support services (including IT, finance and capital management, compliance, risk, HR, actuarial and internal audit services) outsourced to service companies within the Group. Material intra-group outsourcing arrangements are primarily based in the UK, Ireland and Poland.

B.8 Any other material information

The Group did not use the option provided in Article 246(4) of the Directive 2009/138/EC to produce a single ORSA document. No other information on Aviva's system of governance is considered material to require disclosure in this section.

Section C

Risk profile

In this section

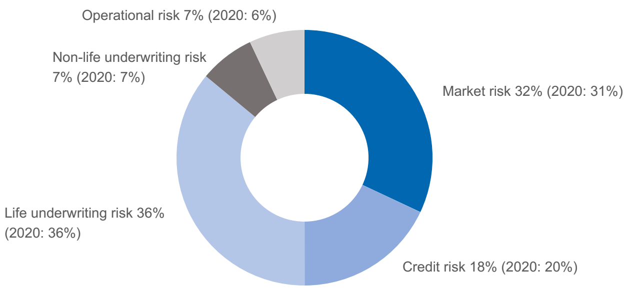
Section C: Risk profile

The 'Risk profile' section of this report provides information on the key risks encountered by the Group, as well as the corresponding processes for monitoring the risk exposures and the techniques in place for mitigating these risks.

Overview of the Group's risk profile

For the purposes of risk identification and measurement, and aligned to Aviva's risk policies, risks are usually grouped by risk type: underwriting risk for both life insurance (including long-term health) and general insurance (including short-term health) businesses, market, credit, liquidity, operational and asset management risk.

The chart below shows the composition of the Group's undiversified SCR as at 31 December 2021 and 31 December 2020:



Risk profile	Section reference
Life and non-life underwriting risk	C.1
Market risk	C.2
Credit risk	C.3
Liquidity risk	C.4
Operational risk	C.5
Asset Management risk	C.6

Risk identification

Risk identification is carried out on a regular basis drawing on a combination of internal and external data, covering both regular conditions and stressed environments.

Primary sources for identifying risks include risk events analysis, external and internal trends analysis and management information as well as other risk governance processes and input from executive teams and internal committees.

Exposure measurement and monitoring

The primary bases used by the Group to measure and assess risks are the Solvency II SCR and Solvency II cover ratio which are used to set the Solvency II capital risk appetites and tolerances and to assess the significance of risks and to appropriately direct resources to their management. Under our capital framework, we consider capital above 180% Solvency II shareholder cover ratio as excess, allowing for reinvestment in the business and returns to shareholders over time. We target Solvency II debt leverage ratio of below 30%.

Some categories of risk are not measured and assessed by the Solvency II SCR and cover ratio, principally liquidity risk, which is measured through the liquidity coverage ratio (see section C.4). There are also other risk categories included in the other main risk types, which are not measured and managed through the holding of capital, such as asset valuation uncertainty risk.

The Group Solvency II SCR components for each risk have been disclosed applying the Group's partial internal model to aggregate the SCR for those entities using standard formula and those using our internal model. At 31 December 2021, 84%[1] (2020: 81%) of the Group's undiversified SCR was calculated using the Group's internal model.

We also assess risks on the basis of their potential impact on the value of our franchise, which is supported by our reputation, brand and strong focus on good customer and third party relationships. Operational risks in particular have the potential to significantly impact our franchise value (see section C.5) compared to other risk types which are relatively more significant when measured on the basis of the Solvency II SCR.

We measure and assess risk in terms of our total gross exposure and sum at risk, as well as monitoring risk indicators that might indicate changes in our risk exposure and act as a trigger for management action. These are generally risk type specific and are considered in sections C.1 to C.6.

Risk mitigation

The Group uses a variety of risk mitigation techniques to reduce and manage its risk exposures, including financial hedging, reinsurance and operational controls. Risk mitigation techniques applied are explained in greater detail by risk type in sections C.1 to C.6.

1 See section E.2.2: Internal model represents £16.0 billion (2020: £19.6 billion) of the total undiversified SCR of £19.0 billion (2020: £24.1 billion)

Monitoring the effectiveness of risk mitigation techniques
The Group's major business units have dedicated risk teams which monitor the effectiveness of risk management in the business, including risk mitigation. How the effectiveness of specific risk mitigation techniques is monitored is considered in sections C.1 to C.6.

Risk concentration
The Group's principal sources of risk concentration are counterparty exposures to sovereign governments and reinsurers, further details of which are disclosed in C.3.3. The Group's scale and business model as a composite multi-business line, multi-geography and multi-channel business, creates diversification of risks and generally helps to reduce concentrations of risks.

Any significant concentrations of risk identified at the level of the individual risk are presented in sections C.1 to C.6 of this report.

The principal example of where the Group is exposed to some degree of concentration risk across risk types are strategic distribution partners or outsourcing partners to which we have investment or reinsurance exposure, resulting in operational, credit and market risk exposures to the same third party.

Sensitivity analyses
The Group performs sensitivity analyses, stress and scenario testing in order to understand the impact that changes in underlying risk calibrations and correlations of those risks would have on the Group's risk profile and SCR. See section C.7 for details of the methodology employed in sensitivity analysis, the assumptions and limitations in performing these analyses and the results obtained.

Prudent person principle
The Group ensures that its assets are invested in accordance with the prudent person principle as set out in the Solvency II regulatory framework through the collective application of its risk policies and business standards. These ensure that Aviva 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. The Group's asset liability management business standard and certain provisions of the investment management business standard contain mandatory requirements to ensure that the Group takes into account the risks associated with its investments without relying only on the risk being adequately captured by the capital requirements. Risk appetites and tolerances by risk type are also set and monitored at Group and business unit level.

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, use of derivatives, assets not admitted for trading and the consistency of investment mandates with the way the investment proposition is described and marketed to customers of unit-linked contracts.

Exposure to insurance special purpose vehicles
As at 31 December 2021, the Group has no insurance special purpose vehicles as defined by the Solvency II regulatory framework.

Exposure to off-balance sheet positions
As at 31 December 2021, the Group has no material exposure arising from off-balance sheet positions.

C.1 Underwriting risk
Underwriting risk is the risk of loss on underwriting activity caused by an adverse change in the value of liabilities arising from inappropriate insurance pricing, inadequate claims reserving assumptions as well as unforeseen fluctuations in the timing, frequency and severity of insured events relative to the expectations at the time of underwriting. The risk excludes operational risk arising from internal processes in the writing of insurance business or settling of claims. The risk arises from a number of underlying life insurance, health insurance and general insurance risks, which are separately managed and discussed in sections C.1.1 and C.1.2.

Underwriting risks	% of Group undiversified SCR	
	2021	2020
Life underwriting risk	**36 %**	36 %
Non-life underwriting risk	**7 %**	7 %
Total underwriting risks	**43 %**	43 %

C.1.1 Underwriting risk – Life insurance (including health similar to life)
C.1.1.1 Exposure
Description
Life insurance risk in the Group arises through its exposure to longevity risk, mortality risk and exposure to worse than anticipated operating experience on factors such as persistency levels, exercising of policyholder options and management and administration expenses. The Group's health insurance business (including private health insurance, critical illness cover, income protection and personal accident insurance, as well as a range of corporate healthcare products) exposes the Group to morbidity risk (the proportion of our customers falling sick) and medical expense inflation. The Group chooses to take measured amounts of life and health insurance risk provided that the relevant business has the appropriate core skills to assess and price the risk and adequate returns are available. The Group's underwriting strategy and appetite is communicated via specific policy statements, related business standards and guidelines. Life insurance risk is managed primarily at business unit level with oversight at the Group level.

The Group is exposed to the risk of changes in policyholder behaviour due to the exercise of options, guarantees and other product features embedded in its long-term savings products. These product features offer policyholders varying degrees of guaranteed benefits at maturity or on early surrender, along with options to convert their benefits into different products on pre-agreed terms.

The extent of the impact of these embedded derivatives differs considerably between business units and exposes the Group to changes in policyholder behaviour in the exercise of options as well as market risk (see section C.2). Examples of each type of embedded derivative affecting the Group are:

- **Options**: call, put, surrender and maturity options, guaranteed annuity options, options to cease premium payment, options for withdrawals free of market value adjustment, annuity options, and guaranteed insurability options;
- **Guarantees**: embedded floor (guaranteed return), maturity guarantee, guaranteed death benefit, and guaranteed minimum rate of annuity payment; and
- **Other**: indexed interest or principal payments, maturity value, loyalty bonus.

Exposure measurement

The following measurement and analysis of life insurance risks is undertaken by business units to support management and monitoring of risk exposures:

- Analysis of actual experience against expected experience to support ongoing monitoring of the appropriateness of assumptions;
- Standard stresses for mortality, morbidity, longevity, expense, lapse and policyholder behaviour risks. This output is also used to inform liquidity risk analysis;
- Combined scenarios considering interest rate falls or rises where adverse experience has the potential to increase or decrease the duration of the liability and financial market falls where there is a likelihood of significantly higher lapses. This output is also used to inform liquidity risk analysis; and
- SCR calculations for mortality, morbidity, longevity, expenses and lapse risks.

The following analysis is undertaken by business units on an annual basis as part of the planning process to support management and monitoring of risk exposures and more frequently if necessary:

- Stress and scenario tests for assumptions that are identified as critical to the profitability and risk profile of the business based on standard stresses;
- An in-force risk profile analysis to understand the guarantee profile of the business, looking at minimum interest rate guarantees and other financial and non-financial guarantees;
- Projected liquidity is compared to risk appetite for the base plan and scenarios; and
- Business mix sensitivities to determine how economic capital requirements would move under different plan scenarios.

The Group’s life underwriting risk undiversified SCR at 31 December 2021 is disclosed in section E.2.2.

The table below shows the key life underwriting risks expressed as a proportion of Group undiversified SCR.

	% of Group undiversified SCR	
Life underwriting risks	2021	2020
Longevity risk	**15 %**	14 %
Persistency risk	**11 %**	11 %
Expense risk	**6 %**	6 %
Other life underwriting risks	**4 %**	5 %
Total life underwriting risks	**36 %**	36 %

Changes to risk profile in the reporting period

The Group's exposure to life underwriting risks, as measured by undiversified SCR, remained stable in 2021. The Group's most significant life underwriting risks are longevity risk and persistency risk in the UK. Longevity risk decreased over the year due to higher interest rates, as result of the higher impact of discounting, but was offset by disposals (primarily France) which increased the Group's exposure to life insurance risks from the UK.

Longevity risk remains the Group’s most significant life insurance risk due to the Group’s annuity portfolio, while persistency risk remains significant and continues to be linked with economic conditions.

COVID-19 has continued to present additional uncertainty to the risk profile of our life insurance risks and in the shorter term we are seeing some modest changes in morbidity, through changes in working patterns and increased NHS waiting lists. Mortality rates have also continued to run slightly higher than normal. However, the long-term impact of COVID-19 is not currently expected to be material and we continue to monitor the situation closely.

The sensitivity of the Group’s Solvency II cover ratio to changes in lapse, mortality and morbidity rates and maintenance expenses is provided in section C.7.1 .

C.1.1.2 Risk mitigation
The individual life and health insurance risks are mitigated and managed as follows:

- Mortality and morbidity risks are mitigated by use of reinsurance and life concentration limits. The Group allows business units to select reinsurers, from those approved by the Group, based on local factors, but retains oversight of the overall exposures and monitors that the aggregation of risk ceded is within credit risk appetite.
- Longevity risk and internal experience analysis are monitored against the latest external industry data and emerging trends. While individual business units are responsible for reserving and pricing for annuity business, the Group monitors the exposure to this risk and any associated capital implications. The Group uses reinsurance solutions to reduce the risks from longevity and continually monitors and evaluates emerging market solutions to mitigate this risk further. The Group is exposed to longevity risk through the Aviva Staff Pension Scheme, to which our economic exposure has been reduced since 2014 by entering into a longevity swap covering approximately £5 billion of pensioner in payment scheme liabilities. We purchased reinsurance for longevity risk for our annuity business, including the bulk annuity buy-in transaction with the Aviva Staff Pension scheme. More generally, life insurance risks provide a significant diversification against other risks in the portfolio.
- Persistency risk is managed at a business unit level through frequent monitoring of company experience, and benchmarked against local market information. Generally, persistency risk arises from customers lapsing their policies earlier than has been assumed. Where possible the financial impact of lapses is reduced through appropriate product design. Business units also implement specific initiatives to improve the retention of policies which may otherwise lapse. The Group has developed guidelines on persistency management.
- Expense risk is primarily managed by the business units through the regular assessment of business unit profitability and frequent monitoring of expense levels.

Monitoring the effectiveness of risk mitigation techniques
The implementation of risk mitigation techniques is discussed and then approved via business units' governance bodies, with ongoing effectiveness being monitored as part of 'business as usual' management information. This is the process to support the business Chief Executive Officer's annual declaration that the system of governance, internal controls and risk management is effective and fit for purpose and periodic internal audit reviews, significant findings from which are reported to the Group Audit Committee.

C.1.1.3 Risk concentration
Annuities are marketed and sold to policyholders approaching or in retirement, and therefore longevity risk is concentrated within the age cohort of 60 years old or above. Otherwise, the Group's policy on life insurance risks is to avoid significant concentrations of risk exposure. Life insurance concentration risk is a reflection of too little diversification within or across life insurance risk types. The Group mitigates the concentration of life insurance risks through its scale, geographic spread and diversity of product lines. Risk transfer solutions, primarily through reinsurance, are employed to transfer risks that the Group does not wish to retain, due to the presence of single large exposures, accumulations, or limited internal expertise to the external market.

Controls are in place to ensure accumulations of risk can be evaluated properly. Counterparty concentration as a result of life insurance activities and reinsurance arrangements are considered in section C.3.3.

C.1.2 Underwriting risk – General insurance (including health similar to non-life)
C.1.2.1 Exposure
Description
The majority of the general insurance business underwritten by the Group continues to be short tail in nature such as motor, household and commercial property insurances. The Group's exposure to general insurance (including health similar to non-life) underwriting risk 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.

Exposure measurement
At business unit level the management and monitoring of risk exposures is supported by the following calculations:

- A distribution of the range of probable losses and the related Solvency II capital calculations for claims reserves and new underwriting exposures – with the catastrophe risk element shown separately where relevant – as well as for distribution costs and expenses;
- Analysis of actual experience against expected experience to support the appropriateness of assumptions; and
- Extrapolation of historical trends to help with the understanding of likely future behaviour of risk drivers and the general insurance risk profile.

At a business unit level, exposures are also monitored in terms of best estimate liabilities, total sum insured and estimated maximum loss (EML). EML is an estimation of the maximum loss which could reasonably be sustained, as a result of a single incident considered to be within the realms of probability taking into account all factors likely to increase or lessen the extent of the loss, but excluding such coincidences and catastrophes which may be possible but remain unlikely.

The general insurance risk Group's undiversified SCR at 31 December 2021 is disclosed in section E.2.2.

The table below shows the key non-life underwriting risks expressed as a proportion of Group undiversified SCR.

Non-life underwriting risks	% of Group undiversified SCR 2021	2020
Reserve risk	**2 %**	2 %
Non-life catastrophe risk	**2 %**	2 %
Premium risk	**3 %**	3 %
Total non-life underwriting risks	**7 %**	7 %

Changes to risk profile in the reporting period

During the year, our exposures from COVID-19 were driven by our Business Interruption policies and Travel Insurance. These exposures, together with mitigants, are as follows:

Business Interruption: For the significant majority of the Group's UK General Insurance commercial policies, where policy wordings are determined by the Company, cover is based on a specified list of diseases. These policies exclude business interruption due to new and emerging diseases, like COVID-19. Business interruption losses stemming from the COVID-19 outbreak are therefore not covered under the significant majority of policies. The FCA test case sought to provide legal clarity in terms of the events and the cover provided by a variety of policy wordings, including broker determined policy wordings where we are the lead or follow insurer. Following the judgement received on 15 September 2020 and the subsequent Supreme Court appeal on 15 January 2021, the legal uncertainty in the UK around gross losses has been significantly reduced. In order to provide clarity to policyholders and mitigate exposure to future events of a similar nature, exclusions were added to relevant policy wordings at renewal in our UK, Canadian and Irish businesses. In Canada, we are party to a number of litigation proceedings, including class actions that challenge coverage under our commercial property policies; however, we believe we have a strong argument that there is no pandemic coverage under these policies. In Ireland, the vast majority of commercial insurance products do not respond to business interruption losses arising from the COVID-19 pandemic. The Group purchases reinsurance protection on its property portfolio that includes coverage for business interruption and is collecting or seeking reinsurance recoveries of business interruption losses that are covered by reinsurance.

Travel Insurance: We are potentially exposed to claims due to travel cancellation, disruption and sickness where this is insured by the Group, primarily in the UK. We are only exposed to losses after recoveries have been made from travel providers (e.g. tour operators or airlines) and agents. Travel disruption is not part of our Aviva UK Direct cover but is included as standard in the majority of the added value accounts with our banking partners. COVID-19 wording has been clarified to eliminate ambiguity, pricing adjusted to ensure risk is appropriately priced and further reinsurance cover has been purchased. These costs are offset by reduced claims frequency as a result of the current low levels of international travel, and are also partially mitigated through profit commission and future pricing agreements with distribution partners.

Other: There have also been impacts in other product lines as a result of reduced economic activity, for example there was a reduction in claims frequency and a change in the severity of claims on motor insurance as a result of changes in customer behaviour in response to government restrictions, although claims frequency has increased during 2021 as restrictions have eased. The disruption to global supply chains as a result of COVID-19 has also led to upwards pressure on claims severity. Private health insurance claims have also continued to be lower than expected as a result of the disruption caused by the COVID-19 pandemic, and in the UK we provided a fair value pledge to policyholders to recognise the ongoing uncertainty around the ability to access treatment.

The sensitivity of the Group's Solvency II cover ratio to changes in general insurance gross loss ratios is provided in section C.7.1 .

C.1.2.2 Risk mitigation

Reinsurance is purchased to mitigate general insurance risk and ensure exposures remain within appetite. The Group purchases external reinsurance mainly on an excess of loss basis, although there are some quota share and facultative reinsurance purchased in selective circumstances. The Group's treaty programmes are designed to allow business units to trade to the full extent of their underwriting appetite.

Significant reinsurance purchases are reviewed annually at both business unit and Group level to confirm that the levels of protection being bought reflect any developments in exposure and the risk appetite of the Group. The basis of these purchases is underpinned by analysis of Solvency II capital, earnings and capital volatility, cash flow and liquidity and the Group's franchise value. The Group hold reinsurance protections on its property portfolio that includes coverage for business interruption.

Detailed actuarial analysis is used to calculate the Group's extreme risk profile and then design cost and capital efficient reinsurance programmes to mitigate these risks to within agreed appetites. For businesses writing general insurance we analyse the natural catastrophe exposure using our own internal probabilistic catastrophe model which is benchmarked against external catastrophe models widely used by the rest of the (re)insurance industry.

The Group cedes much of its worldwide catastrophe risk to third-party reinsurers through excess of loss and aggregate excess of loss structures. The Group purchases a Group-wide catastrophe reinsurance programme to protect against catastrophe losses up to a 1 in 250 year return period. The total Group potential retained loss from its most concentrated catastrophe exposure peril (Northern Europe Windstorm) is approximately £150 million on a per occurrence basis and £175 million on an annual aggregate basis. The Group purchases a number of GI business line specific reinsurance programmes with various retention levels to protect both capital and earnings, and has reinsured 100% of its latent exposures to its historic UK employers' liability and public liability business written prior to 31 December 2000.

Monitoring the effectiveness of risk mitigation techniques
The management of general insurance underwriting risk is overseen at business unit level by legal entity Board Risk Committees and specific business unit senior management committees. In the case of UK general insurance, the Group's largest general insurance business unit, in addition to the Asset Liability Committee (ALCO), the management of general insurance underwriting risk is overseen by specific management committees, namely the Insurance Committee and the Reserve and Projections Committee.

C.1.2.3 Risk concentration
The Group's policy on general insurance risks is to avoid concentrations of risk exposure through its scale, geographical distribution of underwriting risks, diversity of product lines and diversity of distribution channels. Individual risks and groups of risks are only accepted if, after diversification and reinsurance, the residual risk is within appetite.

Controls are in place to ensure accumulations of risk can be evaluated properly. Counterparty concentration as a result of general insurance activities and reinsurance are considered in section C.3.3.

The Group's single most concentrated catastrophe peril gross exposure is not sufficiently material that, if it occurred, it would result in the Group being outside risk appetite.

C.2 Market risk
C.2.1 Exposure
Description
Market risk is the risk of adverse financial impact resulting, directly or indirectly from fluctuations in interest rates, inflation, foreign currency exchange rates, equity and property prices. Market risk arises in business units due to fluctuations in both the value of liabilities and the value of investments held. At the Group level, it also arises in relation to the overall portfolio of international business units and in the value of investment assets owned directly by the shareholders. We actively seek some market risks as part of our investment and product strategy. However, we have limited appetite for interest rate risk as we do not believe it is adequately rewarded.

Principal market risk types are described below:

- **Equity risk**: The Group is subject to direct equity risk arising from changes in the market values of its equity securities portfolio. Our most material indirect equity risk exposures are to policyholder unit-linked funds, which are exposed to a fall in the value of the fund thereby reducing the fees we earn on those funds, and participating contracts, which are exposed to a fall in the value of the funds thereby increasing our costs for policyholder guarantees. We also have some equity exposures in shareholder funds through equities held to match inflation-linked liabilities.
- **Interest rate risk:** Interest rate risk arises primarily from the Group's investments in long-term debt and fixed income securities and their movement relative to the value placed on the insurance liabilities. A number of policyholder product features have an influence in the Group's interest rate risk. The major features include guaranteed surrender values, guaranteed annuity options, and minimum surrender and maturity values. Some of the Group's products, principally participating contracts, expose us to the risk that a change in the interest spread (the difference between the amounts that we are required to pay under the contracts and the investment income we are able to earn on the investments supporting our obligations under those contracts) will adversely impact profits. The Group is primarily exposed to this risk in the UK.
  Other product lines of the Group, such as protection, are not significantly sensitive to interest rate or market movements. For unit-linked business, the shareholder margins emerging are typically a mixture of annual management fees and risk/expense charges. Risk and expense margins will be largely unaffected by low interest rates. Annual management fees may increase in the short-term as the move towards low interest rates increases the value of unit funds. However, in the medium term, unit funds will grow at a lower rate which will reduce fund charges. For the UK annuities business interest rate exposure is mitigated by closely matching the duration of liabilities with assets of the same duration.
- **Property price risk**: The Group is subject to property price risk directly due to holdings of investment properties in a variety of locations worldwide and indirectly through investments in commercial and residential mortgages and mortgage backed securities.
- **Inflation risk**: Inflation risk arises primarily from the Group's exposure to general insurance claims inflation, to inflation linked benefits within the defined benefit staff pension schemes and within the UK annuity portfolio and to expense inflation. Increases in long-term inflation expectations are closely linked to long-term interest rates and so are frequently considered with interest rate risk.
- **Foreign currency exchange risk**: The Group has minimal exposure to currency risk from financial instruments held by business units in currencies other than their functional currencies, as nearly all such holdings are backing either unit-linked or with-profits contract liabilities or are hedged. The Group operates internationally and as a result is exposed to foreign currency exchange risk arising from fluctuations in exchange rates of various currencies. Approximately 21% of the Group's gross premium income from continuing operations arises in currencies other than sterling. The Group's net assets are denominated in a variety of currencies, of which the largest are sterling, euro and Canadian dollars.
- **Derivatives risk**: Derivatives are used by a number of the Group's business units. Derivatives are primarily used for efficient investment management, risk hedging purposes, or to structure specific retail savings products.
- **Correlation risk**: The Group recognises that lapse behaviour and potential increases in consumer expectations are sensitive to and interdependent with market movements and interest rates. These interdependencies are taken into consideration in the Group internal model and in scenario analysis.

Exposure measurement
At a Group level the Solvency II SCR is used as the principal basis to measure and assess our exposure to market risks. Risk appetites are set to limit exposure to interest rate risk and foreign exchange rate risk based on the Solvency II cover ratio. In addition at business unit level and Group for each risk category the following key parameters are used for risk assessment:

- Shifts in key interest rate/currency-related parameters relevant to market risk profile, e.g. term structure shifts, interest rate volatility, drift and correlation, slope and convexity;
- Changes in price level of individual assets or specific asset classes, e.g. equity, commodity, property;
- Changes in price volatility of individual assets or specific asset classes;
- Changes in realised and/or implied inflation; and
- Portfolio sensitivities.

These parameters are monitored regularly with significant changes included in management information reported to Group and business unit ALCOs which inform the development of scenarios for stress and scenario testing. Specifically, the UK business is exposed to the level of house price inflation and assumptions made about the future growth rate of house price inflation on its equity release mortgage portfolio. The level of house price inflation is monitored and the impact of exposure to adverse movements is regularly reviewed.

See section E.2.2 for market risk Group's undiversified SCR at 31 December 2021, and inclusive of the SCR related to credit spread risk from corporate and government bond holdings and other debt securities.

The table below shows the key market risks expressed as a proportion of Group undiversified.

Market risks	% of Group undiversified SCR 2021	2020
Equity risk	**12 %**	10 %
Interest rate risk	**9 %**	9 %
Property price risk	**6 %**	6 %
Other market risks	**5 %**	6 %
Total market risks	**32 %**	31 %

Changes to risk profile in the reporting period
The Group's most significant exposures to market risk are interest rate risk, equity risk and property price risk. The Group's exposure to market risk against other risk types increased in 2021 driven by an increase in market interest rates, which decreased the Group's exposure to longevity risk, and increases in equity risk driven by assumption changes in Singapore.

The sensitivity of the Group's Solvency II cover ratio to changes in market risk indicators is provided in C.7.1 .

C.2.2. Risk mitigation
The Group's principal risk mitigation actions are set out below by principal market risk type:

- **Equity risk**: We continue to limit our direct equity exposure in line with our risk preferences. At a business unit level, investment limits and local investment regulations require that business units hold diversified portfolios of assets thereby reducing exposure to individual equities. The Group does not have material holdings of unquoted equity securities.
  Equity risk is also managed using a variety of derivative instruments, including futures and options. Business units actively model the performance of equities through the use of risk models, in particular to understand the impact of equity performance on guarantees, options and bonus rates. An equity hedging strategy remains in place to help control the Group's overall direct and indirect exposure to equities.
- **Property price risk**: Investment in property is managed at business unit level, and is subject to local regulations on investments, liquidity requirements and the expectations of policyholders. As at 31 December 2021, no material derivative contracts had been entered into to mitigate the effects of changes in property prices. Exposure to property risk on equity release mortgages from sustained underperformance in the House Price Index (HPI) is mitigated by capping loan to value on origination at low levels and regularly monitoring the performance of the mortgage portfolio.
- **Interest rate risk**: The Group typically manages interest rate risk by investing in fixed interest securities which closely match the interest rate sensitivity of the liabilities where such investments are available. In particular, a key objective is to at least match the duration of our annuity liabilities with assets of the same duration, and in some cases where appropriate cash flow matching has been used. These assets include corporate bonds, residential mortgages and commercial mortgages. Should they default before maturity, it is assumed that the Group can reinvest in assets of a similar risk and return profile, which is subject to market conditions. Interest rate risk is also managed in some business units using a variety of derivative instruments, including futures, options, swaps, swaptions, caps and floors.
  The UK participating business includes contracts with features such as guaranteed surrender values, guaranteed annuity options, and minimum surrender and maturity values. These liabilities are managed through duration matching of assets and liabilities and the use of derivatives, including swaptions. As a result, the Group's exposure to sustained low interest rates on this portfolio is not material.
- **Inflation risk**: The Group typically manages inflation risk through its investment strategy and, in particular, by investing in inflation-linked securities and through a variety of derivative instruments, including inflation-linked swaps.
- **Currency risk**: The Group does not hedge foreign currency revenues as these are substantially retained locally to support the growth of the Group's business and meet local regulatory and market requirements. However, the Group does use foreign currency forward

contracts to hedge planned dividends from its subsidiaries. Business units aim to maintain sufficient assets in local currency to meet local currency liabilities, however movements may impact the value of the Group's consolidated shareholders' equity which is expressed in sterling. This aspect of foreign exchange risk is monitored and managed centrally, against pre-determined limits. These exposures are managed by aligning the deployment of regulatory capital by currency with the Group's regulatory capital requirements by currency. Currency borrowings and derivatives are used to manage exposures within the limits that have been set.
- **Derivatives risk**: The Group applies strict requirements to the administration and valuation processes it uses, and has a control framework that is consistent with market and industry practice for the activity that is undertaken.

Monitoring the effectiveness of risk mitigation techniques
The Group and its business units are required, under the financial risk mitigation business standard, to assess and document the effectiveness of arrangements that are in place to mitigate market and credit risks (financial risks). This assessment is initially undertaken prior to deciding whether or not to enter into an arrangement, and considers its impact on key metrics including:

- Measures of risk, primarily Solvency II capital based (internal model or standard formula basis, as applicable to the business unit); and
- Financial measures, including contractual cash flows, operating capital generation and operating profit and expenses.

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

C.2.3 Risk concentration
The Group 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 to ensure the Group and individual business units and legal entities are not individually exposed to significant risk concentrations. Further information on how the Group manages, monitors and limits investment exposures is included in section C.3.3.

C.3 Credit risk
C.3.1 Exposure
Description
Credit risk is the risk of financial loss as a result of the default or failure of third parties to meet their payment obligations to Aviva, or variations in market values as a result of changes in expectations related to these risks. Credit risk is taken so that we can provide the returns required to satisfy policyholder liabilities and to generate returns for our shareholders. In general we prefer to take credit risk over equity and property risks, due to the better expected risk adjusted return, our credit risk analysis capability and the structural investment advantages conferred to insurers with long-dated, relatively illiquid liabilities.

Our credit risks arise principally through the following exposures:

- **Fixed maturity securities**: Includes investments in sovereign and corporate bonds, structured notes and collateralised securities.
- **Loans**: Principally comprised of mortgage loans, healthcare, infrastructure and Private Finance Initiative loans, policy loans, and loans and advances to banks primarily relating to loans of cash collateral received in stock lending transactions.
- **Reinsurance recoverables**: Where the Group has reinsurance arrangements in place, credit risk arises in relation to the reinsurance recoverables held.
- **Other investments**: Credit risk arises in relation to other assets, including bank deposits, receivables and derivative counterparties.

Exposure measurement
The principal basis used to measure and assess our exposure to credit risk is the Solvency II SCR. In addition, the following factors are used when measuring and assessing credit risk exposure:

- Maximum exposure: The Group's maximum exposure to credit risk of financial assets and reinsurance recoverables, without taking collateral or hedges into account, is represented by the carrying value of the financial assets and reinsurance recoverables recognised in the Group's Solvency II balance sheet. These comprise debt securities, reinsurance recoverables, derivative assets, loans and receivables.
- Credit ratings: At Group level, credit ratings (external, internal and market adjusted ratings) are used as indicators of credit risk to help determine risk management actions, investment decisions and asset allocation, as well as the credit risk capital requirement.
- Loan specific factors: The loan exposures for our UK Life business are calculated on a discounted cash flow basis, and include a risk adjustment through the use of credit risk adjusted value (CRAV). In addition, the Group and its business units consider a range of factors in assessing credit risk arising on mortgage portfolios, including loan to value ratios, interest and debt service cover, and the diversity and quality of the tenant base metrics.

The majority of credit risk relates to that arising from corporate and government bond holdings and other debt securities, which is reported within the market risk SCR.

As at 31 December 2021, credit risk makes up 18% (2020: 20%) of the Group's undiversified SCR.

Changes to risk profile in the reporting period
Credit risk, including spread risk, measured by undiversified SCR fell in 2021. This fall was due to divestments and higher interest rates, which reduce SCR as a result of the higher impact of discounting. There was also a reduction in our UK business due to run-off corporate credit risk on existing business.

As economies recover, we have seen credit upgrades outpacing downgrades, a fall in default rates and credit outlooks stabilising to pre-pandemic limits. We continue to monitor the UK Life commercial mortgage portfolio, actions include debt restructuring, and any events that could be indicative of systemic faults in the global market (e.g. Chinese property sector and municipal debt). The divestments in the year have resulted in shift to a higher credit quality distribution within the portfolio.

The sensitivity of the Group's Solvency II cover ratio to changes in credit risk indicators is provided in section C.7.1 Sensitivity Analysis.

C.3.2 Risk mitigation
The Group's principal methods of mitigating credit risk exposure are the purchase of derivatives for hedging purposes and the holding of collateral and other forms of securities.

Credit risk hedging
The Group holds a series of macro credit hedges to reduce the overall credit risk exposure. The Group's portfolio of macro credit hedges uses credit tranches to reduce the Group's credit risk in a cost effective manner. While the current intention is to hold these to maturity, the tranches used are chosen to maximise the liquidity and are based on standardised credit indices and standardised tranche attachment and detachment points. Outside the Group's macro credit hedging programme, the credit derivatives used in the Group's major programmes are entirely single name credit default swaps (CDS). These are vanilla products with multiple market makers and standardised terms.

Collateral and other security
The Group holds collateral, provided by a number of counterparties, to mitigate specific credit risks. Where appropriate, the Group also mitigates the credit risk of its derivative counterparties by collateralising derivative transactions. In addition, the credit risk associated with the Group's securities financing operations is mitigated by over-collateralisation. The adequacy of this collateral is assessed against current market prices on a daily basis. Borrower credit default swap prices are also monitored daily against pre-defined trigger points to reduce or stop lending activity.

In respect of the Group's loan portfolio, credit risk is mitigated by holding collateral as follows:

- Policy loans are generally collateralised by a lien or charge over the underlying policy;
- Loans and advances to banks, which primarily relate to loans of cash collateral received in stock lending transactions. These loans are fully collateralised by other securities;
- Healthcare, infrastructure and Private Finance Initiative loans secured against healthcare, education, social housing and emergency services related premises; and
- Mortgage loans collateralised by property assets.

C.3.3 Risk concentration
The long-term and general insurance businesses are generally not individually exposed to significant concentrations of credit risk due to the regulations applicable in most markets and the Group credit policy and limits framework, which limit investments in individual assets and asset classes. Credit concentrations are monitored as part of the regular credit monitoring process and are reported to Group ALCO and Board Risk Committee (BRC).

The Group's largest credit exposures are to sovereign states. At 31 December 2021, the Group's largest sovereign exposure (including assets backing unit-linked contracts and non-controlling interests) was to the UK Government amounting to £32.5 billion (2020: £30.2 billion), followed by the Canadian government £3.8 billion (2020: £3.6 billion) and the United States government £3.7 billion (2020: £3.2 billion).

With the exception of government bonds, the largest aggregated counterparty exposure within shareholder assets (i.e. excluding potential exposures arising from reinsurance of unit-linked funds) at 31 December 2021 is to the Swiss Reinsurance Company Limited (including subsidiaries), amounting to £2.7 billion (2020: £2.6 billion) on a Solvency II basis.

C.4 Liquidity risk

C.4.1 Exposure

Description

Liquidity risk is the risk of not being able to make payments as they become due because there are insufficient assets in cash form. The relatively illiquid nature of insurance liabilities is a potential source of additional investment return by allowing us to invest in higher yielding, but less liquid assets such as commercial mortgages and infrastructure loans.

Sources of liquidity risk for a business unit are those activities or external factors that could alter the liquidity needs and liquidity resources in a stress scenario. Business units are responsible for identifying where liquidity risk is created and the factors that may increase the liquidity risks they face at the business unit, legal entity and/or specific funds level when setting risk appetite.

At the Group, in particular in respect of the Group's principal holding companies (Aviva plc and Aviva Group Holdings Limited) the main sources of central liquidity risk include reduced remittances from subsidiaries, higher capital requirements of businesses and the refinancing of external debt issued by Aviva plc and Friends Life Holdings plc.

Exposure measurement

Liquidity risk appetite is expressed and measured through both absolute level targets and bespoke liquidity coverage ratios which measure the extent to which liquid assets held centrally or at the business unit level and stressed inflows are sufficient to meet liquidity requirements over a specified time horizon.

At the Group, central liquidity requirements include external dividends, debt interest payments, centre operating costs and any planned internal and external de-leveraging, taking into account a stressed value of central assets and stressed value of central receipts, principally dividends from business units.

At a business unit level, businesses are required to establish specific short and long-term liquidity risk appetites for legal entities and ring fenced funds.

Changes to risk profile in the reporting period

The liquidity risk profile of the Group and business units varies according to the nature of each entity. The liquidity risk measured against both absolute level targets and liquidity coverage ratios remained within appetite over the year.

Sensitivity analysis

Stress and scenario testing, including reverse stress tests, is undertaken by the Group for the purpose of recovery planning and to test the resilience of the business plan. This testing specifically considers impacts on the Group's central liquidity position. See section C.7 for further details of this testing.

C.4.2 Risk mitigation

The Group centre mitigates liquidity risks by:

- Maintaining significant undrawn committed borrowing facilities (£1.70 billion) *(*2020: £1.65 billion) at the Group centre from a range of leading international banks, some of which is allocated to cover commercial paper in issuance; and
- Use of the Group's commercial paper programme providing for issuance of up to £2.0 billion (2020: £2.0 billion), of which £1.9 billion (2020: £1.8 billion) is unused and available for use.

Business units mitigate liquidity risk through asset liability matching which optimises asset portfolio maturity structures to ensure cash flows are sufficient to meet liabilities when they fall due. Business units have contingency funding plans that enable them to draw on liquidity held at the Group centre. To pre-empt the need to initiate the contingent funding plan, the business units set liquidity buffers and triggers to enable action to be taken before target levels are breached.

C.4.3 Risk concentration

The diversity of sources of liquidity available to the Group averts concentration of liquidity risk. The Group's committed borrowing facilities are with 11 different leading UK, US and European banks.

C.4.4 Additional information on liquidity risk — EPIFP (Expected Profit included in Future Premiums)

EPIFP are profits arising from the inclusion in technical provisions of premiums on existing business that will be received in the future, but that have not yet been received. EPIFP is presented in QRT S.23.01.22 'Own Funds' within section F.2.

Excluding the premium is likely to have an impact on the benefit to be paid. Relevant benefit and expense cash flows are therefore assumed to be on a paid-up or lapse basis. Where 'unearned' commission could be clawed back on a paid-up basis, this is also allowed for. However, any penalties on the contract associated with the policyholder making the policy paid up are not taken into account.

When calculating the EPIFP for a contract, at a Group level it is based on the net of reinsurance technical provision (excluding risk margin) and its contract boundary is taken into account for both life and non-life operations. In non-life operations, future premiums also include, as a minimum, premiums from legally obliged business, premiums due from policies with instalment premium payment terms and policyholder debtor balances (for example, overdue premiums).

The amount of Group EPIFP was £2,849 million (2020: £4,338 million), of which £2,730 million (2020: £4,138 million) was for life business and £119 million (2020: £200 million) for non-life business.

C.5 Operational risk

C.5.1 Exposure

Description

Operational risk is the risk of direct or indirect loss, arising from inadequate or failed internal processes, people and systems, or external events including changes in the regulatory environment. We have limited appetite for operational risk and aim to reduce these risks as far as is commercially sensible.

As part of the Group's Operational Risk and Control Management Framework the Risk and Control Self-Assessment (RCSA) process is used to identify operational risks. The process involves the mapping of identified operational risks to operational processes, the identification of mitigating controls and an assessment of the effectiveness of these controls. As part of the Group's Risk Taxonomy, the Group maintains a Common Operational Risk Register (CORR) to provide a consistent basis for assessing risk and reporting risk and control information.

Exposure measurement

Operational risks are initially assessed through the RCSA process. Following an assessment of the design adequacy and operating effectiveness of the controls implemented, a residual risk impact and probability assessment is performed. Residual impact is quantitatively assessed on the basis of financial loss and misstatement and qualitatively for reputational and conduct considerations. The nature of operational risks (e.g. interruption of service to customers or loss of customer data as a result of an IT security breach) means that the reputational and conduct impacts are often more significant than the financial impact. The residual impact is compared to pre-defined operational risk tolerances to identify where management action is required. Notwithstanding this, the Group will also seek to reduce residual operational risk exposures for those operational risks within tolerance where it is cost effective to do so.

To the extent that operational risks cannot be fully mitigated, the Group holds Solvency II capital to manage these risks calculated on the basis of the Solvency II SCR. For the purposes of calculating the Solvency II SCR for operational risk, a number of Group and business unit specific scenarios were modelled. The operational risk Group SCR before diversification and tax at 31 December 2021 is disclosed in section E.2.2.

Given the significance of reputational and conduct risk impacts referred to above, the Group in addition to an operational risk appetite also maintains risk appetites for conduct and reputational risk.

The Group's conduct risk exposures are measured against appetite by assessing the individual conduct exposure pillars (Customer, Market and Regulatory conduct), as defined by the Group's Conduct Risk Policy and aggregating these into a Group-wide rating.

In order to assess the Group's reputational risk exposure against appetite we regularly analyse and review indicators of stakeholder perception of our reputation, threats to that reputation and any potential actions that we could take to maximise opportunities to build (or minimise threats to) our reputation. The stakeholders and indicators we assess are:

- Investors: We track buy/hold/sell rating recommendations of equity analysts who track our shares;
- Rating agencies: We track the credit ratings assigned by the credit rating agencies;
- People: We undertake a number of surveys of employee sentiments during the year, including an annual survey of all our staff;
- Customer: We track customer advocacy indicators;
- Regulators: We track qualitative indicators of the strength of our relationship with regulators; and,
- Opinion formers: We track qualitative indicators of the strength of our reputation in the media and with government and politicians (at a local, national and European Union level).

Changes to risk profile in the reporting period

As at 31 December 2021, operational risk remained stable at 7% (2020: 6%) of the Group's undiversified SCR.

Since the onset of the COVID-19 pandemic the Group has remained operationally resilient, with key activities such as cash payments and transaction processing being maintained, IT systems remaining operational, and employees including frontline customer facing staff being supported to ensure that we are there to support our customers when they need us most. Aviva has continued to strengthen its processes and controls to ensure that operational risks relating to continued extensive working from home remain at an acceptable level. While there continues to be high profile cyber security incidents for corporates in the UK and globally, Aviva has seen no material increase in the volume of cyber incidents/attacks as a result of the pandemic but has seen external threat actors exploit the global situation through COVID-19 inspired phishing emails, texts and phone calls. In response to this Aviva has put in place a programme of communications to ensure Aviva employees are aware of such scams, published safe homeworking guides and run online training for its employees and their families

Aviva completed the sale of a number of our businesses as part of the rationalisation of the Group. We agreed an approach that ensured all operational risks were managed effectively up until the point of completion and continue to track all transitional service agreements. We also carefully monitored and managed the risks associated with this divestment programme itself. These risks included:

- Execution risk including failure to achieve necessary regulatory approvals, other legal obligations and clean and appropriate separation of the business in the required time;
- Data leakage or loss as a result of ongoing access to Aviva information by divested entities post-sale, or the security of email communications with divested markets; and
- Impact on our ongoing operational risk profile including disruption to customer services, external reporting requirements, loss of key staff/expertise.

C.5.2 Risk mitigation
Operational controls are used to mitigate operational risks, while the RCSA process is used to assess the effectiveness of these controls. In addition, the Group's 'three lines of defence model' (see section B.1.1) all have an important role to play in monitoring the effectiveness of the controls that are in place in respect of operational risks.

C.5.3 Concentration risk
Concentrations of operational risk arise when there is dependency on a single supplier (internal to the Group as well as external) to provide a product or service supporting a business critical function, in particular when provided across a number of territories. Business units are required to identify such business critical outsourced functions (internal and external) and for each have exit and termination plans and business continuity and disaster recovery plans in the event of supplier failure. These plans are required to be reviewed at least annually.

In our larger markets, such as the UK, our operations are geographically well spread across a number of office locations, helping to ensure continuity of service if a catastrophic event results in an office being out of action. While many of our smaller markets operate out of only a few offices, all have business continuity plans for critical functions which should ensure continuity of service to our customers without significant interruption.

Most of our products are sold under the 'Aviva' brand. The Group is therefore particularly vulnerable to any operational failures that could adversely impact public perception of the 'Aviva' brand.

C.6 Asset Management risk
In addition to the risks set out in sections C.1 to C.5 of this report, the other material risk type to which the Group is exposed is asset management risk.

C.6.1 Exposure
Description
Aviva is directly exposed to the risks associated with operating an asset management business through its ownership of Aviva Investors. In addition to operational, credit, market and liquidity risk, the underlying risk profile of our asset management business is derived from investment performance, specialist investment professionals and leadership, product development capabilities, fund liquidity, margin, client retention, regulatory developments, fiduciary and contractual responsibilities.

Measurement
Our UK and material overseas asset management entities apply the Internal Capital Adequacy Assessment Process (ICAAP) to identify, measure and monitor their risk exposures. The process is subject to the different sectoral requirements of the asset management industry, pursuant to IFPRU 2.3 Supervisory review and evaluation process: Internal Capital Adequacy Standards. The basis for calculating the capital resource requirement for the ICAAP is similar to Solvency II SCR, and is included on this basis in the Group's total SCR in the SCR for non-insurance entities (see section E.2.2), of which the Group's asset management business is the principal contributor. The capital resource requirement for the ICAAP REC is based on year-end balance sheet exposures and exposure to operational risk (including asset management specific risks) for a 1 in 200 year stress scenario.

Changes to risk profile in the reporting period
There has been no significant change to the profile of asset management risks as measured under ICAAP in the reporting period.

C.6.2 Risk mitigation
Investment performance against client and fund objectives and exposure to fund liquidity risk are subject to further independent oversight and challenge by the investment risk team. Succession plans are in place to manage and mitigate against the risk of key staff leaving our asset management business. A global client solutions team is in place to manage and mitigate against the risk of clients redeeming their investments, while all new asset management products are reviewed and approved at each stage of the product development process, supported by a product feasibility study.

The Aviva Investors executive team regularly monitor the asset management risk exposure and develop the business' strategy and plan to manage and mitigate against the risks materialising.

C.6.3 Risk concentration

Particular asset management risks that are prone to concentration risk are client retention risk (e.g. proportion of fees from a single client), people risk (e.g. proportion of revenue dependent on a fund management desk or team), performance risk (e.g. proportion of fees generated by a single fund) and product risk (e.g. proportion of revenue dependent on a single product or source). The Group does not have a material concentration of asset management risk to a single external client or single fund, product or fund manager.

C.7 Any other information

C.7.1 Sensitivity analyses

The Group performs sensitivity analyses alongside stress and scenario testing in order to understand the impact that changes in underlying risk calibrations (and correlations of those risks) could have on the Group's risk profile and Solvency II cover ratio (Group own funds over Group SCR). This section describes the sensitivity analyses performed, and section C.7.2 covers the Group's stress and scenario testing.

The following sensitivity analysis of Solvency II surplus allows for any consequential impact on the asset and liability valuations. All other assumptions remain unchanged for each sensitivity, except where these are directly affected by the revised economic conditions or where a management action that is allowed in the SCR calculation is applicable for that sensitivity. For example, future bonus rates are automatically adjusted to reflect sensitivity changes to future investment returns.

The transitional measure on technical provisions (TMTP) is assumed to be recalculated in all sensitivities where its impact would be material.

The table below shows the absolute change in regulatory cover ratio under each sensitivity, e.g. a 2pp positive impact would result in an increase in the cover ratio from 205% to 207%.

Sensitivities		Impact on surplus 31 December 2021 £bn	Impact on cover ratio 31 December 2021 pp	Impact on surplus 31 December 2020 £bn	Impact on cover ratio 31 December 2020 pp
Changes in economic assumptions	25bps increase in interest rate	**0.2**	**4 pp**	0.3	4 pp
	50bps increase in interest rate	**0.3**	**8 pp**	0.5	7 pp
	100bps increase in interest rate	**0.4**	**15 pp**	0.9	13 pp
	25bps decrease in interest rate	**(0.2)**	**(4)pp**	(0.4)	(4)pp
	50bps decrease in interest rate	**(0.3)**	**(8)pp**	(0.8)	(8)pp
	50bps increase in corporate bond spread[1]	**0.2**	**4 pp**	—	1 pp
	100bps increase in corporate bond spread[1]	**0.4**	**8 pp**	—	2 pp
	50bps decrease in corporate bond spread[1]	**(0.4)**	**(5)pp**	(0.1)	(2)pp
	Credit downgrade on annuity portfolio[2]	**(0.5)**	**(6)pp**	(0.5)	(4)pp
	10% increase in market value of equity	**0.1**	**0 pp**	0.3	1 pp
	25% increase in market value of equity	**0.3**	**0 pp**	0.7	2 pp
	10% decrease in market value of equity	**(0.1)**	**1 pp**	(0.3)	(1)pp
	25% decrease in market value of equity	**(0.3)**	**1 pp**	(0.7)	(2)pp
	20% increase in market value of commercial property	**0.3**	**4 pp**	0.8	6 pp
	20% decrease in market value of commercial property	**(0.5)**	**(6)pp**	(1.1)	(8)pp
	20% increase in market value of residential property	**0.4**	**5 pp**	0.6	4 pp
	20% decrease in market value of residential property	**(0.6)**	**(7)pp**	(0.7)	(5)pp
Changes in non-economic assumptions	10% increase in maintenance and investment expenses	**(0.7)**	**(7)pp**	(1.0)	(7)pp
	10% increase in lapse rates	**(0.3)**	**(2)pp**	(0.3)	(2)pp
	5% increase in mortality/morbidity rates – life assurance	**(0.2)**	**(1)pp**	(0.2)	(1)pp
	5% decrease in mortality rates – annuity business	**(1.4)**	**(14)pp**	(1.6)	(11)pp
	5% increase in gross loss ratios	**(0.2)**	**(2)pp**	(0.3)	(2)pp

1 The corporate bond spread sensitivity is applied such that even though movements vary by rating and duration consistent with the approach in the solvency capital requirement, the weighted average spread movement equals the headline sensitivity. Fundamental spreads remain unchanged.
2 An immediate full letter downgrade on 20% of the annuity portfolio credit assets (e.g. from AAA to AA, from AA to A).

The sensitivity of Solvency II shareholder surplus to assumption changes has generally reduced over the period primarily due to the disposal of France, Italy and Poland. The exception is corporate bond spreads, and in particular the corporate bond spread widening sensitivity, where the beneficial impact reflects that the disposed entities were adversely exposed to corporate bond spreads widening whereas the Group is adversely exposed to corporate bond spreads narrowing.

Limitations of sensitivity analysis

The table above demonstrates the effect of a change in a key assumption while other assumptions remain unchanged. In reality, there is a correlation between the assumptions and other factors. It should also be noted that these sensitivities are non-linear, and larger or smaller impacts should not be interpolated or extrapolated from these results.

The sensitivity analysis does not take into consideration that the Group's assets and liabilities are actively managed. Additionally, the Solvency II position of the Group may vary at the time that any actual market movement occurs. For example, the Group's financial risk management strategy aims to manage the exposure to market fluctuations.

As investment markets move past various trigger levels, management actions could include selling investments, changing investment portfolio allocation, adjusting bonuses credited to policyholders, and taking other protective action.

Other limitations in the above sensitivity analysis include the use of hypothetical market movements to demonstrate potential risk that only represent the Group's view of possible near-term market changes that cannot be predicted with any certainty, and the assumption that all interest rates move in an identical fashion.

C.7.2 Stress and scenario testing

Stress and scenario testing (including reverse stress testing) is used to test the resilience of business plans and to inform decision-making. These tests include reference stresses other than 1 in 200 driven by the Group's risk profile, as well as a range of other scenarios as part of the Group solvency and liquidity management processes, and are used to support management decisions.

The results of stress and scenario testing demonstrate that through usage of key management actions (including expense management, hedging and capital raising) the Group can maintain a sufficient liquidity and surplus of Solvency II own funds over SCR to withstand the severe scenarios and stresses outlined above.

C.7.3 Russia-Ukraine conflict

On 24 February 2022, on-going tensions between Russia and Ukraine developed into full-scale armed conflict between the two countries. Many countries have responded with severe economic sanctions on Russia and Belarus and connected companies and individuals. There is considerable uncertainty over how the conflict might develop, including the possibility of the conflict spreading to neighbouring countries, some of which are members of the North Atlantic Treaty Organisation (NATO).

The conflict has resulted in a significant increase in volatility in equity, credit, currency and commodity markets. In particular, the prices of oil, gas, wheat and other commodities have increased significantly since the conflict began and have heightened inflation expectations, which is likely to adversely impact disposable incomes and economic growth. There remains considerable uncertainty over the monetary policy response of central banks to the crisis, with the possible tightening of monetary policy to counteract inflation tempered by concerns over economic growth.

As a result of the escalation in the conflict on 24 February 2022, the Group's crisis management framework was invoked with the meeting of the Aviva plc Crisis Leadership Team in order to assess the Group's response, provide strategic direction and manage communications.

Capital management

The capital position of the Group is monitored on an ongoing basis and the Group continues to maintain strong solvency levels and expects to continue to meet its solvency capital requirements. The Group's Financial Event Response Plan ('FERP') provides an operational framework that enables senior management to respond quickly, in the event any deterioration in the conflict results in elevated financial market stress. The sensitivity of the Group's capital position to changes in economic assumptions and non-economic assumptions such as expense inflation is disclosed in section C.7.1.

Market & Credit risk

The Group has minimal direct investment exposure to Russia and Ukraine, and no exposure to Belarus. The Group does have indirect shareholder exposure to the conflict via its investments in counterparties with revenue streams in Russia and Ukraine. These are not significant. The Group is taking necessary actions to divest its direct investment and indirect exposure to Russia.

While increasing interest rates and credit spreads as a result of the likely monetary policy response to the inflationary pressures of the conflict will positively impact the Group's solvency position, this may be partially offset or even exceeded by the negative impact of credit downgrades, counterparty defaults, claims and maintenance expenses and lapse rates, if high inflation persists and the economy stagnates or falls.

Life insurance risk

The Group's life insurance risk exposure is not expected to be impacted by the Russia-Ukraine conflict, other than via the adverse impact on policy maintenance expenses from heightened general price inflation, and the resulting squeeze on disposable income adversely impacting lapse rates and new business.

General insurance risk

The Group's general insurance businesses, including specifically its Global Corporate & Specialty business, does not have material underwriting exposure to Russia and the Ukraine. All commercial underwriting lines with exposures above £1 million have been reviewed and all have clear war exclusions. While heightened claims inflation will weigh adversely on profitability, this can be mitigated via new business pricing actions, albeit dependent on market, competitor and customer behaviour.

Operational risk

The Russia-Ukraine conflict has heightened the risk of cyber security attacks on the Group or its suppliers, in particular via denial of service attacks. Although to date no serious cyber security incidents have been reported, the Group has strengthened its perimeter controls. The Group has engaged with its suppliers to ensure they have put in place all reasonable measures to ensure that services to Aviva remain unaffected.

The Group actively monitors social and other media in order to manage mis/disinformation about the business/our products/colleagues/customers should we be targeted by a hostile actor in the context of the situation in Ukraine or elsewhere, taking corrective media action if necessary.

The Group has in place systems and controls to ensure it does not provide financial services and/or funds to individuals or connected companies subject to sanctions arising from the Russia-Ukraine conflict, and that for any client relationships existing before the imposition of sanctions assets are frozen and policies cancelled.

Section D

Valuation for solvency purposes

In this section

Section D: Valuation for solvency purposes

The 'Valuation for solvency purposes' section of this 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/liability class under Solvency II.

The table below sets out a summarised balance sheet as at 31 December 2021, comparing assets and liabilities as reported in the Group IFRS financial statements column (a) with the Group Solvency II balance sheet column (e). Presentational and reclassification adjustments required to align the Group's IFRS balance sheet to the prescribed format of the SII balance sheet QRT are given in column (b).

Assets and liabilities have been valued according to the requirements of the Solvency II Directive and related guidance. The basis of the Solvency II valuation principle is the amount for which the assets or liabilities could be exchanged between knowledgeable and willing parties in an arm's length transaction. Where the valuation of assets and liabilities is the same under IFRS, a description of the bases, methods and main assumptions can be found in the accounting policies and notes of the 2021 Annual Report and Accounts (accounting policy F 'Fair value measurement' and Note 23 'Fair value methodology').

Where there are differences in scope of consolidation or measurement they are presented in columns (c) and (d) respectively.

1. Balance Sheet – IFRS and Solvency II

As at 31 December 2021	Note from financial statements[1]	IFRS (a) £m	Presentational and reclassification adjustments[2] (b) £m	Consolidation scope adjustments[3] (c) £m	Valuation difference (d) £m	Solvency II (e) £m	SFCR note
Assets							
Goodwill	O & 16	1,741	—	—	(1,741)	—	D.1.1
Other intangible assets	O & 17	408	25	(11)	(422)	—	D.1.1
Acquired value of in-force business	O & 17	1,542	—	—	(1,542)	—	D.1.2
Deferred acquisition costs	X & 29	2,721	—	(91)	(2,630)	—	D.1.2
Deferred tax assets	AC & 49	138	95	(11)	(99)	123	D.3.1
Pension benefit surplus	30	2,769	(15)	—	—	2,754	
Property, plant & equipment held for own use	P & 20	428	(67)	49	101	511	
Property (other than for own use)	Q & 21	7,003	(5,123)	(4)	—	1,876	
Participations[3]	D & 18,19	1,973	27,414	23,655	(135)	52,907	D.1.6
Equities	S,T,U & 27	95,169	(91,862)	31	—	3,338	D.1.6
Bonds	S,T,U & 27	133,251	(59,653)	2,793	—	76,391	D.1.6
Other investments	S,T,U & 27	36,541	(19,281)	(8,935)	—	8,325	D.1.6
Assets held for index-linked and unit-linked contracts		—	159,073	13	—	159,086	D.1.7
Loans and mortgages	V & 24	38,624	(15,910)	(2,197)	(2)	20,515	D.1.3
Reinsurance recoverables	N & 44	15,032	(62)	8	(3,840)	11,138	D.1.4
Cash and cash equivalents	Y & 56(d)	12,485	(10,044)	(406)	—	2,035	D.1.6
Receivables (insurance, reinsurance and intermediaries)	X & 28	3,473	92	4	(2,641)	928	D.1.5
Other assets (inc. deposits to cedants, trade receivables and own shares)[4]	X & 28,31	5,176	(2,396)	(389)	3	2,394	
Assets of operations classified as held for sale	AH & 3(b)	—	—	—	—	—	
Total assets		**358,474**	**(17,714)**	**14,509**	**(12,948)**	**342,321**	
Liabilities							
Technical provisions[5]	L,M & 40,42	294,702	(1,281)	2,110	(14,191)	281,340	D.2.1
Contingent liabilities		—	—	—	—	—	
Provisions other than technical provisions	AA & 48	516	(9)	(13)	(15)	479	
Pension benefit obligations	AB & 48	485	—	—	—	485	
Deferred tax liabilities	AC & 47	1,983	95	30	498	2,606	D.3.1
Derivatives	S,U & 51	5,763	(526)	(457)	—	4,780	
Financial liabilities other than debts owed to credit institutions	S & 50,51	5,485	24	8,465	25	13,999	D.3.2
Insurance and intermediaries payables	51	1,220	1,291	41	(174)	2,378	
Deposits from reinsurers and reinsurance payables	51	340	—	17	(95)	262	
Payables (trade, not insurance)	51	1,713	(1,015)	4,906	—	5,604	D.3.3
Subordinated liabilities	AD & 50	5,432	—	140	449	6,021	D.3.4
Other liabilities (including debts owed to credit institutions)[6]	D,L & 46,47,52	21,381	(16,344)	(730)	(2,219)	2,088	D.3.5
Liabilities of operations classified as held for sale	AH & 3(b)	—	—	—	—	—	
Total liabilities		**339,020**	**(17,765)**	**14,509**	**(15,722)**	**320,042**	
Excess of assets over liabilities		**19,454**	**51**[7]	**—**	**2,774**	**22,279**	

1 For the main bases, methods and assumptions refer to notes as presented in the 2021 Annual Report and Accounts.
2 Certain presentational and reclassification adjustments have been made to align IFRS to Solvency II presentation.
3 See section '2. Method of consolidation' which explains the difference between IFRS and Solvency II bases.
4 Other assets presented in column (a) include prepayments, accrued income, trade receivables, deposits with ceding undertakings, other receivables and current tax assets.
5 This includes insurance and investment contract liabilities as classified in IFRS.
6 Other liabilities presented in column (a) include the net asset value attributable to unitholders, unallocated divisible surplus, accruals, deferred income, other liabilities and current tax liabilities.
7 Own shares held at 31 December 2021 of £51 million have been reclassified from equity in the IFRS balance sheet to 'Other assets' in the Solvency II balance sheet.

2. Method of consolidation

The Solvency II balance sheet has been prepared using the default accounting consolidation based method ('method 1'). This differs to the methods applied under IFRS for the consolidated financial statements.

The table below sets out the key differences between the consolidation approach under Solvency II and IFRS for each type of undertaking defined by the Solvency II Directive and related guidance.

Type of undertaking	Influence	Indication of percentage of ownership	Solvency II Group balance sheet	IFRS balance sheet treatment
Insurance or reinsurance undertaking Insurance holding company or mixed financial holding company	Dominant	50-100%	Full consolidation • Line-by-line 100% consolidation of assets and liabilities valued on a Solvency II basis.	Full consolidation if entity is controlled by Aviva, otherwise equity accounted in a single line in the IFRS balance sheet
Ancillary services undertaking	Jointly managed entity	50%	Proportional consolidation • Line-by-line proportional consolidation (based on share of capital held by the undertaking) of assets and liabilities valued on a Solvency II basis.	Full consolidation if entity is controlled by Aviva, otherwise equity accounted in a single line in the IFRS balance sheet
	Significant	20-50%	Adjusted equity method • Each holding valued on the basis of the share of the excess of assets over liabilities valued on a Solvency II basis • Value represented in 'participations' line of balance sheet	Equity accounted in a single line in the IFRS balance sheet
Other financial sectors (including credit institutions, financial institutions, alternative investment fund managers, UCITS[1] management companies, non-regulated undertakings carrying out financial activities)	All	>20%	Proportional share of own funds according to relevant sectoral rules • Include Aviva share of own funds calculated on the basis of EU sectoral requirements • Value represented in 'participations' line of balance sheet.	Full consolidation if entity is controlled by Aviva, otherwise equity accounted in a single line in the IFRS balance sheet
Other (including collective investment undertakings and non-financial entities)	All	>20%	• Each holding valued at fair value accordance with the valuation hierarchy[2]. • Value represented in 'participations' line of balance sheet	Full consolidation if entity is controlled by Aviva, otherwise equity accounted in a single line in the IFRS balance sheet

1 Undertakings for Collective Investment in Transferable Securities (UCITS).
2 The valuation hierarchy requires assets to be valued by reference to: (1) quoted market prices for the same assets in active markets; (2) quoted market prices in active markets for similar assets with adjustments to reflect differences where quoted market prices for same assets are not available; or (3) alternative valuation methods where (1) and (2) are not available. The Group 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 Group has concluded that markets are not active, alternative methods for valuation are used. Refer to section D.4 for further details on alternative methods for valuation.

The different approaches to consolidation required for IFRS and Solvency II result in material presentation differences in the Group balance sheet. As at 31 December 2021, the consolidation methodology changes that increase the value of Participations by £23,655 million include the following:

- Deconsolidation from the Solvency II balance sheet of insurance, insurance holding and ancillary services undertakings where the Group holding is between 20%-50%, non-financial undertakings and other financial sectors undertakings that are fully consolidated in the Group IFRS balance sheet. In the Solvency II balance sheet, these entities are accounted for under the adjusted equity method and proportional share of own funds according to sectoral rules, gross of intra-group transactions. This has the impact of increasing participations by £24,008 million as follows:
  - Property and financial assets (equities, bonds, other investments and assets held for index-linked and unit-linked contracts) £9,139 million;
  - Loans and mortgages £2,426 million;
  - Other assets and liabilities £(591) million;
  - Financial liabilities other than debts owed to credit institutions £8,185 million; and
  - Payables £4,849 million.
- Proportional consolidation of the jointly managed insurance entities which are equity accounted under IFRS but are required to be consolidated for Aviva's ownership share under Solvency II. This decreases the participation line by £353 million.

A simplified reporting approach has been adopted for a number of small business units within the Group. Under this approach, IFRS net asset values were used in place of Solvency II valuations under the adjusted equity method.

3. Valuation differences

A number of valuation differences exist in respect of the assets and liabilities reported in the Group balance sheet under Solvency II compared to IFRS as at 31 December 2021. The net impact of these differences is an increase in net assets of £2,825 million. This primarily reflects the differences in assumptions and reserving methodology used under Solvency II compared to IFRS.

More detail is included in sections D.1 'Assets', D.2 'Technical provisions' and D.3 'Other liabilities'.

D.1 Assets

Assets have been valued according to the requirements of the Solvency II Directive and related guidance. The basis of the Solvency II valuation principle is the amount for which the assets could be exchanged between knowledgeable and willing parties in an arm's length transaction. There were no changes made to the recognition and valuation bases used or to estimation approaches during the period.

The description of valuation differences between Solvency II and IFRS balance sheets, by material asset class, are provided below:

D.1.1 Goodwill and other intangibles

Under IFRS, goodwill represents the excess of cost over the fair value of the Group's share of net assets acquired. Identifiable intangible assets which are recognised as part of a business combination e.g. distribution agreements and customer lists are initially valued at fair value and subsequently amortised over their economic useful lives. Other intangible assets that are acquired separately are recognised at cost and subsequently amortised over their economic useful lives.

Under Solvency II, goodwill is deemed to be a non-permissible asset and assigned a value of £nil. Other forms of intangible assets that can be sold separately, where it can be demonstrated that there is a value for the same or similar assets in an active market, can be recognised. Other intangible assets are deemed not to meet the Solvency II recognition criteria and are assigned a value of £nil. The de-recognition of 'Goodwill' and 'Other intangibles' reduces the Solvency II net assets by £2,163 million.

D.1.2 Deferred acquisition costs and acquired value of in-force

Deferred acquisition costs (DAC) and acquired value of in-force (AVIF) policies are reported as assets under IFRS reporting. These are set to £nil in the Solvency II balance sheet and the associated cash flows are included in the measurement of Solvency II technical provisions instead. The de-recognition of 'Deferred acquisition costs' and 'Acquired value of in-force business' reduces the Solvency II net assets by £4,172 million.

D.1.3 Loans & mortgages

Under International Accounting Standard (IAS) 39, loans are valued at either amortised cost or fair value.

The majority of loans, amounting to £29,980 million (including mortgages and associated borrowings, equity release loans and healthcare, infrastructure and Private Finance Initiative loans) are presented at fair value, since they are managed as a portfolio on a fair value basis. The fair values of these loans are determined using discounted cash flow models, based on risk-adjusted discount rates which reflect the risks associated with these loans. They are revalued at each period end, with movements in their fair values being taken to the income statement.

The remainder of the loans amounting to £8,644 million under IFRS are carried at amortised cost and, predominantly, include collateral and policyholder loans. These loans are carried at their unpaid principal balances and adjusted for amortisation of premium or discount, non-refundable loan fees and related direct costs. These amounts are deferred and amortised over the life of the loan as an adjustment to loan yield using the effective interest rate method.

Under Solvency II, all loans and mortgages are valued at fair value. There is a valuation difference of £2 million recognised to bring the loans carried at amortised cost to fair value under Solvency II. Discounted cash flow models are used to determine fair value, maximising the use of relevant market observable inputs and assumptions. Refer to section D.4 for more information regarding the use of alternative methods of valuation.

D.1.4 Reinsurance recoverables

The reinsurance recoverables as at 31 December 2021 were £15,032 million on an IFRS basis compared to £11,138 million on a Solvency II basis. The lower valuation under Solvency II is driven by the lower valuation of technical provisions (refer to section D.2.4) and a different allowance for counterparty default risk.

Under Solvency II, reinsurance recoverables are calculated as a probability-weighted average of discounted future cash flows relating to reinsurance contracts, using principles similar to those in section 'D.2 Technical provisions' adjusted for expected losses due to counterparty default. Only reinsurance cash flows that relate to the best estimate liability are included and the default allowances depend on the credit rating of the reinsurance counterparty and the amount of exposure. The reinsurance recoverable is calculated consistently with the boundary of the underlying contract to which the recoveries relate.

There is no business reinsured with either an external or internal reinsurance Special Purpose Vehicle (SPV).

D.1.5 Receivables (insurance, reinsurance and intermediaries)

The difference between IFRS and Solvency II valuation basis, totalling £2,641 million, arises as insurance receivables which are not past due under IFRS are treated as future cash flows and reclassified to technical provisions under Solvency II (refer to section D.2.4.2).

Under Solvency II, the value of receivables is based on the discounted cash flows arising from the receivable adjusted for the risk of default.

D.1.6 Investments

Property

Property completed, held for long-term rental yields and not occupied by the Group is stated at its fair value under IFRS. There is no difference between IFRS and Solvency II valuations. Further information on the valuation of investment properties is included in section D.4.

Participations
A participation is a Solvency II term for a holding, direct or by way of control, of 20% or more of the voting rights of an undertaking. It can therefore be a subsidiary, an associate or a joint venture. The treatment of participations depends on two factors: the level of influence and the type of entity. This will determine how the participation is valued. The table included within this section, '2. Method of consolidation' sets out the basis upon which participations are valued for Solvency II purposes.

Financial investments
All financial investments, primarily consisting of debt securities, equity securities and unit trusts, are measured at fair value for both Solvency II and IFRS purposes. Fair value is obtained from quoted market prices or, if they are not available, by using relevant valuation techniques. Further information on financial investments valued using an alternative method to either a quoted market price or observable active market data is included in section D.4.

The Solvency II valuation of deposits other than cash equivalents is in line with the IFRS treatment.

D.1.7 Assets held for index-linked and unit-linked funds
Assets held to cover index-linked and unit-linked funds are measured at fair value for both Solvency II and IFRS purposes. These assets are predominantly financial investments which are valued as described in section D.1.6.

Assets held to cover index-linked and unit-linked funds are classified within their respective individual categories in the IFRS balance sheet and combined together as a single total in the Solvency II balance sheet. These balances are therefore reclassified from the individual asset lines to this category for Solvency II reporting purposes.

D.1.8 Changes made to recognition and valuation bases and estimations
No changes were made during the reporting period to the bases and estimation approaches used to recognise and value other assets.

D.2 Technical provisions
This section provides the following information on the Solvency II technical provisions:
- Definition of Solvency II technical provisions;
- Methodology and main assumptions used in the valuation of the Solvency II technical provisions;
- Total value of Solvency II technical provisions split by material lines of business;
- Comparison of the valuation of Solvency II technical provisions with IFRS technical provisions; and
- Description of the level of uncertainty in Solvency II technical provisions.

D.2.1 Definition of technical provisions
The value of technical provisions under Solvency II is equal to the sum of a best estimate liability and a risk margin less the transitional measure on technical provisions (for certain legal entities in the UK).

The best estimate liability is defined as the probability-weighted average of the present value of future cash flows on a market-consistent basis, using the relevant risk-free interest rate term structure.

The risk margin (unaudited) is the present value of the cost of capital held each year in respect of non-hedgeable risks. It is an estimate of the amount in addition to the best estimate liability that a third party would expect to receive in order to take over the insurance obligations of an existing entity.

For technical provisions where the value can be replicated using financial instruments associated with those future cash flows, the best estimate liability and risk margin can be calculated using the value of those financial instruments.

The transitional measure on technical provisions (unaudited) applies over a period of 16 years from 1 January 2016 and at 31 December 2021 was utilised by two entities across the Aviva Group. No insurance undertakings within the Group use the transitional measure on risk-free interest rates.

The following general principles apply to the valuation of technical provisions:
- The calculation of technical provisions is performed on a going concern basis. This means that it can be assumed that contracts run to their expected term (only including premiums within the boundary of the contract) and a proportion of expected future costs (such as general overheads) will be covered by future business. Furthermore, currently fully loaded unit costs are usually assumed to continue which implicitly assumes that future business will replace that running off;
- A policy is recognised as an existing contract once a business unit becomes a party to the contract where this is earlier than the date of inception (more common for general insurance business);
- The definition of a 'best estimate' assumption is one that represents the expected outcome from the range of possible outcomes for future experience of that assumption, and is reasonable and realistic with no margins for prudence included;
- The Group best estimate liabilities are determined at the balance sheet date and are calculated as 100% of the best estimate liabilities that are fully consolidated (i.e. where Group has a dominant influence). The proportional share of best estimate liabilities of entities where there is a significant but non-controlling influence are reflected in the participations line of the Group balance sheet. The Group best estimate liabilities are subject to an elimination of the impact of intra-group transactions with certain exceptions as specified in Solvency II, for example relating to the application of the matching adjustment and certain internal service company arrangements;
- The Group risk margin and transitional measures on technical provisions are not subject to an elimination of intra-group effects; and
- Solvency II rules are applied for the calculation of technical provisions for all material insurance and reinsurance undertakings of the Group including those domiciled outside the European Economic Area, in particular our general insurance operation in Canada.

On 7 December 2017 the PRA issued feedback to life insurers expressing a preference for each component of the unit-linked technical provisions liabilities to be disclosed separately on the Solvency II Balance Sheet. Since this change was not mandated the Group has continued to present the total unit-linked technical provisions across the best estimate liabilities and risk margins, in line with previous years. Given the change is presentational only, it has no impact on the measurement of own funds or of technical provisions.

D.2.2 Technical provisions methodology and assumptions

Material changes in the relevant assumptions made in the calculation of technical provisions compared to the previous reporting period can be found in section D.2.2.6.

D.2.2.1 Methodology and non-economic assumptions for life business best estimate liability

(a) Valuation methodology

A gross premium valuation method has been used to calculate the best estimate liability for most types of products, taking into account all future cash flows (including any charges related to embedded options) required to settle the life insurance liabilities. For products such as UK with-profits participation business, more sophisticated methods such as stochastic simulation approaches are used.

Future investment returns are projected in order to determine the value of items such as annual management charges, investment expenses and the value of investment guarantees on with-profits participation business.

Cash flow modelling

A deterministic approach, producing point estimates based on best estimate assumptions, is used for valuing most of the Group's business. The exception is for contracts with embedded options and guarantees, in particular with-profits participation business, where a stochastic approach based on the average of a number of scenarios is used.

The best estimate liability is calculated separately for cash flows in different currencies.

Reinsurance cash flows are modelled as well as cash flows gross of reinsurance. The valuation of those reinsurance cash flows are reported as an asset (see section D.1.4).

Technical provisions for insurance contracts are allowed to be negative where future cash inflows are expected to exceed future cash outflows.

The technical provisions of an insurance (or reinsurance) contract may be lower than the surrender value available to the policyholder of the underlying contract. This means that if the sum of the best estimate liability and the risk margin of a contract is lower than the surrender value of that contract, then the value of insurance liabilities is not increased to the surrender value of the contract.

Policy grouping

Cash flow projections for each policy are used in the calculation of best estimate liabilities for life insurance business with the exception of some with-profits participation business where policies are grouped.

Contract boundaries

The calculation of best estimate liabilities allows for any boundaries of the insurance contract. At the contract boundary date, all future premiums beyond that point are excluded as are any obligations that would have accrued on these additional premiums. However, obligations due to premiums before this date are recognised.

Where a contract can be unbundled into two components and one of the components is subject to a contract boundary then a restriction is applied to this component.

A boundary exists where the insurance undertaking has a unilateral right to: terminate the contract; reject premiums payable under the contract; or amend the premiums or benefits payable under the contract at a future date in such a way that the premiums fully reflect the risks. Any obligations that relate to cover which may be provided after that date do not belong to the contract, unless the undertaking can compel the policyholder to pay the premium for those obligations.

Where a contract has no insurance risk (compensation for uncertain events) or financial guarantees that have a discernible effect on the economics of the contract then a boundary restriction exists.

Where a boundary exists, relevant non-economic assumptions are adjusted to correspond with the restriction, for example, by setting expense assumptions on a paid-up basis where applicable.

UK Life unit-linked policies invested in charge-capped funds (where the charge cap is set at a level to provide a discernible benefit) do not have a contract boundary restriction and all expected future premiums are included in the valuation of technical provisions. As a consequence, auto-enrolment default funds, stakeholder pensions and products with explicit charge caps promised to policyholders (set at a similar level to stakeholder pensions) do not have a contract boundary restriction.

Financial options and guarantees

For options, guarantees and other non-linear cash flows, a stochastic approach to valuation is used unless the risk is immaterial or there is insufficient data to calibrate the model.

For stochastic assessments in relation to interest rates, no floor is applied (i.e. interest rates can be negative).

Future management actions
As part of the realistic assumptions, the actuarial and statistical methods used to calculate technical provisions take account of future management actions. These actions reflect what management would reasonably expect to do in the circumstances of each scenario over the duration of the projection. A wide range of future management actions is incorporated into the technical provisions. The types of future management actions are not restricted provided they meet the objective, realistic and verifiable standards required by Solvency II.

Future management actions typically relate to:
- Changes in asset allocation;
- Changes in bonus rates; and
- Changes in product or expense charges.

The impact of any assumed management actions on other assumptions is taken into account within a certain valuation scenario. In particular, the effects of management actions on policyholder behaviour or on the related expenses are taken into account. Future management actions allow for relevant legal or regulatory constraints and, for a given scenario and where material, reflect the balance between the degree of competitiveness sought and the risk of dynamic lapses.

Each business unit produces, at least annually, a future management action plan, which is updated and signed off by the Board or delegated sub-committee. This action plan covers the identification of actions that are relevant to the valuation of technical provisions, the specific circumstances in which the actions would or would not be able to be carried out and a description of how the actions have been reflected in the calculation of the best estimates.

Future policyholder behaviours
The cash flow projection allows for the probabilities that policyholders exercise certain options, for example to surrender a policy or to take up a guaranteed annuity rate by means of assumptions discussed in the next section. Certain behaviours are assumed to vary with market conditions, for example the propensity of some types of with-profits policyholders in UK Life to surrender their policies.

Ring fenced funds (RFF)
The treatment of cash flows between RFF and other funds is also taken into account. In the UK, where there is a charging arrangement between a ring fenced (with-profits) fund and a non-profit fund, the technical provisions in the with-profits fund are on a fees basis and a technical provision in relation to the excess of fees over expenses (a negative liability) is held outside the RFF in the non-profit fund.

The technical provisions take into account all payments to policyholders (and beneficiaries) including future discretionary bonuses, which are expected to be made, whether or not those payments are contractually guaranteed.

Future cash flows are split into guaranteed and discretionary benefits because the loss absorbing capacity of technical provisions is limited to the technical provisions relating to future discretionary benefits.

In line with Solvency II requirements, discretionary benefits (and hence technical provisions), exclude payments representing surplus funds where explicitly defined in national law (see section E.1.4). For Aviva, this is applicable for UK and Ireland with-profits funds and in line with guidance received from the PRA, only future benefits arising from enhancements which are regarded as permanent have been assumed in the calculation of technical provisions.

(b) Valuation components and material non-economic assumptions

Cash flows in scope

For life insurance obligations, all cash flows (including any charges related to embedded options) required to settle the insurance liabilities over their lifetime are taken into account. The table below summarises the main cash flows that are modelled (gross technical provisions and reinsurance recoverables):

Gross cash inflows	Gross cash outflows
Future premiums (gross of commissions and policyholder tax). Annual management (and other) charges in unit-linked business.	Benefits including: Claims payments, Maturity benefits, Death and critical illness benefits, Disability benefits, Surrender benefits, Annuity payments, Profit sharing bonuses.
	Expenses including administrative expenses, investment management expenses, claims management expenses (direct and indirect), acquisition expenses including commissions which are expected to be incurred in the future.
	Other items which are charged to policyholders (or required to settle the obligations): Taxation.
Reinsurance cash inflows	**Reinsurance cash outflows**
Reinsurance recoveries in respect of gross claims/benefit payments. Reinsurance commissions including profit commissions. Floating leg payments in respect of longevity hedges.	Future reinsurance premiums (including adjustment premiums and reinstatement premiums). Commissions. Reinsurance refunds. Fixed leg payments in respect of longevity hedges.

Future premiums

Future premiums are projected using decrement assumptions appropriate to each class of business, which include persistency and mortality. Recent persistency experience is reviewed annually to assist with setting assumptions for the continuation of premiums being paid by policyholders. In addition, consideration is given to factors that may cause future experience to differ from past experience such as changes to pensions regulations. Assumptions are set by product, and vary based on expected experience, which may vary by duration, age and size of policy.

Expenses

In determining the best estimate liability, future expense cash flows are a combination of the following elements:

- Cash flows arising from expenses that will be incurred in servicing all liabilities related to existing insurance contracts over their future lifetime, including future expected commission payments;
- Exceptional costs in excess of the above cash flows which includes non-discretionary project expenses; and
- Allowances for investment expenses which are expected to be incurred in managing the asset portfolio.

Expense cash flows take into account assumptions about how expenses will develop in the future (e.g. legal, demographic, medical, technological, social or economic changes in the environment). In particular, future expenses are adjusted for expense and claims inflation. Any expected increases in future expenses are also allowed for. For example, if it is known that on renewal of an external service agreement costs are expected to increase, the expense cash flows reflect this increase.

Expenses are appropriately allocated between future and existing business. Expense assumptions do not allow for future cost reductions where these have not yet been realised, although start-up companies are permitted to take into account anticipated cost reductions relating to the first five years after their licensing.

Fixed expenses are allocated between lines of business and converted to an equivalent ‘per policy’ charge for modelling, using the policy counts for in-force business in each fund.

Investment management expenses are allowed for as an explicit cash flow, calculated as a proportion of the assets under management.

Where internal companies provide administration, investment management or other services and are defined as ‘Ancillary Service’ undertakings under Solvency II, then the value of profits or losses arising from these services is included in the value of technical provisions for Aviva plc (that is a ‘look-through’ approach to the underlying cost is adopted to assess the expense cash flows). However, for services from ‘Other Financial Sector’ undertakings (or other undertakings presented as participations on the Solvency II balance sheet) a ‘look-through’ approach is not adopted and the expense cash flows are assessed using the service fee charged to the life operation.

Death and other claim benefits
Death and other claim benefits are projected using decrements appropriate to each class of business, including persistency, mortality and morbidity. For contracts which have fixed benefit increases, the valuation provides for these increases within the discounted cash flow method.

Local, generally accepted, published standard mortality tables are used for different categories of business as appropriate. The tables are based on relevant experience and show mortality rates, by age, for specific groupings of people. Mortality assumptions for UK non-profit business are set with regard to recent Company experience and general industry trends. The mortality tables used in the valuation are summarised below:

Mortality tables used	2021	2020
Non-profit	**AM00/AF00 or TM08/TF08 adjusted for smoker status and age/sex specific factors**	AM00/AF00 or TM08/TF08 adjusted for smoker status and age/sex specific factors
Pure endowments and deferred annuities before vesting	**AM00/AF00 adjusted**	AM00/AF00 adjusted

Annuity payments
The conventional immediate and deferred annuity business is valued by discounting future benefit payments with an allowance for mortality, including future improvements in mortality. Mortality assumptions for non-profit business are set with regard to Company experience and general industry trends. The mortality tables used in the valuation are summarised below:

Mortality tables used	2021	2020
Pensions business and general annuity business	**PMA16_IND/PFA16_IND or PMA16_IND_INT/ PFA16_IND_INT plus allowance for future mortality improvement**	PMA08 HAMWP /PFA08 HAMWP adjusted plus allowance for future mortality improvement
Bulk purchase annuities	**CV3**	CV3

For the largest portfolio of pensions annuity business, the underlying mortality assumptions for males are 104.1% of PMA16_IND (2020: 107.3% of PMA08 HAMWP adjusted) with base year 2016 (2020: 2008); for females the underlying mortality assumptions are 100.3% of PFA16_IND (2020: 104.8% of PFA08 HAMWP adjusted) with base year 2016 (2020: 2008).

Improvements are based on 'CMI_2019 (S=7.25) Advanced with adjustments' (2020: 'CMI_2019 (S=7.25) Advanced with adjustments') with a long-term improvement rate of 1.5% (2020: 1.5%) for males and 1.5% (2020: 1.5%) for females. An allowance has been made to allow for greater mortality improvements in the annuitant population relative to the general population on which CMI_2019 is based using 'Parameter A', which is set to 0.15% for males and 0.20% for females (for 2020 the CMI_19 tables were instead adjusted by increasing the initial rate of mortality improvements (which has a similar effect to using 'Parameter A') by 0.25% and 0.35% for males and females respectively). Advanced parameters are used to taper the long-term improvement rates to zero between ages 90 and 115 (the 'core' parameters taper the long-term improvement rates to zero between ages 85 and 110).Some further adjustments have been made to the CMI_19 tables for YE21 but these have a small impact in aggregate. In addition, on a significant proportion of individual annuity business, year-specific adjustments are made to allow for potential selection effects due to the development of the enhanced annuity market and covering possible selection effects from pension freedom reforms.

Tax
The best estimate liability includes tax payments charged to policyholders or those which are required to settle the insurance liabilities. Policyholder tax is modelled as a separate cash flow rather than implicitly. However, the cash flows in the actuarial models represent future income and expenses cash flows only and do not take into account any brought forward tax attributes such as deferred acquisition expenses, excess management expenses or unrealised gains. These are valued in the deferred tax liability (or asset) on the Solvency II balance sheet. This treatment ensures there is no double counting of tax due or tax relief.

Reserves are established (or credit is taken) for tax on unrealised gains (or losses) for linked business as part of the technical provisions.

Options and guarantees
The most material options and guarantees are in the Group's UK with-profits funds. The valuation methodology for these is covered in section (a) above.

Reinsurance cash flows
The valuation of reinsurance cash flows is not a component of technical provisions, however, its value is included within reinsurance recoverables in the balance sheet (see section D.1.4).

Events not in data (ENID)
The best estimate assumptions allow for rare events and asymmetries. The term ENID refers to any events not deemed to be captured by the data which need to be allowed for within the best estimate calculation to allow for the uncertainty in the future cash flows.

From a life perspective, business units consider ENID through either adjusting the best estimate assumptions to ensure the likely impact of the event is included or using a scenario approach, where they are expected to be material. Expert judgement is applied and events that could (but not necessarily would) be included are: legislative change, severe pandemic and breakthrough cures for diseases.

(c) Transitional arrangements (unaudited)
Aviva Group applies the transitional measure on technical provisions for the following operations:

Business unit	Legal entity
AVLAP	Aviva Life & Pensions UK Limited
Aviva International Insurance	Aviva International Insurance Limited

The applications for the UK operations were approved by the PRA for use from 1 January 2016.
The transitional measure on technical provisions is required by the PRA to be recalculated every two years, or more frequently where the risk profile has materially changed. The following legal entities reset their transitional measure at 31 December 2021:

• Aviva Life & Pensions UK Limited (AVLAP); and

• Aviva International Insurance Limited (AII).

The transitional measure on technical provisions (TMTP) decreases linearly over 16 years from 1 January 2016 to 31 December 2031. If the transitional measure is recalculated, the recalculated amount is decreased linearly over the remaining period until 31 December 2031.

Within the QRTs, the transitional deduction is applied at the legal entity level (or at the homogeneous risk group level within a legal entity) to the risk margin first and then to the best estimate liabilities only when the risk margin has been exhausted. Where the total transitional deduction exceeds the total risk margin (at the homogeneous risk group level), the excess is allocated against the best estimate liabilities in proportion to the contribution of each line of business to the total deduction. At 31 December 2021, the reduction to the best estimate liabilities from the transitional measure on technical provisions across the Group was £352 million (unaudited) (2020: £nil) out of a total reduction to technical provisions of £4,309 million (unaudited) (2020: £4,147 million).

The unrestricted transitional deduction is based on the difference between:
- The technical provisions on a Solvency II basis, net of reinsurance recoverables, including the impact of the matching adjustment and volatility adjustment where applicable, calculated in accordance with the approach described in this section of the SFCR at the valuation date; and
- The Solvency I position, which in the UK is the greater of the Pillar 1 and Pillar 2 individual capital assessment (ICA) technical provisions, net of reinsurance recoverables, and allowing for any individual capital guidance (ICG) applicable at the valuation date.

The transitional relief is restricted, if necessary, to ensure that the Solvency II financial resources (defined as the sum of the Solvency II technical provisions after the application of transitional relief, other liabilities and the solvency capital requirement) are no lower than the more onerous of Solvency I Pillar 1 financial resources and Solvency II Pillar 2 financial resources (defined as the sum of the ICA technical provisions, other liabilities and ICA/ICG). The Solvency II financial resources are determined including new business since the effective date of Solvency II. For AII, the financial resources test is applied in total, so across life and non-life insurance business.

The restriction mentioned above no longer applies to any of the legal entities in the Group.

At the Group level, the transitional impact is the sum of the individual legal entity transitional impacts (i.e. the impact of intra-group transactions is not eliminated).

Impact of the transitional measures
The impact of long-term guarantees and transitional measures is disclosed in QRT S.22.01.22 (see section F.2) using a step-by-step approach.

The Group impact of removing the transitional measure on technical provisions is set out below:

31 December 2021 Unaudited	Including transitional relief (A) £bn	With transitional relief set to zero (B) £bn	Impact of removing transitional relief (C) = (B) – (A) £bn
Technical provisions	**281.3**	**285.6**	**4.3**
Basic own funds	**24.8**	**21.4**	**(3.4)**
Eligible own funds to meet SCR	**25.6**	**22.2**	**(3.4)**
SCR	**12.5**	**13.4**	**0.9**

The impact of the transitional measure on the SCR arises because it is treated as a reduction in liabilities, which generates a corresponding deferred tax liability.

The SCR represents a 1 in 200 loss scenario and is allowed to be reduced by the deferred tax asset created by the loss as long as there are sufficient tax liabilities to offset against the loss. The transitional relief tax liability can be used as a source of capital to justify the use of the deferred tax asset generated by the SCR scenario, and so removing transitional relief will increase the SCR.

D.2.2.2 Methodology and non-economic assumptions for non-life business best estimate liability

(a) Valuation methodology

The best estimate liabilities are defined as the probability weighted average of future cash flows discounted on a market-consistent basis, using the relevant risk-free interest rate term structure.

For non-life business units, the future cash flows included are those that are required to settle the following insurance contracts, which include:

- Cash flows arising from in-force and expired contracts;
- Cash flows arising from contracts that have not yet incepted but where the policyholder has accepted our quote at the valuation date ('pre-inception contracts'); and
- Cash flows resulting from future cancellations or endorsements by the policyholder of in-force and pre-inception contracts.

The best estimate liabilities are calculated in two parts:

- Premium provision: The premium provision is the discounted best estimate (mean) of cash flows relating to unearned premiums and future claim events that have not yet occurred, but which are covered by existing and legally binding pre-inception contracts. Premium provisions are typically 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; and
- Claims provision: The claims provision is the discounted best estimate (mean) of cash flows relating to earned exposure and past claim events that occurred before the valuation date, whether reported or not. The ultimate cost of outstanding claims is estimated by using a range of standard actuarial claims projection techniques, such as the Chain Ladder and Bornhuetter-Ferguson methods. Historical claims development is mainly analysed by accident period, although underwriting or notification period is also used where this is considered appropriate.

Periodical payment orders (PPOs)

The Group's best estimate liabilities for PPOs, in line with other non-life business, are valued based on the present value of future cash flows discounted using relevant risk-free interest rates.

Lump sums payable to bodily injury claimants

Lump sum payments in settlement of bodily injury claims that are decided by the UK courts are calculated in accordance with the Ogden tables and discount rate. The Ogden discount rate is set by the Lord Chancellor and is applied when calculating the present value of future care costs and loss of earnings for claims settlement purposes. The balance sheet reserves in the UK at 31 December 2021 have been calculated using the current Ogden discount rate of -0.25% (2020: -0.25%), as this is the enacted legislative rate that was announced by the Lord Chancellor in 2019. The Ogden discount rate is expected to be reviewed by the Lord Chancellor by summer 2024.

Contract boundaries

The circumstances for when a contract boundary exists are the same as described above for life business in section D.2.2.1.

Non-life business units treat business written by intermediaries on a delegated authority basis on a 'look-through' basis, including on the balance sheet policies where a legal obligation has been created by the intermediary.

Non-life business units assume outwards reinsurance is renewed in accordance with level 3 guidelines. This is done using the 'principle of correspondence', whereby a proportion of the full premium and recoveries are recognised to reflect the fact that the renewed policy will also cover primary policies which are not yet within the contract boundary. For reinsurance purchased or renewed before the valuation date, including pre-inception contracts, Aviva uses the principle of legal obligations and allows for the full cost of the reinsurance unless they are legally entitled to a refund if no further exposure is written.

(b) Valuation components and material non-economic assumptions

The key assumption for many projection techniques, is that past experience is a good guide to future claim development. This is monitored for each reserving class by frequent contact with relevant experts (e.g. claims handlers, underwriting and pricing). Where appropriate, expert judgements are used to reflect situations where this is not thought to be the case.

For estimating volumes of pre-inception business, data on renewal and new-business rates are combined with expert judgements and knowledge of sales and intermediary practices are used to derive appropriate volume assumptions.

The assumptions used in most non-life actuarial projection techniques, including future rates of claims inflation or loss ratio assumptions, are implicit in the historical claims development data on which the projections are based. Additional qualitative judgement is used to assess the extent to which past trends may not apply in the future, for example, to reflect one-off occurrences, changes in external or market 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 in order to arrive at a point estimate for the ultimate cost of claims that represents the likely outcome, from a range of possible outcomes, taking account of all the uncertainties involved.

The table below summarises the main cash flows modelled:

Provision	Asset/liability type	Cash in-flows	Cash out-flows
Premium provision Gross liability	Gross liability	Future premiums, including those in respect of pre-inception contracts and instalment premiums on incepted contracts, gross of commissions and premium tax. Receivables from salvage and subrogation in respect of future claims from future premiums.	Future claim payments relating to in-scope future premiums, ENID and pre-inception contracts. Expenses in respect of future claims including: • Administrative expenses; • Investment management expenses; • Claims management expenses (direct and indirect); • Acquisition expenses (including commissions which are expected to be incurred in the future); and • Other gross cash flow items in respect of future claims that are charged to policyholders such as premium tax.
Premium provision	Reinsurance recoverable	Reinsurance recoveries in respect of gross future claims from future premiums, assuming reinsurance is renewed, allowing for the principle of correspondence. Reinsurance commissions receivable in respect of future claims, including override and profit commissions.	Future reinsurance premiums related to in-scope future premiums, including adjustment premiums and reinstatement premiums. Reinsurance commissions payable in respect of future claims, including override and profit commissions.
Claims provision	Gross liability	Receivables from salvage and subrogation in respect of incurred claims. Future premiums, including those in respect of reinstatements on inwards reinsurance and adjustment premiums.	Future payments on incurred claims, including those in respect of annuities stemming from non-life insurance contracts and ENID; Expenses in respect of incurred claims including: • Administrative expenses; • Investment management expenses; and • Claims management expenses (direct and indirect).
Claims provision	Reinsurance recoverable	Reinsurance recoveries in respect of gross earned business. Reinsurance commissions receivable in respect of incurred claims, including override and profit commissions.	Reinsurance refunds in respect of incurred claims. Reinsurance commissions payable in respect of incurred claims, including override and profit commissions.

Expenses
The treatment of expense cash flows is the same as described above for life business in section D.2.2.1.

For non-life businesses expenses are allocated to claims provisions and premiums provisions as appropriate. Allowances are made for variable acquisition cost cash flows, for example, profit sharing arrangements, where necessary.

Reinsurance cash flows
The valuation of reinsurance cash flows is not a component of technical provisions, however, their value is included within reinsurance recoverables in the balance sheet (see section D.1.4).

Events not in data
The term ENID is defined in line with the definition for the life business as set out in section D.2.2.1.

From a non-life business perspective, two types of ENID are considered:
- 'Known unknowns' – possible future scenarios that can be anticipated; and
- 'Unknown unknowns' – future scenarios that are completely unexpected.

No allowance is made for 'unknown unknowns' within technical provisions 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. Aviva Group specifies a core list of events which are considered as the starting point for the analysis. Impacts are estimated gross of reinsurance, with recoveries estimated separately. The amounts included within the best estimate liabilities are on a discounted basis.

ENID are considered both at line of business level, and at portfolio level with allocations to lines of business, depending on the scenario being considered.

Cash flow patterns
Cash flow payment patterns have been set by line of business based on historic data and actuarial judgement. Cash flow patterns are separately analysed for each geographic area and each line of business. Certain lines of business are also further analysed by claim type or type of coverage.

Cash flows are modelled in monthly time intervals for the first 10 years and annually thereafter. This approach is taken for both long tail and short tail business. Payment profile assumptions are not produced separately for each accident year.

Future management actions
Additional assumptions in relation to the likely future reinsurance purchasing decisions are required when determining the future reinsurance recoveries and future reinsurance premium cash flows.

There are no future management actions assumed in the calculation of the non-life best estimate liabilities.

Periodical payment orders (PPOs)
The cash flows that are considered when calculating the best estimate liabilities for PPOs are derived from:
- Payment of claims benefits: with the majority of PPOs providing payments relating to care needs of the claimant, with a smaller number providing loss of earnings payments; and
- Expenses: there are relatively small administrative costs (compared to the size of claims benefits) in relation to each PPO.

PPO best estimate liabilities use life insurance actuarial methods and techniques to estimate appropriate assumptions for each individual claimant. 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 PPOs based on independent medical opinions.

PPO payments escalate based on indices specified at the time of settlement of the PPO. The majority of PPO claims in the UK escalate based on an Annual Survey of Hours and Earnings index (ASHE) with a smaller number escalating in line with the Retail Prices Index (RPI). Assumptions are therefore required for the future escalation of these indices. In the UK, it is assumed that, over the longer term, the future escalation of the ASHE indices will be linked to general inflation 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.2.2.3 Economic assumptions
The risk-free interest rate curves used to value the technical provisions reflect the basic risk-free interest rate curves, volatility adjustment and fundamental spread for the matching adjustment published by the PRA via the Bank of England website and by EIOPA for Euro denominated liabilities. The year-end 2021 risk-free interest rate curves were published by the PRA on 12 January 2022 and are illustrated for key currencies and durations in the tables below.

Economic assumptions are derived actively, based on market data as at the end of each reporting period.

(a) Basic risk-free interest rates
The risk-free rate curves used to value the technical provisions at year-end 2021 are stated in the table below, including a credit risk adjustment (CRA) where applicable, noting CRA is currently zero for GBP.

Risk-free rates	1 year	5 years	10 years	15 years	20 years	40 years
GBP	0.8 %	1.1 %	0.9 %	0.9 %	0.9 %	0.7 %
EUR	(0.6)%	(0.1)%	0.2 %	0.4 %	0.5 %	1.6 %
CAD	1.2 %	1.7 %	1.9 %	1.9 %	1.9 %	2.3 %

Where swaps do not exist or are not sufficiently liquid or reliable from a certain point, the basic risk-free interest rate is extrapolated in a smooth progression. The PRA has prescribed by currency the entry points for extrapolation, the duration to convergence and the ultimate forward rate (UFR), as can be seen in the table below.

Currency	Entry point for extrapolation of risk-free rates	Duration to convergence to ultimate forward rate	Ultimate forward rate
GBP	50	40	3.60%
EUR	20	40	3.60%
CAD	30	40	3.60%

(b) Volatility adjustment (VA)
The VA is intended to reflect temporary distortions in spreads caused by illiquidity in the market or extreme widening of credit spreads, in particular in relation to government bonds. VAs are prescribed by the PRA from 31 December 2020 and are published along with the basic risk-free interest rate curves on their website.

In the UK, the PRA has approved applications for the VA to be applied in AVLAP, Aviva Insurance Limited (AIL) (non-life operation) and AII (life and non-life operation) (see section F.4). The application of VA has also been approved in Ireland by the Irish regulator (Central Bank of Ireland). Where applicable, the VA is applied to all those liabilities where a Matching adjustment (MA) is not applied. The exception is UK unit-linked business where, in line with the approved application, no allowance for the VA is made. VAs for each currency are listed in the table below. Note that there is no VA applied to business written in Singapore or India.

Volatility adjustment	31 December 2021 (bps)
GBP	**15**
EUR	**3**
CAD	**30**
CNY	**34**

The impact of long-term guarantees and transitional measures is disclosed in QRT S.22.01.22 (see section F.2) using a step-by-step approach. Note that the quantification of the impact of setting the volatility adjustment to zero is after the removal of transitional measures. In practice the impact may be lower as the removal of the VA would result in an increase in the transitional relief on technical provisions (for those entities in the Group with transitional relief approval).

The impact at a Group level of setting the VA to zero is set out below:

31 December 2021	Including the volatility adjustment (A) £bn	With volatility adjustment set to zero (B) £bn	Impact of removing volatility adjustment (C) = (B) – (A) £bn
Technical provisions (unaudited)	**285.6**	**286.1**	**0.5**
Basic own funds	**21.4**	**21.2**	**(0.2)**
Eligible own funds to meet SCR	**22.2**	**22.0**	**(0.2)**
SCR (unaudited)	**13.4**	**13.5**	**0.1**

(c) Matching adjustment (MA)

Aviva applies a MA to certain obligations in AVLAP and AII (see section F.4).

The MA results in an increase applied to the risk-free rate used to value insurance liabilities where the cash flows are relatively fixed (e.g. no future premiums or surrender risk) and are well matched by assets that are intended to be held to maturity and have cash flows that are also relatively fixed. The intention is that, if held to maturity, the business can earn the additional yield on these assets that relate to illiquidity risk.

Group methodology

Any MA benefit received by internal reinsurers (on their own retained risks) is preserved in the Group balance sheet. An adjustment is made to the Group consolidated best estimate liabilities to reflect the value of AII MA benefits.

For the purposes of the AVLAP MA, it is assumed that the internal equity release securitisations do not collapse when preparing the Group consolidated best estimate liabilities.

The matching adjustments used at 31 December 2021 are shown in the table below.

Legal entity (Undertaking)	Matching adjustment portfolios	MA (bps)	Obligations to which a matching adjustment is applied	Assets used to back obligations
AVLAP	UKA	81	All UKA insurance liabilities (as defined in the approved application in 2020 to merge the previous Friends Life annuity portfolio with UKA)	Government bonds (including inflation-linked government bonds) Corporate bonds (including inflation-linked corporate bonds and asset backed securities) Private placements (including inflation-linked private placements) Fixed rate commercial mortgages and project finance/infrastructure Interest rate swaps, currency swaps and inflation swaps CDS (including named CDS and pair-trades) Equity release fixed rate notes Cash
AII	Business reinsured from AVLAP	81	Business ceded from UKA into AII	

Assets eligible for inclusion

- Equity release mortgage assets meet the criteria for inclusion when such assets are securitised into internal SPVs which issue fixed coupon notes secured by those assets to the MA portfolio of the insurance undertaking, which is the case for AVLAP. Prior to such restructuring, equity release mortgage assets do not meet the criteria for inclusion.
- Assets that do not have an external rating such as commercial mortgages and equity release mortgage assets eligible for inclusion within the MA are assigned a fundamental spread (which represents expected losses due to defaults and downgrades) based on an internal credit rating by our asset managers, in accordance with an internal rating methodology framework (see section C.3.1 (unaudited)).

Internal reinsurance
AII uses an identical MA as calculated for AVLAP, for the business ceded from the latter into the former, as the quota share arrangements between the two entities are set up in such a way as to ensure identical eligible asset and liability profiles.

The reinsurance recoverable in AVLAP associated with these ceded liabilities is measured using the basic risk-free interest rate term structure without a MA. For consistency, the gross of reinsurance best estimate liability in AII is measured using a MA determined from the yield on all the assets in the portfolio. The part of the portfolio relating to the reinsurance recoverables has a risk-adjusted spread of zero (i.e. a MA of zero).

Impact of matching adjustment
The impact of long-term guarantees and transitional measures is disclosed in QRT S.22.01.22 (see section F.2). Note that the quantification of the impact of setting the MA to zero is after the removal of transitional relief on technical provisions and the setting of the volatility adjustment to zero. In practice the impact may be lower as the removal of the MA would result in an increase in the transitional relief on technical provisions and the Group would also look to obtain approval to use the volatility adjustment in place of the MA.

The quantification of the impact of setting the MAs to zero at a Group level is set out below:

31 December 2021	Including matching adjustment (A) £bn	With matching adjustment set to zero (B) £bn	Impact of removing matching adjustment (C) = (B) – (A) £bn
Technical provisions (unaudited)	286.1	292.4	6.3
Basic own funds	21.2	15.0	(6.2)
Eligible own funds to meet SCR	22.0	15.8	(6.2)
SCR (unaudited)	13.5	19.7	6.2

D.2.2.4 Risk margin methodology and assumptions (unaudited)
(a) Overall methodology and assumptions
The risk margin is calculated for each legal entity 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 product of the cost of capital rate and the SCR in respect of non-hedgeable risks at each future year discounted using the risk-free rate.

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 by all insurance companies and is prescribed at 6% per annum.

Discount rate
As the SCR in the risk margin calculation takes into account non-hedgeable risks only, the rate used to discount the projected non-hedgeable SCR is the basic risk-free rate (including credit risk adjustment), with no allowance for VAs or MAs, where applicable.

Non-hedgeable risks
The SCR in the risk margin calculation takes the following risks into account:
- Life underwriting risk;
- Health underwriting risk;
- Non-life underwriting risk;
- Market risk[1];
- Counterparty default risk with respect to reinsurance contracts, arrangements with debtors and any other material exposures which are closely related to the insurance obligations[2]; and
- Operational risk.

Projection of the non-hedgeable risk SCR
In order to project the non-hedgeable SCR which underpins the risk margin, simplifications are applied 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. For internal model business units, there is an adjustment for non-linearity and interactions as observed in the internal model. For business units using the standard formula approach, no allowance is made for non-linearity or risk interactions.

1 The risk margin calculation explicitly excludes non-hedgeable interest rate risk. Only material non-hedgeable market risks are included in the risk margin calculation. 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. In all markets where there is a deep, liquid and transparent market for instruments whose value is linked to price inflation then price inflation risk on the opening best estimate liabilities is considered hedgeable. However, the additional inflation risk arising from variation from the best estimate liabilities is not considered hedgeable. The exception to this is in Canada where the market for inflation linked assets is neither deep nor liquid, and hence none of the inflation risk is considered hedgeable.
2 While reinsurance credit risk, and some underwriting risks may be hedgeable in practice using credit default swaps, longevity swaps etc., the risk margin calculation assumes that these risks are not hedged after the business is transferred to the third party.

Loss absorbing capacity
The loss absorbing capacity of technical provisions assumed in the projection of the non-hedgeable risk SCR is consistent with the loss absorbing capacity of technical provisions assumed in the calculation of the SCR. No allowance for the loss absorbing capacity of deferred taxes is included in the risk margin.

Allocation of the risk margin to Solvency II line of business
The risk margin is allocated across lines of business using an approximation approach for the internal model business units. For standard formula business units, one of the two prescribed methods is adopted:
- Allocation according to time zero non-hedgeable SCRs; and
- Allocation according to present value of non-hedgeable SCRs.

(b) Life business methodology
In projecting the non-hedgeable risk SCR, the life businesses generally follow the second approach in the hierarchy provided, which approximates the individual risks or sub-risks to be used for the calculation of future SCRs. For each risk, so-called risk carriers are used, where a suitable statistic is chosen which can be readily projected and used as a proxy for the projected size of the risk relative to its size at the balance sheet date. The exception to this is for longevity risk in AVLAP non-profit funds, where the first approach in the hierarchy is used (i.e. the projection is exact and no approximation is applied). This approach is mirrored by AII for longevity.

The projected risks are then aggregated using a correlation matrix approach at each future time period to derive the non-hedgeable risk SCR. Adjustments are made to reflect the differences between the correlation matrix approach and the internal model.

(c) Non-life business methodology
In projecting the non-hedgeable risk SCR, non-life internal model businesses (UK and Canada), adopt an enhanced version of the second approach in the hierarchy where the projected SCR by modelled calculation class and risk category allows for an increase in relative volatility as the risks run-off to reflect that smaller portfolios are inherently more volatile. Non-life business units that do not use the internal model generally apply a method that lies between levels two and three in the specified hierarchy of simplifications.

The UK business actively participates in the deep and liquid hedging market in order to manage claims inflation risk and regards price (RPI) inflation risk in respect of the existing liabilities as hedgeable. Elements of claims inflation risk other than price (RPI) inflation risk are considered non-hedgeable. However, it is considered imprudent to regard the additional inflation risk that might arise, from adverse movements in other risks, primarily latent and annuity risks, as hedgeable as these ‘cross-term’ risks could not be hedged at outset. Thus price (RPI) inflation risk relating to the best estimate liabilities is treated as hedgeable, but the ‘cross-term’ element of the inflation risk is treated as non-hedgeable.

With regard to future management actions, there is allowance for the reinsurance of PPO risk to AVLAP with the reinsurance cover linked to RPI inflation.

For Canada GI, the risk margin is calculated at business unit level which is equivalent to an entity by entity approach due to the reinsurance structures in place between the legal entities.

(d) Allowance for diversification
The risk margin allows for diversification as follows:
- For all business units, diversification is taken into account at individual legal entity level. Where the overall portfolio contains both life and non-life business, diversification is not allowed. This only affects AII;
- For internal model entities, diversification in the risk margin calculation is assessed consistently with the Internal Model SCR. In particular, for AVLAP and AII diversification between the MA portfolios and the rest of the business is permitted within each entity; and
- No diversification is assumed between RFFs and the rest of the business.

(e) Group risk margin
The Group risk margin has been calculated at an aggregate level, and is not subject to an elimination of intra-group effects.

Where the Group has a significant but non-controlling influence in an entity, the proportional share of risk margins will be reflected in the participations line of the Group balance sheet. The proportional share is defined according to the percentages used in the consolidated accounts.

D.2.2.5 Simplified methods *(unaudited unless relating to best estimate liabilities)*
In order to project the non-hedgeable SCR which underpins the risk margin for both life and non-life business, a hierarchy of projection simplifications is necessary to ensure that the risk margin calculation remains proportionate to the nature, scale and complexity of the business (see section D.2.2.4 for further details).

Simplified methods employed to calculate the best estimate liabilities are detailed below.

(a) Life business
For smaller blocks of business that are not included in the main models on materiality grounds, an approximate approach is used to calculate the best estimate liability. Manual adjustments to the results calculated by the main valuation systems are made to produce the required technical provisions, for example where a best estimate is set to the equivalent accounting liability. Such manual adjustments are applied in a proportionate manner.

For options and guarantees that are immaterial, alternative methods such as closed-form approaches or a series of deterministic projections are used to calculate the liability. This is based on the results for similar products where guarantees are modelled stochastically and is a proportionate approach given materiality considerations.

There are no other material simplifications used within the Aviva Group.

(b) Non-life business
In some areas of the calculation of the Solvency II best estimate liabilities, simplified methods were chosen from a range, from an average cost per claim method to a simple percentage of claims provisions. The selected method depends on the nature of the business, for example, whether it is long-tailed or short-tailed; or whether it exhibits ENID characteristics.

Where simplified methods are used, these are documented and justified in our internal reserving reports.

D.2.2.6 Material changes in assumptions

This section highlights the most material changes to assumptions made in the calculation of technical provisions compared to the previous reporting period.

Life business
The impact of mortality for annuitant contracts on long-term business relates primarily to the UK. In 2021, there has been a reduction in best estimate liabilities, net of reinsurance recoverables, of £176 million, due to changes in longevity assumptions on both individual and bulk purchase annuities arising from:

- Updates to base mortality to reflect methodology and process refinements and changes to data;
- Updates to the rate of mortality improvements, consisting of a change to the allowance made for expectations of greater mortality improvements in the annuitant population than in the general population on which CMI_2019 is based;
- Release of a COVID-19 provision; and
- Changes to base mortality tables for individual annuities (moving to 2016 series tables) and changes to assumptions for anti-selection on individual annuities.

In the UK there have also been updates to persistency and expense assumptions.

Non-life business
No material changes

D.2.3 Value of technical provisions by line of business

The following table sets out Group technical provisions, split by Solvency II lines of business, as detailed in Annex I to the Level 2 Delegated Acts. The best estimate liabilities and the risk margins are provided separately except in the case where technical provisions have been calculated as a whole. The methodology and assumptions used in the calculation of technical provisions is covered in section D.2.2. The technical provisions are gross of reinsurance and after the impact of any transitional measures.

	Line of business 31 December 2021	Technical provisions £m	Best estimate liability[1] £m	Risk margin (unaudited) £m
1	Medical expense insurance	79	77	2
2	Income protection insurance	28	28	—
3	Workers' compensation	—	—	—
4	Motor vehicle liability	4,795	4,652	143
5	Other motor insurance	351	344	7
6	Marine, aviation and transport	51	51	—
7	Fire and property damage	1,830	1,779	51
8	General liability insurance	3,067	2,982	85
9	Credit and suretyship	80	76	4
10	Legal expenses insurance	—	—	—
11	Assistance	13	13	—
12	Miscellaneous financial loss	10	10	—
A	Total non-life insurance obligations	10,304	10,012	292
B	Total proportional non-life reinsurance	184	18	166
C	Total non-proportional non-life reinsurance	67	67	—
29	Health insurance	1,077	1,025	52
30	Ins with-profits participation	35,827	35,149	678
31	Index-linked and unit-linked	160,796	160,753	43
32	Other life insurance	71,604	71,313	291
33	PPOs health	—	—	—
34	PPOs non-health	986	907	79
D	Total life insurance obligations	270,290	269,147	1,143
E	Total life reinsurance obligations	495	495	—
	Total Group technical provisions	281,340	279,739	1,601

1 The reduction in best estimate liabilities relating to the transitional measures on technical provisions as set out in D.2.2.1(c) is unaudited.

D.2.4 Comparison of Solvency II technical provisions to IFRS technical provisions

Solvency II technical provisions comprise two components – the best estimate liability and the risk margin (both net of transitional measures for life lines of business). By contrast, the IFRS provisions are a single calculation of liabilities, with appropriate margins for risk included within the assumptions and methodology. There is also a different approach to discounting.

There are specific differences in the valuation methods used for example relating to the risk margin, contract boundaries, unit-linked contracts and the treatment of unallocated surplus for participating contracts.

The material differences between the main assumptions used relate to the discount rates, mortality rates, lapse rates and expense assumptions.

The following table summarises Group technical provisions (gross of reinsurance) on an IFRS and Solvency II basis. The technical provisions for non-life business make up a relatively small proportion of the Group technical provisions, hence they are not split by line of business in this table. The IFRS technical provisions exclude the unallocated divisible surplus liability for participating contracts and the Solvency II technical provisions are after the impact of any transitional measures.

Line of business reference	Line of business 31 December 2021	IFRS technical provisions[2] (A) £m	SII technical provisions (B) = (C) + (D) £m	Best estimate liability[1] (C) £m	Risk margin (unaudited) (D) £m	Difference in technical provisions[3] E= (B) – (A) £m
	Total non-life obligations	14,891	10,555	10,097	458	(4,336)
29	Health insurance	1,892	1,077	1,025	52	(815)
30	Ins with-profit participation	37,141	35,827	35,149	678	(1,314)
31	Index-linked and unit-linked	164,863	160,796	160,753	43	(4,067)
32	Other life insurance	73,231	71,604	71,313	291	(1,627)
33	PPOs health	—	—	—	—	—
34	PPOs non health	871	986	907	79	115
	Total life insurance obligations	277,998	270,290	269,147	1,143	(7,708)
	Total life reinsurance obligations	532	495	495	—	(37)
	Total Group technical provisions	293,421	281,340	279,739	1,601	(12,081)

1 The reduction in best estimate liabilities relating to the transitional measures on technical provisions as set out in D.2.2.1(c) is unaudited.
2 The IFRS technical provisions of £293,421 million exclude outstanding claims provisions on life lines of business of £1,281 million. The IFRS technical provisions quoted in section D overview of £294,702 million includes claims provisions on life lines of business.
3 The difference between IFRS technical provisions and SII technical provisions of £(12,081) million includes the £2,110 million consolidation scope reclassifications difference shown in section D.1.

D.2.4.1 Life lines of business
The Solvency II technical provisions for life lines of business are approximately £7.7 billion lower than IFRS technical provisions. This can largely be explained by differences in assumptions and reserving methodology. In particular, removal of IFRS margins and difference in rates used in discounting of cash flows, are partially offset by contract boundary restrictions and the risk margin under Solvency II. These key differences are explained in more detail below.

(a) IFRS margins on non-economic assumptions
Best estimate assumptions relating to non-economic variables, such as mortality, are materially aligned between IFRS and Solvency II bases of valuation. However, in the UK under IFRS explicit margins for prudence are added to various best estimate assumptions for non-profit contracts including mortality rates, lapse rates and expense assumptions. Under Solvency II, these margins are not included. This results in Solvency II best estimate liabilities being lower than IFRS technical provisions and affects all non-participating life lines of business. For UK with-profits business no margins are added to the best estimate assumptions under IFRS.

(b) Treatment of participating business
The key difference between Solvency II and IFRS technical provisions for UK participating business is that the IFRS technical provisions include certain future liabilities associated with assets not yet distributed as bonuses. Under Solvency II, the technical provisions exclude payments representing surplus funds (as defined in UK national law) and so only future benefits arising from enhancements that are fully consolidated into asset shares are included. This results in Solvency II best estimate liabilities being lower than IFRS technical provisions.

This is partially offset by the treatment of assets in excess of liabilities. Under IFRS, the assets in excess of liabilities are held as a separate liability called Unallocated Divisible Surplus (UDS) in addition to technical provisions. Since UDS is not classified as part of IFRS technical provisions, it is not included in the table above. Under Solvency II, a proportion of the UDS is implicitly included within best estimate liabilities. This results in Solvency II best estimate liabilities being higher than IFRS technical provisions.

These differences impact line of business (LOB) 30 (insurance with-profits participation).

(c) Treatment of unit-linked business
Under IFRS, the technical provisions for unit-linked business are based on current unit value plus an allowance for non-unit liabilities, but only where this would increase technical provisions. Under Solvency II, the reserves are lower than the unit value reflecting the profits expected to emerge in future in respect of premiums already paid and in some cases in respect of premiums expected to be paid in the future where there is no contract boundary restriction (e.g. future management charges in excess of incurred expenses expected to be earned from existing business). Solvency II best estimate liabilities are subject to contract boundaries for certain product types, such as unit-linked savings contracts with no insurance risk or material financial guarantee. This means that future premiums are ignored for regular premium contracts where there is no obligation for the policyholder to pay future premiums.

Overall, this results in Solvency II best estimate liabilities being lower than IFRS technical provisions.

This impacts LOB 31 (index-linked and unit-linked).

(d) Discount rates
Discount rates in Solvency II vary from those used in IFRS and all LOBs are affected by these differences.

Solvency II best estimate liabilities are valued as set out in section D.2.2.3.

For non-participating life insurance contracts in most markets including the UK, IFRS liabilities are valued using a valuation interest rate which reflects the yields available on the underlying assets, with an allowance for credit risk based on internal analysis and an additional margin for adverse deviation. No distinction is made for reinsured business in the IFRS valuation interest rate. For UK participating business, a risk-free rate curve with no allowance for credit risk is used in IFRS.

(e) Risk margin (net of transitional measures) (unaudited)
In addition to the best estimate liabilities, Solvency II technical provisions include a risk margin to cover the cost of capital held each year in respect of non-hedgeable risks. This is in contrast to the additional margins held under IFRS to cover risk and uncertainty. The risk margin is provided separately for each material line of business in section D.2.3 above and applies to both life and non-life business. This results in Solvency II technical provisions being higher than IFRS technical provisions.

D.2.4.2 Non-life lines of business
The Solvency II technical provisions for non-life business are approximately £4.3 billion lower than the IFRS technical provisions. This can largely be explained by differences in assumptions and reserving methodology, in particular, the difference in approach to reserving for future claims. Other less material differences include the removal of IFRS margins and differences in the discounting of cash flows. These are partially offset by contract boundary restrictions and risk margin which result in an increase in Solvency II technical provisions compared to IFRS. These key differences are explained in more detail below.

(a) Methodology for reserving for future claims
IFRS and Solvency II technical provisions include reserves for future claims expected to be incurred on a contract. Under IFRS this is achieved by holding the premiums attributable to the remaining duration of the contract as reserves and an insurance receivable asset is also held to offset these reserves. Under Solvency II, the best estimate liabilities are determined using the actual future cash flows expected under that contract. This results in Solvency II best estimate liabilities being typically lower than IFRS technical provisions and affects all non-life lines of business.

Some of this reduction is also driven by the reclassification of insurance receivables 'not past due' as referred to in section D.1.5. Under IFRS, these receivables are classified as an asset. Under Solvency II these receivables are treated as future cash flows in the technical provision calculations and this affects all non-life lines of business. These differences result in both insurance receivables and technical provisions being lower by £2.6 billion on the Solvency II balance sheet.

(b) IFRS margins

IFRS technical provisions contain margins for prudence on claims and expense assumptions which are not included in Solvency II best estimate liabilities. This results in Solvency II best estimate liabilities being lower than IFRS technical provisions and affects all non-life lines of business.

(c) Discounting

For non-life insurance, only certain long-tailed claims reserves are discounted within the IFRS technical provisions and where discounting is applied, a different rate to that prescribed by the PRA in Solvency II is adopted. The claims reserves that are discounted predominantly relate to latent claims on the longer-tailed LOBs including LOB 8 (general liability insurance). In contrast, all non-life insurance cash flows are discounted under Solvency II. This results in Solvency II best estimate liabilities being lower than IFRS technical provisions and affects all non-life lines of business that do not include material long-tailed claims (which are discounted under IFRS).

(d) Contract boundaries

The cash flows relating to pre-inception business are included in Solvency II best estimate liabilities. Pre-inception business refers to all liabilities arising from policies that the business units are contractually obliged to write at the valuation date but that have not yet incepted. This affects all non-life lines of business with the exception of annuities stemming from non-life insurance contracts. IFRS is not subject to the same requirement. This results in Solvency II best estimate liabilities being higher than IFRS technical provisions.

(e) Risk margin (unaudited)

As explained above for life business, Solvency II technical provisions include a risk margin (net of transitional measures) which results in Solvency II technical provisions being higher than IFRS technical provisions. This affects all material non-life lines of business.

D.2.5 Level of uncertainty in value *(unaudited unless relating to the best estimate liabilities)*

Section D.2.2 sets out details of the methodology and assumptions used by the Group to determine the technical provisions for both life and non-life business. These techniques are designed to allow for the appropriate cost of policy-related liabilities, to give a result within the normal range of outcomes. However, the actual cost of settling these liabilities may differ, for example, because experience may be worse than that assumed, or future claims inflation may differ from that expected, and hence there is uncertainty in respect of these liabilities. Specific areas of uncertainty are described below. Given the mix of business written by the Group the most material areas of uncertainty in technical provisions will be driven by the life business (non-life technical provisions comprise 3.8% of the total Group technical provisions).

D.2.5.1 Life insurance technical provisions

(a) General

The best estimate liabilities correspond to the probability-weighted average of future cash flows, taking account of the time value of money using the relevant risk-free interest rate term structure. They are an estimate of how markets and the business might behave in the future given policyholder data, cash flow models and a set of assumptions.

All estimates are based on management's knowledge of current facts and circumstances; assumptions based on that knowledge; and their predictions of future events and actions. Actual results may differ from those estimates, possibly significantly. The list below sets out the estimates and assumptions that are considered particularly susceptible to valuation uncertainty:

- Fluctuation in the amount and/or timing of claims events, e.g. when estimating the length of time for which an annuity will be paid. This requires a projection of annuitant mortality rates in excess of 20 years into the future which cannot be done with any certainty;
- Changes in the value of an index/market values used to determine claims amounts, e.g. estimating future market values of the assets backing the with-profits best estimate liabilities in the UK; and
- Uncertainty in policyholder behaviour, e.g. for estimating lapse rates for different policy types and for different durations of a policy. Policyholder behaviour may change as a result of changes in the regulatory and economic environment.

The best estimate liability assumptions are governed by a rigorous process, underpinned by actuarial judgement and peer review. The scope of assumption review papers includes documenting the degree of uncertainty inherent in the assumptions being reviewed.

Data governance and model governance standards are in place, which help to ensure that the cash flow models used to calculate technical provisions, and the data which is used within that calculation, are fit for purpose and are managed under appropriate change control processes.

The sensitivity of the Group's Solvency II surplus and cover ratio (on a regulatory view) to key assumptions used in the calculation of technical provisions is disclosed in section C.7.1 (unaudited). It should be noted that these impacts include the mitigating effects of the change in the value of financial assets and reinsurance recoverables as well as the impact on tax and the solvency capital requirement.

(b) Guarantees on long-term savings products
As a normal part of their operating activities, various Group companies have given guarantees and options, including interest rate guarantees, in respect of certain long-term insurance and investment products. Interest rate guaranteed returns, such as those available on guaranteed annuity options, are sensitive to interest rates falling below the guaranteed level.

D.2.5.2 Non-life insurance technical provisions
(a) General
The actual cost of settling insurance obligations may differ from the best estimate liabilities, for example because experience may be worse than assumed or future claims inflation may differ from that expected. There are a number of potential developments in the external environment that would have a material impact on the value of the technical provisions due to the inherent uncertainty in the underlying best estimate liabilities.

Best estimate liabilities are based on estimates and therefore can vary and develop, sometimes significantly, against current best estimates for a number of reasons including exposure to the following:

- Latent claims;
- Catastrophes;
- New types of latent claims;
- Emerging trends and legislative changes not allowed for in the current best estimate; and
- Uncertain economic trends (excessive inflation, interest rate change etc.).

The best estimate liability assumptions are governed by a rigorous process, underpinned by actuarial judgement and peer review.

Data governance and model governance standards are in place, which help to ensure that the cash flow models used to calculate technical provisions, and the data which is used within that calculation, are fit for purpose and are managed under appropriate change control processes.

The main additional risks and uncertainties in the Solvency II technical provisions (over and above those inherent in the IFRS technical provisions which are set out as part of note 41 of the Annual Report and Accounts) include the following items:

- Assumptions are made about the future reinsurance contracts which will be purchased, including the expected price and expected terms and conditions of those arrangements. There is consequently a risk that this reinsurance is not actually bought, or has a materially different price than that expected; and
- The premium provision represents the best estimate of future claims and expenses relating to unexpired risks. This is inherently more uncertain than the determination of the IFRS unearned premium provision.

(b) Asbestos, pollution and social environmental hazards
In the course of conducting insurance business, the Group 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. However, on the basis of current information having regard to the level of provisions made for general insurance claims and substantial reinsurance cover now in place, management consider that any additional costs arising are not likely to have a material impact on the technical provisions of the Group. Technical provisions for the relevant line of business (general liability insurance) currently comprise 1% of Group technical provisions.

(c) Ogden discount rate
Refer to section D.2.2.2 for information in respect of the Ogden discount rate.

(d) Annuities stemming from non-life business
PPOs represent a small part of best estimate liabilities. They also represent one of the most uncertain elements of technical provisions due to the long-tailed nature of liabilities 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 large injury claims to settle as PPOs as opposed to lump sum awards. The technical provisions in respect of PPOs currently comprise 0.4% of Group technical provisions.

(e) COVID-19
See section C.1 for further detail on the impact of COVID-19, including Business Interruption claims, on the underwriting risk profile of the Group.

D.2.5.3 Regulatory compliance

The Group's insurance (both life and non-life) and investment business is subject to local regulation in each of the countries in which it operates. A number of the Group's UK subsidiaries are dual regulated directly authorised by both the PRA (for prudential regulation) and the FCA (for conduct regulation) while others are solo regulated (regulated solely by the FCA for both prudential and conduct regulation). Between them, the PRA and FCA have broad powers including the authority to grant, vary the terms of, or cancel a regulated firm's authorisation; to investigate marketing and sales practices; and to require the maintenance of adequate financial resources. The Group's regulators outside the UK typically have similar powers, but in some cases they also operate a system of 'prior product approval'.

The Group's regulated businesses have compliance resources to respond to regulatory enquiries in a constructive way, and take corrective action when warranted. However, all regulated financial services companies face the risk that their regulator could find that they have failed to comply with applicable regulations or have not undertaken corrective action as required.

The impact of any such finding (whether in the UK or overseas) could have a negative impact on the Group's reported results.

D.3 Other liabilities

A description of material valuation differences between Solvency II and IFRS balance sheets related to other liability class are provided below.

D.3.1 Deferred tax assets and liabilities

Solvency II valuation basis

Deferred tax for Solvency II valuation purposes is determined in accordance with IAS 12 principles on temporary differences arising between the economic value of assets or liabilities in the Solvency II balance sheet and their tax base.

Deferred tax assets and liabilities are recognised separately on the Solvency II balance sheet to the extent that a deferred tax asset cannot be offset against corresponding deferred tax liabilities.

The deferred tax balances in the Solvency II balance sheet differ from those already recognised in the IFRS balance sheet as a result of the differences between the IFRS and Solvency II balance sheet valuation and consequential impact on recognition of deferred tax assets. The largest impact arises from the revaluation of technical provisions. The net deferred tax liability of £2,484 million arises mainly on unrealised gains on investments.

Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which temporary differences can be utilised. Deferred tax assets are recognised to the extent that they are to be offset against deferred tax liabilities or can be supported by future taxable profits.

Unused tax losses and credits

The Group has unrecognised gross tax losses (excluding capital losses) of £796 million and other unrecognised temporary differences of £942 million. Included in these are trading losses of £11 million which will expire within the next 20 years. The remaining losses have no expiry date.

In addition, the Group has unrecognised capital losses of £575 million. These losses also have no expiry date.

D.3.2 Financial liabilities other than debts owed to credit institutions

Financial liabilities other than debts owed to credit institutions ('financial liabilities') include securitised mortgage loan notes, obligations for repayment of cash collateral received, internal loans and other financial liabilities.

Under International Accounting Standard (IAS) 39, financial liabilities are either carried at fair value under the fair value option (2021: £4,713 million) or at amortised cost (2021: £772 million). Financial liabilities recognised under IFRS at fair value include loan notes issued in connection with certain securitised mortgage loans, for which the Group has taken advantage of the fair value option under IAS 39 to present the mortgages, associated liabilities and derivative financial instruments at fair value, since they are managed as a portfolio on a fair value basis. This presentation provides more relevant information and eliminates any accounting mismatch which would otherwise arise from using different measurement bases for these three items. Refer to section D.4 for more information on valuation.

Under Solvency II, financial liabilities are valued at fair value. Financial liabilities which are expected to be paid within one year have been valued on the Solvency II balance sheet at the amount expected to be paid, deemed to approximate fair value. Non-current financial liabilities are measured at fair value, adjusted to eliminate movement in fair value due to changes in own credit standing.

In determining the most appropriate valuation approach to eliminate the effects of changes in own credit standing we considered the characteristics of the market risks of the financial liability. Own credit risk is a component of market risk. Market risk is reflected by the market spread of the instrument, being the current yield less the risk-free rate of return (or benchmark rate if the financial liability pays a fixed return above a benchmark rate i.e. SONIA).

- For certain financial liabilities, such as unsecured fixed term borrowings (e.g. bank loans), the own credit standing of the issuer (i.e. risk of default by the issuer) is the most significant market risk factor, and other market risk factors can be considered insignificant. On initial recognition, the credit spread reflects the own credit standing of the issuer. In subsequent periods, the expected cash flows have been reassessed at each reporting date. The expected cash flows have not been adjusted for the risk of credit default and therefore the credit spread on initial recognition continues to be used.
- For other financial liabilities, such as securitised mortgage loans, own credit risk will be just one market risk amongst many other significant risks. If the credit worthiness of collateral or security (for example cash) is superior to that of the issuer, then the market spread attributable to the own credit risk of the issuer is likely to be minimal. Any change in the credit spread of a particular financial liability will therefore reflect changes in the credit worthiness of the issuer as well as the general price for credit. For example, a credit spread for an instrument can increase even though the credit worthiness of the issuer, measured by its external credit rating, might be considered to remain unchanged. However, because it is not possible to objectively measure the general price of credit separate from own credit risk, no adjustments have been made for what could be considered the general price of credit, other than changes in the risk-free interest rate. A valuation difference of £25 million is recognised to bring financial liabilities carried at amortised cost under IFRS to fair value under Solvency II.

D.3.3 Payables (trade, not insurance)
Under Solvency II, payables are measured at fair value using discounted cash flow models adjusted to eliminate movement in fair value due to changes in the own credit standing of the entity. Under IFRS, payables are initially recognised at cost, being fair value. Subsequent to initial measurement they are measured at amortised cost. Given the nature of these liabilities which is short duration, the amortised cost best represents fair value in all material aspects.

D.3.4 Subordinated liabilities
Under IFRS, subordinated debt is valued either on an amortised cost basis or at nominal value. Under Solvency II, subordinated debt is valued on a fair value basis, with changes in own credit standing removed for subsequent measurement. A discounted cash flow model using the risk-free rate plus initial credit spread relevant to each instrument has been used to assess fair value. Changes in foreign exchange rates and the movement in risk-free rates from the point of issuance to the reporting date are the only drivers of changes in fair value. No changes in the issuer’s credit standings are applied and, for the purpose of the valuation, it is assumed that the option to redeem at the first call date will be exercised.

The difference of £449 million arising is due to the revaluation of subordinated liabilities from amortised cost under IFRS to fair value under Solvency II.

D.3.5 Other liabilities
The majority of the difference of £2,219 million between the IFRS and the Solvency II values of other liabilities relates to the unallocated divisible surplus (UDS). Under IFRS, the UDS represents the excess of the aggregate carrying value of assets over the carrying value of the policyholder liabilities for participating business, and where it is negative (that is an asset) it is subject to recoverability testing. Under Solvency II, a proportion of the UDS is implicitly included within best estimate liabilities, notably in continental Europe where certain expected unrealised gains and losses are attributable to policyholders.

D.3.6 Pension benefit obligations
The Group operates a number of defined benefits and defined contribution pension schemes, the most significant being in the UK, Ireland and Canada. Further information about the Group’s pension obligations, including key assumptions and judgments used, is included in note 49 of the 2021 Annual Report and Accounts.

Under Solvency II, the pension benefit obligation is calculated using IFRS methodology.

D.3.7 Changes made to recognition and valuation bases and estimations during the reporting period
No changes were made during the reporting period to the bases and estimation approaches used to recognise and value other liabilities.

D.4 Alternative methods for valuation
The majority of the Group’s assets and liabilities measured at fair value 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.

Although, the Solvency II valuation hierarchy differs from IFRS, the methodology for valuing assets and liabilities measured at fair value remains consistent. The assets valued using quoted prices for identical or similar assets from inactive markets (within the fair value hierarchy of IFRS) fall under alternative methods for valuation under Solvency II.

Justification for use of alternative valuation method approach
In accordance with Aviva’s asset valuation business standard, alternative methods for valuation are applied in respect of the valuation of assets and liabilities only where a readily observable, external market valuation is not available, or where the relevant market is deemed to be inactive.

Assumptions underlying the valuation approach and key drivers of valuation uncertainty
Alternative methods for valuation include the use of estimates and assumptions that are not market observable but based on a combination of independent third-party evidence and internally developed models, calibrated to market observable data where

possible. Valuation uncertainty arises from variation in the expected range of the key inputs feeding into models, judgemental features of model inputs and assumptions used and reliance on third party's market experience and judgement within the accepted valuation standards.

Valuation uncertainty on assets which rely on either unobservable long-term assumptions or comparable market transactions as valuation inputs was impacted by the economic disruption resulting from the COVID-19 pandemic during 2020. During 2021 the level of comparable market evidence available has increased and market views around long-term economic assumptions such as residential and commercial property growth rate assumptions have stabilised, reducing the impacts on valuation uncertainty caused by the pandemic. Material uncertainty declarations previously included in valuation reports on certain of the Group's properties have now been removed.

The principal assumptions underlying the valuation approach and key drivers of valuation uncertainty for the categories of assets and liabilities valued using alternative methods of valuation are described below:

Investment property and property for own use

Directly held investment property, property funds and freehold property for own use (£7,018 million)

- Valued in the UK at least annually (for investment property) and at least every three years (for freehold property for own use) by external chartered surveyors in accordance with guidance issued by The Royal Institution of Chartered Surveyors, and using estimates during the intervening period. Outside the UK, valuations are produced by external qualified professional appraisers in the countries concerned. Investment properties are valued on an income approach that is based on current rental income plus anticipated uplifts at the next rent review, lease expiry, or break options taking into consideration lease incentives and assuming no further growth in the estimated rental value of the property. The uplift and discount rates are derived from rates implied by recent market transactions on similar properties. Tenant risk arising as a result of COVID-19 has reduced during 2021, leading to a corresponding reduction in capital deductions applied to valuations of properties in the retail and leisure sectors.
- Valuation uncertainty is assessed based on published research from MSCI comparing valuations against sales data. This is supported by comparison of valuation data and sales in Aviva's investment property portfolios.

Leasehold property for own use (£391 million) and lease liabilities (£472 million)

- Leasehold property assets for own use are held at fair value. Where the lease is not impaired this is deemed to be equal to the related lease liability. Where the lease asset is deemed to be impaired it is held at a value equal to its IFRS carrying value. The lease liability is equal to the minimum lease payments, consisting of future expected cash flows discounted using the interest rate implicit in the lease. The valuation uncertainty of property held for own use has been assessed by reference to a study of sales prices achieved in commercial real estate transactions against their previous valuations. This assessment indicates that the uncertainty relating to the valuation of property (other than own use), net of lease liabilities is immaterial.

Loans and mortgages

Commercial mortgage loans (£11,629 million)

- Commercial mortgages primarily held by our UK Life business are valued using a portfolio credit risk model (PCRM). This model calculates a credit risk adjusted value (CRAV) for each loan. The risk adjusted cash flows are discounted using a yield curve, taking into account the term dependent risk-free rate and global assumptions for the liquidity premium. Furthermore, assumptions regarding property growth and rental income forecasts are based on commercial real estate market views which take into account projected market volatility. The commercial mortgage loans are sensitive to future property value (via yields), liquidity premium and future property and rental growth. Management assesses the valuation uncertainty by evaluating the valuation range by flexing inputs/assumptions within a reasonably possible range of alternatives and back-testing analysis.

Infrastructure and private finance initiative loans (£6,119 million)

- Private finance initiative and private infrastructure loans are valued using a discounted cash flow model whereby spreads for credit and illiquidity are added to a risk-free discount rate. Credit spreads are updated monthly using an internally developed methodology which depends on the credit rating and duration of each loan, credit spreads on publicly traded bonds and estimated recovery rate in event of default.
- Valuation uncertainty arises as the credit spread is inferred from more liquid assets and the excess spread attributable to illiquidity is not observable in the market.

Equity release and securitised notes and mortgage loans (£11,930 million)

- The Group's Solvency II balance sheet exposure to equity release mortgages arises primarily through its investment in mortgage-backed securitised notes issued by one of its non-insurance subsidiaries and held by the UK Life business. The Group also has direct investments in securitised and unsecuritised equity release mortgage loans.
- The equity release backed securitised notes consist of senior notes and a subordinated junior note (which represents the equity tranche of the asset proceeds). The overall value of the loan notes represents the underlying value of the securitisation and is equal to the value of the equity release mortgages and cash held in the securitisation, less the present value of future expenses. The junior note is calculated by discounting the modelled junior note cash flows at an appropriate equity discount rate. The senior notes are valued by discounting the contractual cash flows for each note at a risk-free rate, plus a spread reflecting the specific risks relating to these notes.
- Directly held equity release mortgage loans held by the UK Life business are valued using an internal model, with fair value initially being equal to the transaction price. The value of these loans is dependent on the expected term of the mortgage and the forecast

property value at the end of the term, and is calculated by adjusting future cash flows for credit risk and discounting using a yield curve plus an allowance for illiquidity.
- The mortgages have a no negative equity guarantee (NNEG) such that the cost of any potential shortfall between the value of the loan and the realised value of the property, at the end of the term, is recognised by a deduction of the value of the loan. Property valuations at the reporting date are obtained by taking the most recent valuation for the property and indexing using an internal model derived from publicly available Land Registry data and market observable house price indices.
- NNEG is calculated using base property growth rates reduced for the cost of potential dilapidations, using stochastic models. In addition, a cost of capital charge is applied to reflect the variability in these cash flows. The base property growth rate assumption is RPI +0.75% which equates to a long-term growth rate of 4.4% pa *(*2020*:* 4.0% pa). After applying the cost of capital charge, dilapidations and the stochastic distribution, the effective long-term growth rate equates to 0.6% pa (2020: 0.6% pa).
- Management assesses the valuation uncertainty by evaluating the valuation range by flexing inputs/assumptions within a reasonably possible range of alternatives.

Non-recourse loans (£301 million)

- Valued using internally developed discounted cash flow models incorporating a significant number of modelling assumptions and unobservable market data including a probability of default and liquidity premium.
- Valuation uncertainty has been assessed by flexing inputs/assumptions within a reasonably possible range of alternatives.

Debt securities

Structured bond-type, non-standard debt products and privately placed notes that have no active market (£4,187 million)

- Structured bond-type, non-standard debt products and privately placed notes held by our life business in the UK do not trade in an active market. These fixed maturity securities are valued using a discounted cash flow model, designed to appropriately reflect the credit and illiquidity risk of the instrument. Valuation uncertainty arises as the credit spread is inferred from more liquid assets and the excess spread attributable to illiquidity is not observable in the market.
- The main drivers of valuation uncertainty are credit risk and liquidity assumptions. Management assesses the valuation uncertainty by operating independent price verification controls as described below.

Other debt securities which are not traded in an active market (£4,336 million)

- Debt securities largely held by the UK business are valued using third party or counterparty valuations. These prices are considered to be unobservable due to infrequent market transactions.
- Valuation uncertainty is assessed by reference to the difference between the primary valuation and independently sourced prices.

Equity securities

Equity securities which primarily comprise private equity holdings held in the UK (£350 million)

- Valued by a number of third party specialists. These are valued using a range of techniques, including earnings multiples, forecast cash flows and price/earnings ratios.
- The main drivers of valuation uncertainty are modelling risk and earnings/dividends assumptions. Valuation uncertainty is based on sensitivities consistent with published research and analysis previously conducted by Aviva.

Other investments

Participations and assets held for index-linked and unit-linked funds (£1,285 million)

- The following participations and assets held for index-linked and unit-linked funds are valued based on external valuation reports received from fund managers:
  – Unit trusts;
  – Other investment funds including property funds; and
  – Derivatives.
- Where these valuations are at a date other than the balance sheet date, as in the case of some private equity funds, we make adjustments for items such as subsequent draw-downs and distributions and the fund manager's carried interest.
- Valuation uncertainty for the unit trusts is based on sensitivities consistent with published research and analysis previously conducted by Aviva. Valuation uncertainty for the property funds is considered to be the same as for directly held property. Valuation uncertainty for derivative assets is considered to be the same as for derivative liabilities described below.

Liabilities

Derivative liabilities comprising over the counter derivatives being primarily RPI swaps and index-linked asset swaps (£445 million)

- Valued using discounted cash flow models.
- Limited valuation uncertainty exists on these instruments. Valuation uncertainty is assessed based on differences between the primary valuations and counterparty valuations and estimates of impacts of unwinding contracts.

Securitised mortgage loan notes (£1,140 million)

- Valued using a similar technique to the related securitised mortgage loan assets presented above.

Adequacy of valuation compared to experience

The Group requires business units to operate independent price verification (IPV) controls, including an assessment of adequacy of valuation methods applied, across all assets.

For assets where a secondary source is available (such as over the counter derivatives), this involves comparing the primary valuation to the secondary source, investigating material differences and making valuation adjustments where we believe appropriate.

For illiquid debt securities which are marked to model the IPV process incudes a review of the valuation methodology, periodic assessment of both observable and judgemental model inputs as well as reviewing any secondary trading activity in the asset to understand whether anything can be learnt regarding the appropriateness of the valuation methodology. For commercial mortgage and equity release mortgage loans where there is generally no secondary source available and no secondary trading activity, the valuation methodology is subject to regular review and there is a process of periodic reassessment of all the model inputs.

For other asset classes where there is no secondary source available and there is no secondary trading activity (such as investment property and private equity), the Group relies on the implementation of accepted valuation standards by parties that are independent to the Group. To assess the reasonableness of the valuations, sales, purchases and movements over the year are reviewed, compared with indices where practical and outliers are queried with fund managers or compared to NAV statements.

D.5 Any other material information

D.5.1 Valuation differences

There are no material differences in the bases, methods and main assumptions used at Group level for the valuation of assets and liabilities from those used by any of its subsidiaries.

Section E
Capital Management

In this section

Section E: Capital management (SCR unaudited)

The 'Capital Management' section of the report describes the objectives, policies and procedures applied by the Group for managing its own funds. The section also covers information on the structure and quality of own funds, and the calculation of the solvency capital requirement (SCR), including information about Group's partial internal model.

The Group calculates its Solvency II position on a regulatory basis and on a 'shareholder view' basis. The shareholder view is considered by management to be more representative of the shareholders' risk exposure and the Group's ability to cover the SCR with eligible own funds and aligns with management's approach to dynamically manage its capital position. In arriving at the shareholder position, the following adjustments are typically made to the regulatory Solvency II position:

- The contribution to the Group's SCR and own funds of the most material fully ring fenced with-profits funds of £2.2 billion at 31 December 2021 (2020: £2.5 billion) and staff pension schemes in surplus of £1.2 billion at 31 December 2021 (2020: £1.2 billion) are excluded. These exclusions have no impact on Solvency II surplus as these funds are self-supporting on a Solvency II capital basis with any surplus capital above SCR not recognised.
- A notional reset of the transitional measure on technical provisions (TMTP), calculated using the same method as used for formal TMTP resets. This presentation avoids step changes to the Solvency II position that arise only when the formal TMTP reset points are triggered. The 31 December 2021 Solvency II position is based on a formal reset of the TMTP, in line with the requirement to reset the TMTP at least every two years and hence no adjustment is required. The 31 December 2020 Solvency II position included a notional reset of £0.6 billion.

The Group Solvency II capital position, including these adjustments, is summarised in the table below:

	Own funds 2021 £m	SCR 2021 £m	Surplus 2021 £m	Own funds 2020 £m	SCR 2020 £m	Surplus 2020 £m
Solvency II regulatory surplus as at 31 December	**25,573**	**(12,499)**	**13,074**	29,262	(16,441)	12,821
Adjustments for:						
Fully ring-fenced with-profit funds	**(2,205)**	**2,205**	**—**	(2,492)	2,492	—
Staff pension schemes in surplus	**(1,218)**	**1,218**	**—**	(1,179)	1,179	—
PPE[1]	**—**	**—**	**—**	(385)	—	(385)
Notional reset of TMTP	**—**	**—**	**—**	564	—	564
Solvency II shareholder surplus at 31 December	**22,150**	**(9,076)**	**13,074**	25,770	(12,770)	13,000

1 A change in regulations announced in December 2019 allows French insurers to place a part of the Provision pour Participation aux Excédents (PPE) into Solvency II own funds. This is included within Group regulatory own funds but is excluded from the shareholder position at 31 December 2020. This relates to the comparative only following disposal of France in 2021.

At 31 December 2021, the shareholder view surplus is £13,074 million (2020: £13,000 million) with a cover ratio of 244% (2020: 202%).

Movement in Solvency II surplus (shareholder view)

Shareholder view	Own funds 2021 £m	SCR 2021 £m	Surplus 2021 £m
Solvency II surplus at 1 January	**25,770**	**(12,770)**	**13,000**
Operating capital generation	**1,645**	**(84)**	**1,561**
Non-operating capital generation	**(1,310)**	**1,156**	**(154)**
Dividends	**(874)**	**—**	**(874)**
Share buyback	**(1,000)**	**—**	**(1,000)**
Hybrid debt repayment	**(1,506)**	**—**	**(1,506)**
Acquired/divested business	**(575)**	**2,622**	**2,047**
Solvency II surplus at 31 December	**22,150**	**(9,076)**	**13,074**

The movement since 31 December 2020 is mainly due to the disposals of France, Italy, Poland, Turkey and Vietnam and operating capital generation, largely offset by repayment of debt, share buyback and the payment of the final 2020 dividend and the interim 2021 dividend. Non-operating capital generation includes the impact of market movements which result in a broadly consistent reduction in both Own funds and SCR due to our hedging strategy.

Our pro forma Solvency II shareholder cover ratio at 31 December 2021 allowing for the further capital return of £3.75 billion[1,2], £1 billion further debt reduction over time (of which £500 million was redeemed on 21 April 2022) and £75 million one-off payment in relation to our staff pension schemes, announced on 2 March 2022, is estimated at 191%. The acquisition of Succession Wealth (see section A.5.2 for further details), will have an estimated five percentage points adverse impact on the cover ratio once completed, and would reduce the pro forma Solvency II cover ratio to 186%. We have also set out plans for reinvestment into the businesses to further accelerate growth. We will be investing £300 million over the next three years into growth. Any additional surplus above the top of our working capital range of 180% after allowing for our investment plans provides the opportunity to consider 'bolt-on' acquisitions that would complement our target growth areas.

1 Subject to shareholder approval and customary conditions including no material deterioration in market conditions or the Company's financial position.
2 There are important notices relating to the B Share Scheme and share consolidation ratio in Section A.5.2. Please read those notices in full in order to obtain a comprehensive understanding of the Company's proposals.

E.1 Own funds

E.1.1 Management of own funds

The primary objective of capital management is to maintain an efficient capital structure, in a manner consistent with our risk profile and the regulatory and market requirements of our business. Capital is a primary consideration across a wide range of business activities, including product development, pricing, business planning, merger and acquisition transactions and asset and liability management. A Capital Management Standard, applicable Group-wide, sets out minimum standards and guidelines over responsibility for capital management including considerations for capital management decisions and requirements for management information, capital monitoring, reporting, forecasting, planning and overall governance.

The Group manages capital in conjunction with solvency capital requirements and in line with the dividend policy and capital framework announced in March 2022.

The Group seeks to, on a consistent basis:

- Operate a sustainable dividend policy with a level of dividend that is resilient in times of stress and is covered by the capital and cash generated from our businesses;
- Maintain sufficient, but not excessive, financial strength in accordance with risk appetite, to support new business growth and satisfy the requirements of our regulators and other stakeholders giving both our customers and shareholders assurance of our financial strength;
- Maintain a Solvency II debt leverage ratio below 30%;
- To the extent that there is excess capital above the top of the working capital range of 160%-180% and excess centre cash not used for investment in the business, consider additional returns to shareholders;
- Retain financial flexibility by maintaining strong liquidity, access to a range of capital markets and significant unutilised committed credit lines; and
- Allocate capital rigorously to support value adding growth and repatriate excess capital where appropriate.

E.1.2 Own funds by tier

The table below sets out a summary of Aviva Group's own funds by tier for year end 2021:

At 31 December 2021, total available own funds to meet the Group SCR equals total eligible own funds, with no tiering limit restrictions.

As at 31 December 2021	Total £m	Tier 1 unrestricted £m	Tier 1 restricted £m	Tier 2 £m	Tier 3 £m
Ordinary share capital (gross of own shares) and share premium	**2,189**	2,189	—	—	—
Surplus funds	**5,192**	5,192	—	—	—
Preference shares	**450**	—	450	—	—
Reconciliation reserve (Group)	**11,739**	11,739	—	—	—
Subordinated liabilities	**5,880**	—	517	5,363	—
An amount equal to the value of net deferred tax assets	**123**	—	—	—	123
Deductions:					
Non-available minority interests at Group level (unaudited)	—	—	—	—	—
Deductions for own funds from other financial sectors (OFS)(unaudited)	**(812)**	(812)	—	—	—
Total basic own funds after deductions	**24,761**	**18,308**	**967**	**5,363**	**123**
Total eligible own funds to meet the consolidated Group SCR (excluding OFS)	**24,761**	**18,308**	**967**	**5,363**	**123**
Total own funds of other financial sectors (unaudited)	**812**	812	—	—	—
Total eligible own funds to meet the consolidated Group SCR (including OFS)	**25,573**	**19,120**	**967**	**5,363**	**123**
Total eligible own funds to meet the minimum consolidated Group SCR[1]	**20,233**	**18,308**	**967**	**958**	**—**

1 Tier 2 own funds are restricted to £958 million which is 20% of the minimum consolidated group SCR (£4,791 million * 20% = £958 million). Tier 3 own funds of £123 million are not eligible to meet the minimum consolidated Group SCR.

As at 31 December 2020	Total £m	Tier 1 unrestricted £m	Tier 1 restricted £m	Tier 2 £m	Tier 3 £m
Ordinary share capital (gross of own shares) and share premium	2,224	2,224	—	—	—
Surplus funds	5,220	5,220	—	—	—
Preference shares	450	—	450	—	—
Reconciliation reserve (Group)	13,905	13,905	—	—	—
Subordinated liabilities	7,866	—	867	6,740	259
An amount equal to the value of net deferred tax assets[1]	96	—	—	—	96
Deductions:					
Non-available minority interests at Group level (unaudited)	(499)	(499)	—	—	—
Deductions for own funds from other financial sectors (OFS)(unaudited)	(1,261)	(1,261)	—	—	—
Total basic own funds after deductions	28,001	19,589	1,317	6,740	355
Total eligible own funds to meet the consolidated Group SCR (excluding OFS)[2]	28,001	19,589	1,317	6,740	355
Total own funds of other financial sectors (unaudited)	1,261	1,261	—	—	—
Total eligible own funds to meet the consolidated Group SCR (including OFS)	29,262	20,850	1,317	6,740	355
Total eligible own funds to meet the minimum consolidated Group SCR[3]	22,339	19,589	1,317	1,433	—

1. Includes a deduction of £4 million in relation to deferred tax assets in excess of the contribution to Group SCR.
2. A change in regulations announced in December 2019 allows French insurers to place a part of the Provision pour Participation aux Excédents ("PPE") into Solvency II own funds. This is included within Group regulatory own funds but is excluded from the shareholder position.
3. Tier 2 own funds are restricted to £1,433 million which is 20% of the minimum consolidated group SCR (£7,167 million * 20% = £1,433 million). Tier 3 own funds of £355 million are not eligible to meet the minimum consolidated Group SCR.

Further information on own funds by tier is presented in QRT S.23.01.22 'Own funds' within section F.2.

Tier 1 unrestricted capital

Unrestricted tier 1 capital of £18,308 million represents 74% of Aviva's eligible own funds to meet the SCR excluding other financial sectors. This consists of Aviva's ordinary share capital and share premium, surplus funds and reconciliation reserve (see section E.1.5). Tier 1 unrestricted capital includes high quality instruments with principal loss absorbing features such as permanence, subordination, undated, absence of redemption incentives, mandatory costs and encumbrances.

Tier 1 unrestricted capital has deductions in respect of minority interests (the minority share of own funds in excess of minority share of diversified SCR) and own funds from other financial sectors (OFS).

Tier 1 restricted

Restricted tier 1 capital of £967 million includes Aviva's preference shares and subordinated debt. None of these instruments include principal loss absorbency features and all qualify as restricted tier 1 capital under transitional provisions.

Tier 2 capital

Aviva's tier 2 capital consists of dated subordinated debt amounting to £5,363 million. Of this £3,033 million qualifies under transitional arrangements and £2,330 million directly qualifies as tier 2 capital under Solvency II. The features of tier 2 capital include subordination, a minimum duration of 10 years with no contractual opportunity to redeem within 5 years, absence of redemption incentives and mandatory costs and encumbrances.

Tier 3 capital

Aviva's tier 3 capital of £123 million consists of net deferred tax assets of £123 million after taking into account the ability to offset assets against deferred tax liabilities.

E.1.3 Details of own funds items

E.1.3.1 Issued share capital and share premium as at 31 December 2021

The Company had an aggregate issued and outstanding ordinary share capital of £941 million and share premium of £1,248 million as at 31 December 2021.

Movement in the year

During 2021, a total of 2,842,866 ordinary shares were allotted and issued by the Company totalling £7 million. On 12 August 2021 Aviva announced a share buyback of ordinary shares for an aggregate purchase price of up to £750 million. On 16 December 2021, Aviva announced the increase and extension of the share buyback programme to £1 billion. In the year ended 31 December 2021, £663 million of shares had been purchased and shares with a nominal value of £42 million have been cancelled, giving rise to an additional capital redemption reserve of an equivalent amount. The share buyback programme completed on the 31 March 2022. The number of shares in issue has reduced by 245,225,489 as at 31 March 2022 in respect of shares acquired and cancelled under the buyback programme.

E.1.3.2 Preference shares in issue as at 31 December 2021

Capital instrument, including nominal, coupon and extent of subordination	Issue date	Redemption date	Callable at par at option of the Company from	Solvency II tier	Solvency II value 2021 £m	Solvency II value 2020 £m
8.750% cumulative irredeemable preference shares £1	20 May 1992	N/A	N/A	Restricted tier 1	**100**	100
8.375% cumulative irredeemable preference shares £1	18 November 1992	N/A	N/A	Restricted tier 1	**100**	100
8.875% cumulative irredeemable preference shares £1	2 September 1992	N/A	N/A	Restricted tier 1	**140**	140
7.875% cumulative irredeemable preference shares £1	2 March 1993	N/A	N/A	Restricted tier 1	**110**	110
Total preference shares					**450**	450

Transitional measures

All of Aviva's preference shares have transitioned as Solvency II tier 1 capital until December 2025 (the end of the transitional period).

E.1.3.3 Subordinated liabilities in issue as at 31 December 2021

Under IFRS, subordinated debt is valued either on an amortised cost basis or at nominal value. Under Solvency II, subordinated debt is valued on a fair value basis, with changes in own credit standing removed for subsequent measurement. A discounted cash flow approach has been used to assess fair value and, for the purpose of the valuation, it is assumed that the option to redeem at the first call date will be exercised.

Capital instrument, including nominal, coupon and extent of subordination	Issue date	Redemption date	Callable at par at option of the Company from	Solvency II tier	Solvency II value 2021 £m	Solvency II value 2020 £m
6.125% £700 million subordinated notes[1]	14 November 2001	14 November 2036	16 November 2026	Tier 2	**810**	861
6.125% £800 million undated subordinated notes[1]	29 September 2003	Undated	29 September 2022	Restricted tier 1	**517**	867
6.875% £600 million subordinated notes[2]	20 May 2008	20 May 2058	20 May 2038	Tier 2	**848**	916
12.000% £162 million subordinated notes	21 May 2009	21 May 2021	N/A	Tier 2	**—**	164
8.250% £500 million subordinated notes	21 April 2011	21 April 2022	N/A	Tier 2	**505**	524
6.625% £450 million subordinated notes[2]	26 May 2011	3 June 2041	3 June 2021	Tier 2	**—**	456
6.125% €650 million subordinated notes[2]	5 July 2013	5 July 2043	5 July 2023	Tier 2	**261**	616
3.875% €700 million subordinated notes[2]	3 July 2014	3 July 2044	3 July 2024	Tier 2	**609**	666
5.125% £400 million subordinated notes[2]	4 June 2015	4 June 2050	4 June 2030	Tier 2	**437**	466
3.375% €900 million subordinated notes[2]	4 June 2015	4 December 2045	4 December 2025	Tier 2	**780**	853
4.500% C$450 million subordinated notes	9 May 2016	10 May 2021	N/A	Tier 3	**—**	259
4.375% £400 million subordinated notes[2]	12 September 2016	12 September 2049	12 September 2029	Tier 2	**400**	421
4.000% £500 million subordinated notes[2]	3 June 2020	3 June 2055	3 March 2035	Tier 2	**466**	497
4.000% C$450 million subordinated notes	2 Oct 2020	2 Oct 2030	N/A	Tier 2	**247**	257
Total subordinated debt					**5,880**	7,823
Other subordinated debt[3]					**—**	43
Total subordinated debt[4]					**5,880**	7,866

1 Instrument callable every five years from first call date.
2 Instrument callable after each interest payment date thereafter.
3 Other subordinated debt at 31 December 2020 represented tier 2 subordinated debt recognised in Italy.
4 Total subordinated debt not included in basic own funds totals £141 million as at 31 December 2021.

Transitional measures

The transitional measures prescribed under Solvency II allow subordinated debt to count towards a firm's available own funds, subject to tiering limits, for a period of up to ten years after 1 January 2016. Subordinated instruments issued in 2015 and thereafter include the required terms as set out in the Solvency II own funds guidelines, including mandatory deferral of both coupons and redemption following breaches in capital requirements. These instruments therefore qualify directly as own funds under the Solvency II regulations.

The subordinated instruments that do not qualify directly as Solvency II own funds met the Solvency I requirements without reliance on waivers and are therefore eligible for Solvency II transitional treatment.

Aviva subordinated instruments using transitional measures are presented, classified by tier, in the table below.

Capital instrument	Solvency 1 regime	Transitional treatment	Solvency II value 2021 £m	Solvency II value 2020 £m	Maturity	Call date
Subordinated debt	Upper tier 2	Transitional restricted tier 1	**517**	867	Undated	Note 1
Subordinated debt	Lower tier 2	Transitional tier 2	**3,033**	4,246	Dated	Note 2

1 All have a first call date that falls within the transitional period.
2 There are two instruments, the 6.875% £600 million 2058 subordinated notes and the 6.125% £700m 2036 subordinated notes, with first call dates after the end of the transitional period.

Movement in the year

On 16 March 2021 the Group completed a £1.0 billion tender offer and redeemed €185 million of the Group's 0.625% €500 million senior notes, €286 million of the Group's 1.875% €750 million senior notes, €349 million of the Group's 6.125% €650 million Tier 2 subordinated debt and £298 million of the Group's 6.125% £800 million restricted Tier 1 subordinated debt. On 10 May 2021 the Group's 4.500% C$450 million subordinated notes reached their final maturity and were redeemed. On 21 May 2021 the Group's 12.000% £162 million subordinated notes reached their final maturity and were redeemed. On 3 June 2021 the Group redeemed its 6.625% £450 million subordinated notes in full at the first call date. Other movements in the total value of subordinated liabilities relate to changes in the foreign exchange rates and the risk-free rates used for the Solvency II valuation of subordinated debt.

E.1.3.4 Own funds items issued by entities other than insurance and insurance holding companies

The table below presents own funds items issued by entities other than insurance and insurance holding companies around the Group.

Country of issue	Entity	Entity type	Tier	Capital instrument	Nominal value £m
UK	General Accident plc	Other related company	Restricted tier 1	Preference shares	250
UK	Friends Life Holdings Limited	Other related company	Tier 2	Subordinated debt	500

The instruments outlined in the table above are those issued by General Accident plc (GA) (£250 million nominal of preference shares) and Friends Life Holdings Ltd (FLH) (£500 million nominal of subordinated liabilities). The subordinated debt issued externally in these companies is held in those companies as a result of acquisitions and mergers that have taken place.

Both GA and FLH are ‘other related companies’, which have no insurance business. The only exposure of GA and FLH to other entities within the Group is through intercompany loans. The liquidity and capital within GA and FLH form part of the overall liquidity and capital held by the Group centre holding companies and, as these entities do not have any operating activities, their subordinated liabilities are structurally further subordinated to claims within the Group’s operating entities, including all policyholder claims. The instruments rely on funds flowing up from other Group entities to service interest and redemption payments.

E.1.4 Surplus funds

The Group has recognised £5,192 million of surplus funds which meet the criteria for classification as tier 1 own funds. These are primarily UK and Ireland with-profits funds where accumulated profits have not yet been made available for policyholders or beneficiaries (see section D.2.4.1(b) ‘Treatment of participating business’). Any restriction by virtue of them being a with-profits fund is presented as an adjustment for restricted items in respect of ring fenced funds.

Surplus funds can only be included in own funds where such funds are explicitly defined in national law. For Aviva this is only the case for the UK and Ireland with-profits funds. Consequently, no surplus funds are recognised outside of the UK and Ireland.

E.1.5 Reconciliation reserve

The table below sets out the constituents of the reconciliation reserve:

As at 31 December	2021 £m	2020 £m
Solvency II excess of assets over liabilities	**22,279**	24,014
Other basic own funds items	**(7,954)**	(7,994)
Foreseeable dividends, distributions and charges	**(337)**	(288)
Own shares held – ordinary share capital	**(51)**	(6)
Restriction to fungibility and transferability of own funds (unaudited)	**(1,056)**	(1,173)
Restricted own fund items in respect of ring fenced funds (RFF) and matching adjustment portfolios (MAP)(unaudited)	**(1,142)**	(648)
Reconciliation reserve (Group)	**11,739**	13,905

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

- Other basic own funds includes ordinary share capital; share premium account; preference shares; surplus funds and deferred tax assets;
- Foreseeable dividends, distributions and charges (see section E.6);
- Own shares held by a subsidiary company (see section E.1.9);
- Restrictions to fungibility and transferability of own funds relates to defined benefit staff pension schemes and provision for tax that would arise on payment of dividends from participating entities to the Group (see section E.1.7); and
- The surplus own funds over notional SCR held within ring fenced funds (RFF) and matching adjustment portfolios (MAP) is restricted (see section E.1.8).

The sensitivity of the Solvency II excess of assets over liabilities is included within the Solvency II surplus sensitivities shown in section C.7 and is reflected in the SCR covered in Section E.2.

E.1.6 Differences between IFRS equity and the excess of assets over liabilities as calculated for Solvency II

The table below lists the material differences between equity as shown in the financial statements and the excess of assets over liabilities as calculated under Solvency II:

As at 31 December	2021 £m	2020 £m
Total Group equity on an IFRS basis	**19,454**	20,560
Elimination of goodwill and other intangible assets		
Goodwill	**(1,741)**	(1,773)
Acquired value-in-force business	**(1,542)**	(1,758)
Deferred acquisition costs (net of deferred income)	**(2,544)**	(3,041)
Other intangibles	**(422)**	(639)
Elimination of unallocated divisible surplus	**1,960**	10,554
Differences between Solvency II and IFRS gross technical provisions		
Valuation differences on best estimate liabilities (net of transitional measures)[1]	**15,792**	11,997
Inclusion of risk margin (net of transitional measures)	**(1,601)**	(3,322)
Valuation difference on reinsurance recoverable	**(3,840)**	(3,742)
Net deferred tax[2]	**(597)**	(1,191)
Valuation difference on other insurance payables/receivables	**(2,206)**	(2,576)
Revaluation of subordinated liabilities	**(449)**	(795)
Other valuation differences[3]	**15**	(260)
Solvency II net assets (gross of non-controlling interests)	**22,279**	24,014
Difference between IFRS and Solvency II net assets	**2,825**	3,454

1 The valuation differences on best estimate liabilities reported in the above table of £15,792 million (2020: £11,997 million) is gross of reinsurance recoverables and net of transitional measures on technical provisions.
2 Net deferred tax includes the tax effect of all other reconciling items in the table above which are shown gross of tax.
3 Other valuation differences include other fair value adjustments.

E.1.7 Restriction to fungibility and transferability of own funds *(unaudited)*

At 31 December 2021 the Group recognised the following restrictions in respect of fungibility and transferability of own funds:

As at 31 December	2021 £m	2020 £m
Defined benefit staff pension schemes	**990**	1,121
Tax arising on the payments of dividends	**66**	52
Restriction to fungibility and transferability of own funds (unaudited)	**1,056**	1,173

Defined benefit staff pension schemes

Where pension schemes contribute positively to eligible own funds, any excess of these eligible own funds above the marginal contribution to the Group diversified SCR of the pension schemes is restricted to nil. For those schemes where there is a negative contribution to eligible own funds, this negative contribution is fully recognised on the Solvency II balance sheet and so no restriction is required. The major pension schemes are recognised in the Group balance sheet from the consolidation of Aviva Employment Services (AES). AES is an ancillary service company that is a subsidiary of Aviva Group Holdings (AGH), an insurance holding company. Consequently, deductions for non-available own funds have been recognised in respect of entities in addition to those identified as being within the scope of the Solvency II regulations.

At 31 December 2021, there is a positive contribution of £2,292 million to basic own funds arising from those pension schemes which are subject to a fungibility restriction and the marginal contribution of these pension schemes to the SCR is £1,302 million. This would imply a contribution to Solvency II surplus of £990 million. Therefore, a fungibility restriction of £990 million (i.e. £2,292 million – £1,302 million) is required so the contribution to Solvency II surplus is £nil.

Tax arising on the payment of dividends

In certain territories where the Group operates, the payment of dividends from Group participations to holding companies gives rise to a withholding tax charge. Where such tax applies, a Group fungibility adjustment is made to represent the required tax provision in own funds. The amount of dividend tax provided for at 31 December 2021 is £66 million.

E.1.8 Restricted own funds items in respect of ring fenced funds (RFF) and matching adjustments portfolio (MAP) (unaudited)

As at 31 December 2021, the total of the excess of assets and liabilities within RFFs and MAPs at Group level amounted to £7,794 million, of which £1,142 million is restricted from Group own funds as summarised below:

- All material with-profits funds are treated as RFFs. Where a RFF exists, the own funds in excess of the notional SCR of the RFF are restricted and deducted from Group own funds as an adjustment to the reconciliation reserve. In particular, Aviva's with-profits funds exist in the UK in Aviva Life & Pensions UK (AVLAP).
- In applying Article 80 of the Solvency II Delegated Acts to the Reattributed Inherited Estate External Support Account (RIEESA) of AVLAP, the surplus of own funds over the notional capital requirement, where the capital requirement includes a buffer in addition to the notional SCR, is not restricted. This surplus is known as the available headroom. The objective of this buffer is to ensure the policyholders of the New With-Profits Sub-Fund (NWPSF) of AVLAP are not exposed to unacceptable risk of failing to meet statutory capital requirements. The headroom test is considered an appropriate indication of the levels of assets in the RIEESA which are available to absorb losses elsewhere in the business and are not part of the RFF.

- A restriction of £48 million is made in relation to the value of assets held in the Contingent Capital Account (CCA) as at 31 December 2021. The CCA is a segregated custody account to provide additional security to the Aviva Staff Pension Scheme and as such is deemed non available capital.
- There are no MAPs within the Group that have any surplus in excess of their notional SCR, and as a result no restriction to own funds has been applied.

The remaining excess of assets and liabilities within RFFs and MAPs at Group level after the above restrictions amounted to £6,652 million. This balance is driven by the inclusion of own funds up to the level of notional SCR for each RFF and MAP plus the allowable RIEESA headroom and shareholder share of future bonuses.

E.1.9 Information on own funds

Group own funds are derived from the Solvency II excess of assets over liabilities using the default accounting consolidation-based method (method 1).

Intra-group transactions with entities that are fully consolidated are eliminated on the face of the balance sheet with the primary exceptions relating to the risk margin (see section D.2.2.4(e)), transitional measures on technical provisions (see section D.2.2.1(c)) and matching adjustment (see section D.2.2.3(c)).

In addition, when arriving at Group own funds, intra-group transactions of entities included through either the adjusted equity method or proportional share of own funds according to relevant sectoral values are eliminated in own funds, with all intra-group transactions netted off in the reconciliation reserve.

E.2 Solvency Capital Requirement (SCR) and Minimum Capital Requirement (MCR)

E.2.1 Group SCR calculation method (unaudited)

Aviva calculates its Group SCR using an accounting consolidation-based method (method 1). This method considers Group as a single entity and allows for diversification between insurance entities. The SCR for non-insurance entities is added separately to the SCR for the insurance entities to obtain the consolidated Group SCR. The method used to calculate the minimum consolidated Group SCR is outlined in section E.2.3.

E.2.2 Solvency Capital Requirement (SCR) *(unaudited)*

The Group SCR at 31 December 2021 is £12,499 million (2020: £16,441 million). The Group SCR decreased in 2021 primarily as a result of the disposals of France, Italy, Poland, Turkey and Vietnam in 2021 and increases in interest rates.

This section contains breakdowns of the Group SCR by risk and an analysis of the main sources of diversification. The final amount of the Group SCR is still subject to supervisory assessment.

Group SCR split between internal model and standard formula and by risk

Aviva uses a partial internal model (PIM), which is made up of entities that use an internal model (IM) and entities that use the standard formula (SF). Undertakings in scope of the internal model are detailed in section E.4.2.

A more detailed breakdown of the Group SCR by risk component is shown in the following table, including the split of each component between internal model and standard formula. Each risk component includes the impact of diversification within that component, whilst the diversification line includes diversification between risk components and the diversification between internal model and standard formula entities (known as PIM diversification). The loss-absorbing capacity of technical provisions (LACTP) is embedded within risk components. The "other risks" component mainly comprises partial internal model consolidation adjustments and minor risks that do not fit into other components and the "other adjustments" component includes adjustments to the SCR for expected changes to own funds over the next year.

Group SCR by risk component	Total £m	IM £m	SF £m
Market risk	10,197	7,608	2,589
Counterparty default risk	403	304	99
Life underwriting risk	6,526	6,237	289
Health underwriting risk	313	—	313
Non-life underwriting risk	1,116	1,080	36
Operational risk	2,469	2,388	81
Other risks	150	150	—
Loss-absorbing capacity of technical provisions	(12)	—	(12)
Loss-absorbing capacity of deferred taxes	(1,795)	(1,356)	(439)
Other adjustments	(363)	(363)	—
Total undiversified components	19,004	16,048	2,956
Diversification	(6,897)		
SCR excluding capital add-on	12,107		
Capital add-ons already set	—		
SCR for non-insurance entities	327		
SCR for non-controlled participations	65		
SCR	**12,499**		

Diversification benefits
Aviva performs an analysis of the diversification benefit by risk and by business unit to provide assurance that the level of diversification applied is reasonable given Aviva's structure, mixture of risks and underlying risk calibrations and correlations.

Aviva's reported Group diversification benefit at 31 December 2021 is £6,897 million (2020: £8,314 million), which includes diversification between risk components and PIM diversification, but does not include diversification within each risk component. The diversification ratio at 31 December 2021 is 36% (2020: 34%) of the total undiversified components of £19,004 million (2020: 24,141 million), which already allows for diversification within risk components.

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 size of the diversification benefits arising between entities within the Group are primarily driven by the risk profiles of those entities. Ring fenced funds and non-insurance entities do not contribute to the diversification benefit, which means that no diversification benefits arise from the UK with-profits funds. Within the internal model entities, the UK Life entities make up a large proportion of the Group and therefore strongly influence the Group's risk profile. The non-life businesses diversify well as they have a different risk profile to the rest of the Group.

The final source of diversification benefits is PIM diversification. Aviva uses a partial internal model to calculate the total Group SCR, which involves modelling internal model entities and standard formula entities separately and then combining them using a correlation matrix.

The PIM diversification benefits arise from the assumed correlations between the internal model block and the standard formula risk modules.

Annex I of the Other Information section, S.25.02.22, outlines the disaggregated SCR as set out in Article 336 of the Solvency II Delegated Acts.

E.2.3 Minimum consolidated Group SCR
Since the Minimum Capital Requirement (MCR) is not defined at the Group level under Solvency II, the minimum consolidated Group SCR is calculated as the sum of the MCR for fully-owned insurance undertakings and the proportional share of MCRs for partially owned insurance undertakings within the Group.

The MCR for UK and EEA insurance undertakings is calculated using a linear formula that applies prescribed factors to technical provisions, written premiums, capital at risk, deferred tax and administrative expenses (all net of reinsurance), subject to a cap (45% of the solo SCR) and a floor (25% of the solo SCR). The MCRs for non-EEA insurance undertakings are their local minimum solvency requirements.

The minimum consolidated Group SCR at 31 December 2021 is £4,791 million (2020: £7,167 million).

E.2.4 Standard formula simplifications *(unaudited)*
Where the SCR is calculated using the standard formula, the Solvency II regulations specify simplified calculations that may be used across all of the standard formula risk modules except operational risk. Aviva has not used any of these simplified calculations to calculate the year end 2021 SCR.

E.2.5 Standard formula Undertaking Specific Parameters (USPs)*(unaudited)*
Where the SCR is calculated using the standard formula, Solvency II regulations specify certain USPs that may be used in place of the standard parameters, subject to regulatory approval. These are available for life and health revision risks, and non-life (including some health) premium and reserve risks. Aviva has not used any USPs to calculate the year-end 2021 SCR.

E.2.6 Transitional measures, disclosure of capital add-ons and USPs *(unaudited)*
Regulators have the power to impose capital add-ons to the SCR or to require the use of certain USPs in the standard formula, where there are significant deficiencies in a firm's internal model or partial internal model, or where a standard formula firm's risk profile deviates significantly from the assumptions underlying the standard formula. Aviva is not required to hold any capital add-ons or use any specified USPs.

E.3 Use of the duration-based equity risk sub-module in the calculation of the SCR *(unaudited)*
Insurance firms that have particular types of retirement provision business managed on a ring-fenced basis, for which the SCR is calculated using the standard formula, are entitled to calculate the equity risk capital requirement using a specified duration-based approach. Aviva does not use the duration-based equity risk sub-module in the calculation of the SCR.

E.4 Differences between the standard formula and any internal model used *(unaudited)*
E.4.1 Use of the internal model in Aviva's business

The internal model is used in day-to-day risk management and business decisions across Aviva, informing key business processes and activities, both across the Group and at a legal entity level.

"Use" does not imply that the model is used to directly run the business, but rather that the outputs of the internal model and the model itself are used to support decision-making, while acknowledging its limitations and balancing against other elements of the risk management framework.

The primary purpose of the internal model is to calculate the capital metrics required for regulatory reporting under Solvency II for each of the internal model legal entities and for the Group as whole. The outputs of the model are used internally and externally in risk based performance reporting and risk and financial strength reporting to the senior management, the Board, shareholders and rating agencies.

The granular metrics produced by the internal model are also used to set Group-wide strategy and support a series of other activities, including:

- Strategy & business planning: allocating capital between legal entities to measure risk-adjusted return and set risk appetites as part of the business planning cycle;
- Pricing: improving pricing and product design by assessing the level of capital required to support different types of product as calculated in the internal model;
- Transactions: assessing the appropriateness of potential acquisitions or business investments through the impact on surplus capital;
- Reinsurance: identifying the need for targeted reinsurance contracts to mitigate undesirable risk exposures, through modelling potential adverse scenarios; and
- Asset and liability management: measuring the impact of market changes on assets and liabilities to drive investment strategy.

Further details on how the internal model is fully integrated into Aviva's risk management system are given in section B.3.3.

E.4.2 Undertakings in scope of the internal model and integration with standard formula to derive the partial internal model

The Group has regulatory approval to use a partial internal model to calculate the SCR.

The table below shows the business units that are in scope of the Group partial internal model and whether they contain internal model and/or standard formula entities. The risks that are considered in the calculation of the Group SCR can be broadly grouped into the following risk categories: market risks, credits risks, general insurance underwriting risks, life and pensions underwriting risks and operational risk.

Management business unit	Internal model entities	Standard formula entities
UK & Ireland Life	✓	✓[1]
UK & Ireland General Insurance	✓	✓[1]
Canada General Insurance	✓	
Aviva Investors		✓
Aviva International Insurance	✓	✓
Asia Pacific		✓
Other activities		
Aviva Group Centre	✓	✓
Staff Pension Schemes		✓

1 Whilst our Irish subsidiaries use the standard formula for their Solo SCR, business reinsured from these entities into our UK subsidiaries is modelled using our internal model.

In addition, from 2017, Aviva has included currency risk in respect of the standard formula entities included in our Group partial internal model (including both currency translation and currency mismatch risks) within our internal model.

As noted above (see section E.2.2), Aviva has chosen to implement a partial internal model Group-wide, using integration technique 2, as detailed in Annex XVIII of the Delegated Acts, to combine the results of the internal model and standard formula calculations.

This technique requires specifying upper and lower bounds for correlations between the entire internal model block and each of the standard formula risk modules/sub-modules. A correlation matrix is then constructed with correlations between these bounds such that it maximises the basic SCR.

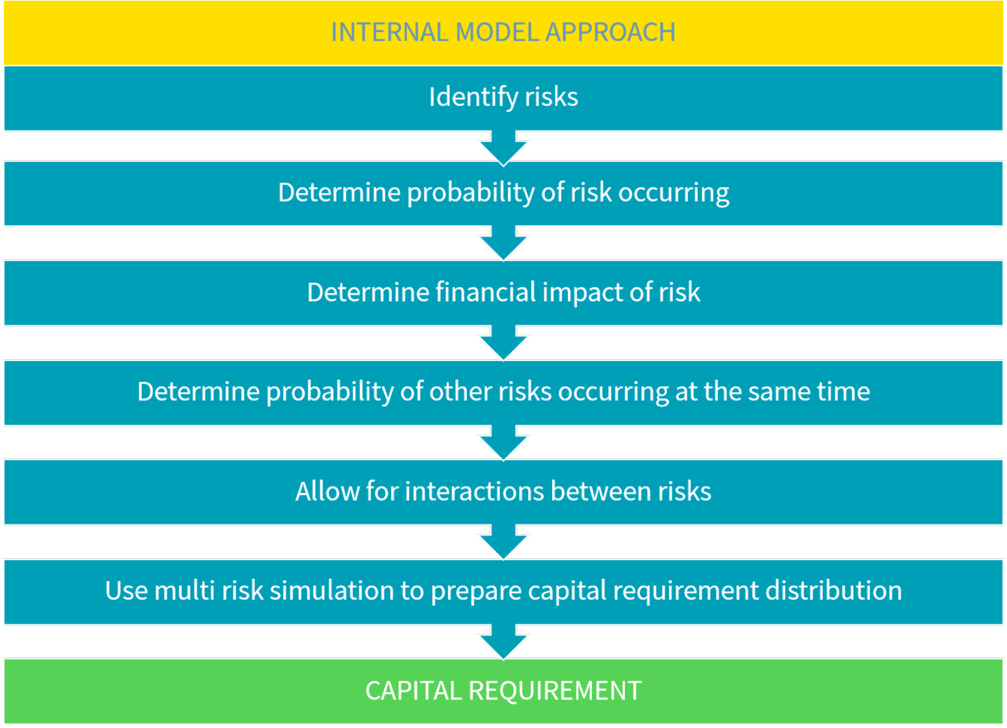
Given the multi-entity structure of the Group, and the varying sizes of our entities, our partial internal model has been designed to accurately model capital requirements for the major management business units with risk profiles that we consider to be of a nature, scale, or complexity that is distinct from that allowed for in the standard formula calculation.

E.4.3 Calculation of the internal model

E.4.3.1 Methods used

The purpose of the internal model is to identify the risks to which Aviva is exposed, model these risks using suitably calibrated inputs and aggregate them to compute the SCR. The internal model produces an aggregate distribution of the change in basic own funds over a one year time horizon from which the SCR can be directly derived (i.e. the SCR is the 99.5th percentile) in line with regulatory requirements.

An overview of the Group's approach is shown below.



Aviva's internal model allows flexibility in determining which statistical distributions to use to represent risk factors (such as mortality, interest rates or credit risk) including those with heavy tails and empirical distributions. The calibrations are not limited to assuming risks follow normal (or similar) distributions, as is implicit in the standard formula. This flexibility is important to ensure that we accurately model the behaviour of the most important risks to Aviva.

For the majority of risk factors, the statistical distributions are fitted directly to the relevant data available. However, for some risk types, such as general insurance liability risks, credit risk 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 accurately reflected.

A wide range of testing and review processes are performed to ensure that the calibrations are appropriate, and the internal model outputs are reasonable. These range from bottom–up reviews of the material assumptions used in the modelling process and testing of the calibrations and loss functions (i.e. the mathematical formulae used as a proxy for the calculations in the asset and liability management models for the valuation of the assets and liabilities on the balance sheet), to top-down stress and scenario testing, as well as profit and loss attribution exercises.

Aviva has chosen to implement a partial internal model Group-wide, defined as using a combination of internal model and standard formula approaches to calculate solvency capital requirements for different components of the business. These components are generally legal entities or distinct blocks of business, rather than risks (further details are given in section E.4.2 above). In order to integrate the internal model capital calculations with the standard formula calculations the partial internal model technique 2 (as described in Annex XVIII of the Delegated Acts) is used.

E.4.3.2 Data used in the internal model

The key data we use in the Group internal models are:

- Accounting Data (IFRS) – the Solvency II valuation of assets and liabilities is required to be consistent with IFRS, except where the IFRS measurement is on a non-economic basis. For the Solvency II balance sheet, most financial investments and certain non-technical liabilities are carried on the IFRS basis;
- Policy Data – this includes claims as well as policies in-force and past policies;
- Operational Risk Data – the Group use a combination of internal loss experience data (specific to Aviva), as well as data held in an external database of industry-wide Operational Risk losses, which is provided by Operational Risk Insurance Consortium (ORIC);
- Financial Market Data – the Group's calibration process for market and credit risks often uses external financial market asset data (e.g. FTSE index returns);
- Internal Asset Data – the valuation of the base Solvency II balance sheet relies on the market valuation of assets, as well as mark to model valuations of certain non-traded assets. The data used is taken from the accounting process and, therefore, most data will be included under the element 'accounting data'; and
- Other Data – data that does not fall under the above five categories. This may include all data (including asset data) used for the calculation of the required economic capital under the Solvency II regime and the technical provisions including numerical, census or classification information, but not qualitative information.

Aviva's Solvency II data governance business standard establishes the control environment and the criteria to be used to assess the quality of the data in terms of appropriateness, completeness, accuracy and consistency before using it for the SCR calculation.

E.4.3.3 Calculation of the Group SCR and subsidiary SCR

Aviva generally uses the same approach, including methodology and assumptions, for each subsidiary's contribution to the Group SCR and the subsidiary's own Solo SCR, apart from where the Solvency II rules require a different approach: for example, the treatment of participations and intra-group transactions. Whilst our Irish subsidiaries use the standard formula for their Solo SCR, business reinsured from these entities into our UK subsidiaries is modelled using our internal model.

E.4.3.4 Impact on risk profile

It is a key requirement for the use of an internal model that it should reflect the actual risks faced by the business. The internal model was assessed as being appropriate when Aviva was granted permission to use it in the calculation of its SCR and subsequent approval of changes to the internal model.

Aviva continuously assesses the model's ongoing appropriateness using various techniques, including a large number of tests that form part of the validation framework referred to in section B.3.5. These tests include comparisons of the internal model results both with management views and with historical experience. Where a significant difference is noted, consideration is given as to whether this difference merits holding additional capital.

In Aviva's work on the year-end 2021 results, no significant concerns were identified with its appropriateness in determining the capital requirements of the Group, and hence no additional capital was considered necessary.

E.4.4 Differences between standard formula and internal model methodologies and underlying assumptions

The key difference between the standard formula and internal model methodology is that the methodology and assumptions for internal model risks are tailored to Aviva's risk profile, whereas the standard formula is a standardised approach.

The standard formula prescribes formulae to calculate the capital required driven by exposure to various risks; for the internal model the Group calibrate a distribution of losses for each risk and use these, along with a set of correlations between these risks, to derive a joint distribution of losses for the business. The capital requirement is derived from this joint distribution, to ensure the Group holds sufficient capital with 99.5% confidence. Calibrating risks for the internal model, therefore, requires detailed data analysis and use of statistical models to derive the most appropriate distribution.

The two bases use a different treatment for loss absorbing capacity of technical provisions: under the internal model, the Group use loss functions net of this, whereas in the standard formula calculation, this is applied as an adjustment to the gross basic solvency capital requirement (BSCR). The calculation of loss absorbing capacity of tax also differs between the two approaches as this is specified in the standard formula calculation.

One key difference in the aggregation approach for internal model and standard formula results from the different modelling approaches:

- For the internal model, Aviva determines an aggregate distribution of losses by combining marginal risk distributions for each risk using a Gaussian Copula and applying loss functions; and
- The standard formula uses a hierarchical correlations approach, where explicit correlation matrices are used to combine sub-module losses within each risk module, and then to combine the calculated losses of the different risk modules.

A key feature of our approach compared to the standard formula is that we can capture fat-tailed risks (i.e. risks where the probability of extreme values is higher than using the normal distribution) and non-linear loss profiles. In addition, the Group are able to model diversification more granularly and, in particular, capture important features such as geographical diversification. Another key difference is that the internal model reflects all material quantifiable risks to which Aviva is exposed, whereas the standard formula only considers a subset of risks.

Market risks module

- The internal model considers changes in market volatility, which are not explicitly modelled in the standard formula. Interest rate and equity volatility risks are particularly important for business with guarantees.
- Credit risk – Aviva's model includes sovereign bonds, which are not currently modelled under standard formula; the model also explicitly considers default migration and spread risks including some allowance for diversification between various credit exposures.
- Interest rates are modelled using three principal components, not just the change in the level of interest rates as under the standard formula.
- Inflation risk – Aviva explicitly models inflation risk – there is no inflation risk in the standard formula.
- Equity/property risk – only exposure to asset price falls is reflected in the standard formula, whereas Aviva models the full distribution of equity/property returns, allowing us to capture exposure to equity/property values rising or falling.
- Currency risk – Aviva models currency translation risk reflecting that exposure to this risk varies with the impact of the other risks, and that there is diversification between currencies, whereas these factors are not assessed in the standard formula.

Health risk module

- Health business written by our Life businesses is separately modelled. Currently, health business written by our non-life businesses is assessed using the standard formula.

Counterparty default module
- The standard formula considers all counterparty default risk under one module; whereas for the internal model, the Group tailors our modelling to the type of the counterparty and the nature of the exposure.

Life insurance module
- The standard formula assumes standard portfolios, whereas Aviva calibrations are tailored to its specific portfolios.

Non-life insurance module
- Aviva has built a general insurance specific model that allows the Group to model the specific risks and exposures of the Aviva. General Insurance business. The standard formula doesn't consider the impact of inflation explicitly, which is one of the key risks for the Aviva General Insurance business.
- In addition, the Group distinguishes between commercial and personal lines, whereas the standard formula does not reflect this level of granularity.

Operational risk
- Aviva models operational risks using a scenario-based approach. The standard formula uses a formulaic approach.

E.5 Non-compliance with the minimum consolidated Group SCR and Group SCR

Aviva complied with the minimum consolidated Group SCR and Group SCR at all times during 2021.

E.6 Any other material information

Foreseeable dividends

Dividends are deducted from own funds as soon as they are "foreseeable". For interim dividends, this is considered at the point at which they are declared by the directors, and, for final dividends, this is considered to be the point at which the Board approves the dividend to be put forward to shareholders for approval at the Annual General Meeting (AGM).

A final dividend of 14.70 pence per share (estimated cash payout of c. £545 million) was approved by the Aviva plc Board on 1 March 2022 to be paid on 19 May 2022 following approval at the AGM on the 9 May 2022. This was not deemed foreseeable at 31 December 2021 and not deducted from own funds.

Section F

Other information

In this Chapter

F.1 Cautionary statement

This announcement contains, and we may make other verbal or written ‘forward-looking statements’ with respect to certain of Aviva’s plans and current goals and expectations relating to future financial condition, performance, results, strategic initiatives and objectives. Statements containing the words ‘believes’, ‘intends’, ‘expects’, ‘projects’, ‘plans’, ‘will’, ‘seeks’, ‘aims’, ‘may’, ‘could’, ‘outlook’, ‘likely’, ‘target’, ‘goal’, ‘guidance’, ‘trends’, ‘future’, ‘estimates’, ‘potential’ and ‘anticipates’, and words of similar meaning, are forward-looking. By their nature, all forward-looking statements involve risk and uncertainty. Accordingly, there are or will be important factors that could cause actual results to differ materially from those indicated in these statements. Aviva believes factors that could cause actual results to differ materially from those indicated in forward-looking statements in the announcement include, but are not limited to: the impact of ongoing uncertain conditions in the global financial markets and the local and international political and economic situation generally (including those arising from the Russia-Ukraine conflict); market developments and government actions (including those arising from the evolving relationship between the UK and the EU); the effect of credit spread volatility on the net unrealised value of the investment portfolio; the effect of losses due to defaults by counterparties, including potential sovereign debt defaults or restructurings, on the value of our investments; changes in interest rates that may cause policyholders to surrender their contracts, reduce the value or yield of our investment portfolio and impact our asset and liability matching; the unpredictable consequences of reforms to reference rates, including LIBOR; the impact of changes in short or long-term inflation; the impact of changes in equity or property prices on our investment portfolio; fluctuations in currency exchange rates; the effect of market fluctuations on the value of options and guarantees embedded in some of our life insurance products and the value of the assets backing their reserves; the amount of allowances and impairments taken on our investments; the effect of adverse capital and credit market conditions on our ability to meet liquidity needs and our access to capital; changes in, or restrictions on, our ability to initiate capital management initiatives; changes in or inaccuracy of assumptions in pricing and reserving for insurance business (particularly with regard to mortality and morbidity trends, lapse rates and policy renewal rates), longevity and endowments; a cyclical downturn of the insurance industry; the impact of natural and man-made catastrophic events (including the impact of COVID-19) on our business activities and results of operations; the transitional, litigation and physical risks associated with climate change; our reliance on information and technology and third-party service providers for our operations and systems; the impact of the Group’s risk mitigation strategies proving less effective than anticipated, including the inability of reinsurers to meet obligations or unavailability of reinsurance coverage; poor investment performance of the Group’s asset management business; the withdrawal by customer’s at short notice of assets under the Group’s management; failure to manage risks in operating securities lending of Group and third-party client assets; increased competition in the UK and in other countries where we have significant operations; regulatory approval of changes to the Group’s internal model for calculation of regulatory capital under the UK’s version of Solvency II rules; the impact of actual experience differing from estimates used in valuing and amortising deferred acquisition costs (DAC) and acquired value of in-force business (AVIF); the impact of recognising an impairment of our goodwill or intangibles with indefinite lives; changes in valuation methodologies, estimates and assumptions used in the valuation of investment securities; the effect of legal proceedings and regulatory investigations; the impact of operational risks, including inadequate or failed internal and external processes, systems and human error or from external events and malicious acts (including cyber attack and theft, loss or misuse of customer data); risks associated with arrangements with third parties, including joint ventures; our reliance on third-party distribution channels to deliver our products; funding risks associated with our participation in defined benefit staff pension schemes; the failure to attract or retain the necessary key personnel; the effect of systems errors or regulatory changes on the calculation of unit prices or deduction of charges for our unit-linked products that may require retrospective compensation to our customers; the effect of simplifying our operating structure and activities; the effect of a decline in any of our ratings by rating agencies on our standing among customers, broker-dealers, agents, wholesalers and other distributors of our products and services; changes to our brand and reputation; changes in tax laws and interpretation of existing tax laws in jurisdictions where we conduct business; changes to International Financial Reporting Standards relevant to insurance companies and their interpretation (for example, IFRS 17); the inability to protect our intellectual property; the effect of undisclosed liabilities, separation issues and other risks associated with our business disposals; and other uncertainties, such as diversion of management attention and other resources, relating to future acquisitions, combinations or disposals within relevant industries; the policies, decisions and actions of government or regulatory authorities in the UK, the EU, the US, Canada or elsewhere, including changes to and the implementation of key legislation and regulation. Please see Aviva's most recent Annual Report and Solvency and Financial Condition Report (SFCR) for further details of risks, uncertainties and other factors relevant to the business and its securities.

Aviva undertakes no obligation to update the forward looking statements in this announcement or any other forward-looking statements we may make. Forward-looking statements in this report are current only as of the date on which such statements are made.

This report has been prepared for, and only for, the members of the Company, as a body, and no other persons. The Company, its directors, employees, agents or advisers do not accept or assume responsibility to any other person to who this document is shown or into whose hands it may come, and any such responsibility or liability is expressly disclaimed.

Aviva plc is a company registered in England No. 2468686.
Registered office
St Helen's
1 Undershaft
London
EC3P 3DQ

F.2 Public disclosure templates

Annex I

S.02.01.02

Balance sheet

Amount in £000s		Solvency II Value
Assets		C0010
Intangible assets	R0030	—
Deferred tax assets	R0040	122,620
Pension benefit surplus	R0050	2,753,786
Property, plant & equipment held for own use	R0060	511,584
Investments (other than assets held for index-linked and unit-linked contracts)	R0070	142,837,140
Property (other than for own use)	R0080	1,875,918
Holdings in related undertakings, including participations	R0090	52,907,097
Equities	R0100	3,337,572
Equities - listed	R0110	3,113,828
Equities - unlisted	R0120	223,744
Bonds	R0130	76,391,459
Government Bonds	R0140	33,977,096
Corporate Bonds	R0150	32,579,322
Structured notes	R0160	78,000
Collateralised securities	R0170	9,757,041
Collective Investments Undertakings	R0180	1,660,945
Derivatives	R0190	5,364,686
Deposits other than cash equivalents	R0200	1,178,537
Other investments	R0210	120,926
Assets held for index-linked and unit-linked contracts	R0220	159,086,186
Loans and mortgages	R0230	20,515,011
Loans on policies	R0240	243,579
Loans and mortgages to individuals	R0250	386,381
Other loans and mortgages	R0260	19,885,051
Reinsurance recoverables from:	R0270	11,137,867
Non-life and health similar to non-life	R0280	1,324,917
Non-life excluding health	R0290	1,316,421
Health similar to non-life	R0300	8,496
Life and health similar to life, excluding health and index-linked and unit-linked	R0310	4,723,620
Health similar to life	R0320	338,098
Life excluding health and index-linked and unit-linked	R0330	4,385,522
Life index-linked and unit-linked	R0340	5,089,330
Deposits to cedants	R0350	—
Insurance and intermediaries receivables	R0360	409,428
Reinsurance receivables	R0370	518,185
Receivables (trade, not insurance)	R0380	2,167,090
Own shares (held directly)	R0390	50,741
Amounts due in respect of own fund items or initial fund called up but not yet paid in	R0400	—
Cash and cash equivalents	R0410	2,034,820
Any other assets, not elsewhere shown	R0420	176,653
Total assets	R0500	**342,321,111**
Liabilities		
Technical provisions - Non-life	R0510	10,554,824
Technical provisions - non-life (excluding health)	R0520	10,444,086
Technical provisions calculated as a whole	R0530	—
Best Estimate	R0540	9,991,126
Risk margin	R0550	452,960
Technical provisions - health (similar to non-life)	R0560	110,738
Technical provisions calculated as a whole	R0570	—
Best Estimate	R0580	104,784
Risk margin	R0590	5,954
Technical provisions - life (excluding index-linked and unit-linked)	R0600	109,989,697
Technical provisions - health (similar to life)	R0610	1,078,180
Technical provisions calculated as a whole	R0620	—
Best Estimate	R0630	1,025,713
Risk margin	R0640	52,467
Technical provisions - life (excluding health and index-linked and unit-linked)	R0650	108,911,517
Technical provisions calculated as a whole	R0660	—
Best Estimate	R0670	107,863,211
Risk margin	R0680	1,048,306
Technical provisions - index-linked and unit-linked	R0690	160,796,103
Technical provisions calculated as a whole	R0700	—
Best Estimate	R0710	160,754,195
Risk margin	R0720	41,908
Contingent liabilities	R0740	—
Provisions other than technical provisions	R0750	479,034
Pension benefit obligations	R0760	484,692
Deposits from reinsurers	R0770	17,467
Deferred tax liabilities	R0780	2,606,434
Derivatives	R0790	4,779,664
Debts owed to credit institutions	R0800	599,537
Financial liabilities other than debts owed to credit institutions	R0810	13,998,877
Insurance & intermediaries payables	R0820	2,378,401
Reinsurance payables	R0830	244,102
Payables (trade, not insurance)	R0840	5,604,044
Subordinated liabilities	R0850	6,020,943
Subordinated liabilities not in Basic Own Funds	R0860	140,872
Subordinated liabilities in Basic Own Funds	R0870	5,880,071
Any other liabilities, not elsewhere shown	R0880	1,488,212
Total liabilities	R0900	**320,042,031**
Excess of assets over liabilities	R1000	**22,279,080**

Annex I

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Premiums, claims and expenses by line of business

Amounts in £000s										
		Line of business for: life insurance obligations						Life obligations		
		Health insurance	Insurance with profit participation	Index-linked and unit-linked insurance	Other life insurance	Annuities stemming from non-life insurance contracts and relating to health insurance obligations	Annuities stemming from non-life insurance contracts and relating to insurance obligations other than health insurance obligations	Health reinsurance	Life reinsurance	Total
		C0210	C0220	C0230	C0240	C0250	C0260	C0270	C0280	C0300
Premiums written										
Gross - Direct Business	R1410	486,583	5,729,404	16,278,185	9,416,568	—	—	—	48	31,910,788
Reinsurers' share	R1420	54,379	13,401	697,233	3,903,051	—	—	—	(10)	4,668,054
Net	R1500	432,204	5,716,003	15,580,952	5,513,517	—	—	—	58	27,242,734
Premiums earned										
Gross - Direct Business	R1510	486,583	5,729,404	16,278,185	9,416,569	—	—	—	48	31,910,789
Reinsurers' share	R1520	54,379	13,401	697,233	3,903,051	—	—	—	(10)	4,668,054
Net	R1600	432,204	5,716,003	15,580,952	5,513,518	—	—	—	58	27,242,735
Claims incurred										
Gross - Direct Business	R1610	228,243	6,799,050	14,248,860	5,520,623	18,255	52,122	60	53,620	26,920,833
Reinsurers' share	R1620	41,348	33,093	5,906	2,111,877	(82)	(10,449)	—	—	2,181,693
Net	R1700	186,895	6,765,957	14,242,954	3,408,746	18,337	62,571	60	53,620	24,739,140
Changes in other technical provisions										
Gross - Direct Business	R1710	(67,811)	(888,188)	(20,527,576	(159,860)	—	13,955	187	195,917	(21,433,376)
Reinsurers' share	R1720	(56,299)	15,473	(1,252,985)	(913,621)	—	—	—	9,925	(2,197,507)
Net	R1800	(11,512)	(903,661)	(19,274,591	753,761	—	13,955	187	185,992	(19,235,869)
Expenses incurred	R1900	87,868	456,252	1,035,295	1,033,316	6,734	—	—	11,393	2,630,858
Other expenses	R2500	—	—	—	—	—	—	—	—	22,976
Total expenses	R2600	—	—	—	—	—	—	—	—	2,653,834

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	Income protection insurance	Workers' compensation insurance	Motor vehicle liability insurance	Other motor insurance	Marine, aviation and transport insurance	Fire and other damage to property insurance	General liability insurance	Credit and suretyship insurance	Legal expenses insurance	Assistance	Miscellaneous financial loss
		C0010	C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100	C0110	C0120
Premiums written													
Gross - Direct Business	R0110	697,061	238,772	—	2,874,618	1,265,962	67,578	4,013,692	1,210,308	121,359	47,597	33,043	70,061
Gross - Proportional reinsurance accepted	R0120	24,257	3,898	—	25,122	47,706	8,980	374,292	48,108	3,216	6,508	648	491
Gross - Non-proportional reinsurance accepted	R0130	—	—	—	—	—	—	—	—	—	—	—	—
Reinsurers' share	R0140	1,324	11,230	—	55,441	31,752	8,757	573,733	107,260	31,173	2,723	3,045	15,193
Net	R0200	719,994	231,440	—	2,844,299	1,281,916	67,801	3,814,251	1,151,156	93,402	51,382	30,646	55,359
Premiums earned													
Gross - Direct Business	R0210	672,504	246,518	—	2,864,566	1,249,866	64,463	3,779,870	1,135,627	114,461	45,999	32,333	54,517
Gross - Proportional reinsurance accepted	R0220	25,024	4,242	—	24,281	47,880	9,160	377,512	40,117	2,855	7,129	707	490
Gross - Non-proportional reinsurance accepted	R0230	—	—	—	—	—	—	—	—	—	—	—	—
Reinsurers' share	R0240	1,288	10,541	—	54,384	33,285	7,647	545,417	104,380	31,906	2,712	2,913	12,297
Net	R0300	696,240	240,219	—	2,834,463	1,264,461	65,976	3,611,965	1,071,364	85,410	50,416	30,127	42,710
Claims incurred													
Gross - Direct Business	R0310	464,943	120,550	—	1,875,518	708,264	32,458	1,711,513	574,703	44,773	12,229	17,060	34,807
Gross - Proportional reinsurance accepted	R0320	23,008	6,294	—	65,254	54,327	3,921	262,405	47,028	(869)	5,560	565	556
Gross - Non-proportional reinsurance accepted	R0330	—	—	—	—	—	—	—	—	—	—	—	—
Reinsurers' share	R0340	13,527	3,882	—	(20,562)	6,953	(5,246)	148,976	(58,191)	12,137	1	804	9,776
Net	R0400	474,424	122,962	—	1,961,334	755,638	41,625	1,824,942	679,922	31,767	17,788	16,821	25,587
Changes in other technical provisions													
Gross - Direct Business	R0410	(3)	3,436	—	—	—	—	—	—	—	—	—	424
Gross - Proportional reinsurance accepted	R0420	—	31	—	—	—	—	—	—	—	—	—	—
Gross - Non-proportional reinsurance accepted	R0430	—	—	—	—	—	—	—	—	—	—	—	—
Reinsurers' share	R0440	—	4	—	—	—	—	—	—	—	—	—	—
Net	R0500	(3)	3,463	—	—	—	—	—	—	—	—	—	424
Expenses incurred	R0550	168,454	70,203	—	670,799	477,282	27,870	1,657,959	357,169	43,893	18,421	11,040	21,288
Other expenses	R1200												
Total expenses	R1300												

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

Amounts in £000s						
		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	—	—	—	—	10,640,051
Gross - Proportional reinsurance accepted	R0120	—	—	—	—	543,226
Gross - Non-proportional reinsurance accepted	R0130	—	—	—	—	—
Reinsurers' share	R0140	—	—	—	—	841,631
Net	R0200	—	—	—	—	10,341,646
Premiums earned						
Gross - Direct Business	R0210	—	—	—	—	10,260,724
Gross - Proportional reinsurance accepted	R0220	—	—	—	—	539,397
Gross - Non-proportional reinsurance accepted	R0230	—	—	—	—	—
Reinsurers' share	R0240	—	—	—	—	806,770
Net	R0300	—	—	—	—	9,993,351
Claims incurred						
Gross - Direct Business	R0310	—	—	—	—	5,596,818
Gross - Proportional reinsurance accepted	R0320	—	—	—	—	468,049
Gross - Non-proportional reinsurance accepted	R0330	—	(2,601)	(3,617)	(336)	(6,554)
Reinsurers' share	R0340	—	(2,601)	(3,617)	(336)	105,503
Net	R0400	—	—	—	—	5,952,810
Changes in other technical provisions						
Gross - Direct Business	R0410	—	—	—	—	3,857
Gross - Proportional reinsurance accepted	R0420	—	—	—	—	31
Gross - Non-proportional reinsurance accepted	R0430	—	—	—	—	—
Reinsurers' share	R0440	—	—	—	—	4
Net	R0500	—	—	—	—	3,884
Expenses incurred	R0550	—	—	—	—	3,524,378
Other expenses	R1200	—	—	—	—	31,551
Total expenses	R1300	—	—	—	—	3,555,929

Annex I
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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
	R0010		IT	FR	IE	PL	VN	
		C0220	C0230	C0240	C0250	C0260	C0270	C0280
Premiums written								
Gross	R1410	21,706,587	5,013,807	3,122,276	1,459,406	360,676	109,194	31,771,946
Reinsurers' share	R1420	4,360,137	9,877	12,712	274,533	4,036	4,028	4,665,323
Net	R1500	17,346,450	5,003,930	3,109,564	1,184,873	356,640	105,166	27,106,623
Premiums earned								
Gross	R1510	21,706,587	5,013,807	3,122,276	1,459,406	360,676	109,195	31,771,947
Reinsurers' share	R1520	4,360,137	9,877	12,712	274,533	4,036	4,028	4,665,323
Net	R1600	17,346,450	5,003,930	3,109,564	1,184,873	356,640	105,167	27,106,624
Claims incurred								
Gross	R1610	19,933,019	1,681,031	3,456,057	1,314,342	244,977	8,686	26,638,112
Reinsurers' share	R1620	2,040,686	19,131	14,713	99,008	703	—	2,174,241
Net	R1700	17,892,333	1,661,900	3,441,344	1,215,334	244,274	8,686	24,463,871
Changes in other technical provisions								
Gross	R1710	(15,038,897)	(3,943,369)	(1,739,883)	(606,204)	(56,621)	(64,026)	(21,449,000)
Reinsurers' share	R1720	(2,097,692)	4,942	4,721	(113,564)	83	—	(2,201,510)
Net	R1800	(12,941,205)	(3,948,311)	(1,744,604)	(492,640)	(56,704)	(64,026)	(19,247,490)
Expenses incurred	R1900	1,749,743	182,783	408,464	141,998	99,740	34,566	2,617,294
Other expenses	R2500							22,976
Total expenses	R2600							2,640,270

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		CA	FR	IE	IT	PL	
		C0080	C0090	C0100	C0110	C0120	C0130	C0140
Premiums written								
Gross - Direct Business	R0110	5,022,455	3,451,881	1,243,235	413,446	260,489	188,471	10,579,977
Gross - Proportional reinsurance accepted	R0120	355,799	—	173,904	6,269	—	3,564	539,536
Gross - Non-proportional reinsurance accepted	R0130	—	—	—	—	—	—	—
Reinsurers' share	R0140	512,260	199,259	50,903	26,573	19,601	14,277	822,873
Net	R0200	4,865,994	3,252,622	1,366,236	393,142	240,888	177,758	10,296,640
Premiums earned								
Gross - Direct Business	R0210	4,819,175	3,341,564	1,194,326	409,430	266,847	175,179	10,206,521
Gross - Proportional reinsurance accepted	R0220	339,835	—	186,304	6,269	—	3,878	536,286
Gross - Non-proportional reinsurance accepted	R0230	—	—	—	—	—	—	—
Reinsurers' share	R0240	484,569	197,443	50,903	25,413	18,292	13,495	790,115
Net	R0300	4,674,441	3,144,121	1,329,727	390,286	248,555	165,562	9,952,692
Claims incurred								
Gross - Direct Business	R0310	2,553,378	1,722,423	816,645	204,199	159,930	62,967	5,519,542
Gross - Proportional reinsurance accepted	R0320	189,761	(1,195)	274,253	2,262	—	1,775	466,856
Gross - Non-proportional reinsurance accepted	R0330	(6,555)	—	—	—	—	—	(6,555)
Reinsurers' share	R0340	41,185	60,653	(26,066)	(6,807)	7,285	3,847	80,097
Net	R0400	2,695,399	1,660,575	1,116,964	213,268	152,645	60,895	5,899,746
Changes in other technical provisions								
Gross - Direct Business	R0410	848	—	6,921	—	—	(3,911)	3,858
Gross - Proportional reinsurance accepted	R0420	—	—	31	—	—	—	31
Gross - Non-proportional reinsurance accepted	R0430	—	—	—	—	—	—	—
Reinsurers' share	R0440	—	—	—	—	—	4	4
Net	R0500	848	—	6,952	—	—	(3,915)	3,885
Expenses incurred	R0550	1,710,519	1,189,281	302,831	149,747	87,802	69,193	3,509,373
Other expenses	R1200							31,551
Total expenses	R1300							3,540,924

Annex I

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Impact of long term guarantees and transitional measures

Amounts in £000s		Amount with Long Term Guarantee 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	281,340,625	4,308,735	—	475,611	6,294,746
Basic own funds	R0020	24,760,831	(3,391,866)	—	(192,220)	(6,171,037)
Eligible own funds to meet Solvency Capital Requirement	R0050	25,572,815	(3,391,866)	—	(192,220)	(6,171,037)
Solvency Capital Requirement	R0090	12,498,316	870,448	—	88,215	6,207,500

Annex I
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Own funds

Amounts in £000s		Total	Unrestricted	Restricted	Tier 2	Tier 3
		C0010	C0020	C0030	C0040	C0050
Basic own funds before deduction for participations in other financial sector						
Ordinary share capital (gross of own shares)	R0010	941,403	941,403		—	
Non-available called but not paid in ordinary share capital at group level	R0020	—			—	
Share premium account related to ordinary share capital	R0030	1,247,869	1,247,869		—	
Initial funds, members' contributions or the equivalent basic own fund item for mutual and mutual-type undertakings	R0040	—			—	
Subordinated mutual member accounts	R0050	—		—	—	—
Non-available subordinated mutual member accounts at group level	R0060	—		—	—	—
Surplus funds	R0070	5,192,270	5,192,270			
Non-available surplus funds at group level	R0080	—	—			
Preference shares	R0090	450,000		450,000	—	—
Non-available preference shares at group level	R0100	—		—	—	—
Share premium account related to preference shares	R0110	—		—	—	—
Non-available share premium account related to preference shares at group level	R0120	—		—	—	—
Reconciliation reserve - Group	R0130	11,739,359	11,739,359			
Subordinated liabilities	R0140	5,880,070		516,833	5,363,237	—
Non-available subordinated liabilities at group level	R0150	—		—	—	—
An amount equal to the value of net deferred tax assets	R0160	122,621				122,621
The amount equal to the value of net deferred tax assets not available at the group level	R0170	—				—
Other own fund items approved by the supervisory authority as basic own funds not specified above	R0180	—	—	—	—	—
Non-available own funds related to other own fund items approved by supervisory authority	R0190	—	—	—	—	—
Minority interests (if not reported as part of another own fund item)	R0200	—	—	—	—	—
Non-available minority interests at group level	R0210	777	777	—	—	—
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds						
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds	R0220	—				
Deductions						
Deductions for participations in other financial undertakings, including non-regulated undertakings carrying out financial activities	R0230	811,985	811,985	—	—	—
whereof deducted according to Article 228 of the Directive 2009/138/EC	R0240	—	—	—	—	
Deductions for participations where there is non-availability of information (Article 229)	R0250	—	—	—	—	—
Deduction for participations included by using D&A when a combination of methods is used	R0260	—	—	—	—	—
Total non-available own fund items	R0270	777	777	—	—	—
Total deductions	R0280	812,762	812,762	—	—	—
Total basic own funds after deductions	R0290	24,760,830	18,308,139	966,833	5,363,237	122,621
Ancillary own funds						
Unpaid and uncalled ordinary share capital callable on demand	R0300	—			—	
Unpaid and uncalled initial funds, members' contributions or the equivalent basic own fund item for mutual and mutual - type undertakings, callable on demand	R0310	—			—	
Unpaid and uncalled preference shares callable on demand	R0320	—			—	—
A legally binding commitment to subscribe and pay for subordinated liabilities on demand	R0330	—			—	—
Letters of credit and guarantees under Article 96(2) of the Directive 2009/138/EC	R0340	—			—	
Letters of credit and guarantees other than under Article 96(2) of the Directive 2009/138/EC	R0350	—			—	—
Supplementary members calls under first subparagraph of Article 96(3) of the Directive 2009/138/EC	R0360	—			—	
Supplementary members calls - other than under first subparagraph of Article 96(3) of the Directive 2009/138/EC	R0370	—			—	—
Non available ancillary own funds at group level	R0380	—			—	—
Other ancillary own funds	R0390	—			—	—
Total ancillary own funds	R0400	—			—	—
Own funds of other financial sectors						
Credit institutions, investment firms, financial institutions, alternative investment fund managers, UCITS management companies - total	R0410	800,212	800,212	—	—	
Institutions for occupational retirement provision	R0420	—	—	—	—	—
Non regulated entities carrying out financial activities	R0430	11,773	11,773	—	—	
Total own funds of other financial sectors	R0440	811,985	811,985	—	—	—
Own funds when using the D&A, exclusively or in combination of method 1						
Own funds aggregated when using the D&A and combination of method	R0450	—	—	—	—	—
Own funds of related undertakings when using the D&A and a combination of method without intra-group transactions	R0460	—	—	—	—	—
Total available own funds to meet the consolidated group SCR (excluding own funds from other financial sector and from the undertakings included via D&A)	R0520	24,760,830	18,308,139	966,833	5,363,237	122,621
Total available own funds to meet the minimum consolidated group SCR	R0530	24,638,209	18,308,139	966,833	5,363,237	
Total eligible own funds to meet the consolidated group SCR (excluding own funds from other financial sector and from the undertakings included via D&A)	R0560	24,760,830	18,308,139	966,833	5,363,237	122,621
Total eligible own funds to meet the minimum consolidated group SCR	R0570	20,233,238	18,308,139	966,833	958,266	
Minimum consolidated group SCR (Article 230)	R0610	4,791,330				
Ratio of eligible own funds to minimum consolidated Group SCR	R0650	4.2229				
Total eligible own funds to meet the group SCR (including own funds from other financial sector and from the undertakings included via D&A)	R0660	25,572,815	19,120,124	966,833	5,363,237	122,621
Group SCR	R0680	**12,498,316**				
Ratio of eligible own funds to group SCR including other financial sectors and the undertakings included via D&A	R0690	**2.0461**				

Annex I

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Own funds

Amounts in £000s		Total
		C0060
Reconciliation reserve		
Excess of assets over liabilities	R0700	22,279,080
Own shares (held directly and indirectly)	R0710	50,741
Foreseeable dividends, distributions and charges	R0720	336,618
Other basic own fund items	R0730	7,954,163
Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fenced funds	R0740	1,142,320
Other non-available own funds	R0750	1,055,880
Reconciliation reserve	R0760	11,739,358
Expected profits		
Expected profits included in future premiums (EPIFP) - Life business	R0770	2,729,520
Expected profits included in future premiums (EPIFP) - Non-life business	R0780	119,078
Total expected profits included in future premiums (EPIFP)	R0790	2,848,598

Annex I

S.25.02.22

Solvency Capital Requirement – for groups using the standard formula and partial internal model

Amounts in £000s

Unique number of component	Components Description	Calculation of the Solvency Capital Requirement	Amount modelled	Undertaking Specific parameters	Simplifications
C0010	C0020	C0030	C0070	C0090	C0120
100000	Market Risk	10,197,219	7,608,451	—	None
200000	Counterparty Risk	403,071	304,470	—	—
300000	Life underwriting risk	6,525,749	6,236,430	None	None
400000	Health underwriting risk	312,583	—	None	None
500000	Non-life underwriting risk	1,116,075	1,079,614	None	None
701000	Operational risk	2,468,574	2,387,549	—	—
801000	Other risks	150,336	150,336	—	—
802000	Loss-absorbing capacity of technical provisions	(11,735)	—	—	—
803000	Loss-absorbing capacity of deferred tax	(1,795,388)	(1,356,702)	—	—
804000	Other adjustments	(362,584)	(362,584)	—	—

Calculation of Solvency Capital Requirement		C0100
Total undiversified components	R0110	19,003,900
Diversification	R0060	(6,896,832)
Capital requirement for business operated in accordance with Art. 4 of Directive 2003/41/EC	R0160	—
Solvency Capital Requirement excluding capital add-on	R0200	12,107,068
Capital add-ons already set	R0210	—
Solvency capital requirement for undertakings under consolidated method	R0220	12,498,316
Other information on SCR		—
Amount/estimate of the overall loss-absorbing capacity of technical provisions	R0300	(3,986,098)
Amount/estimate of the overall loss-absorbing capacity of deferred taxes	R0310	(1,797,764)
Capital requirement for duration-based equity risk sub-module	R0400	—
Total amount of Notional Solvency Capital Requirements for remaining part	R0410	6,044,620
Total amount of Notional Solvency Capital Requirement for ring fenced funds	R0420	2,634,260
Total amount of Notional Solvency Capital Requirements for matching adjustment portfolios	R0430	4,782,592
Diversification effects due to RFF nSCR aggregation for article 304	R0440	—
Minimum consolidated group solvency capital requirement	R0470	4,791,330
Information on other entities		—
Capital requirement for other financial sectors (Non-insurance capital requirements)	R0500	326,555
Capital requirement for other financial sectors (Non-insurance capital requirements) - Credit institutions, investment firms and financial institutions, alternative investment funds managers, UCITS management companies	R0510	326,555
Capital requirement for other financial sectors (Non-insurance capital requirements) - Institutions for occupational retirement provisions	R0520	—
Capital requirement for other financial sectors (Non-insurance capital requirements) - Capital requirement for non-regulated entities carrying out financial activities	R0530	—
Capital requirement for non-controlled participation requirements	R0540	64,693
Capital requirement for residual undertakings	R0550	—
Overall SCR		—
SCR for undertakings included via D and A	R0560	—
Solvency Capital Requirement	R0570	12,498,316

Annex I

S.32.01.22

Undertakings in the scope of the Group

							Criteria of influence						Inclusion in the scope of Group supervision		Group solvency calculation
Country	Identification code of the undertaking	Legal Name of the undertaking	Type of undertaking	Legal form	Category (mutual/ non mutual)	Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for group solvency calculation	YES/NO	Date of decision if art. 214 is applied	Method used and under method 1, treatment of the undertaking
C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YF0Y5B0IB8SM0ZFG9G81GB01057	10-11 GNS Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE00792	11-12 Hanover Square Unit Trust	Other	Fund	Non-mutual		50.00%	100.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01767	11-12 Hanover Square LP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01768	11-12 Hanover Square Nominee 1 Limited	Other	Limited by Shares	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01766	11-12 Hanover Square Nominee 2 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01765	130 Fenchurch Street LP	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE00794	130 Fenchurch Street Unit Trust	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB2068	130 Fenchurch Street General Partner Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01764	130 Fenchurch Street Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01763	130 Fenchurch Street Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800JPUK2SNT299B93	BMO Global Total Return Bond (GBP Hdg) Fund	Other	Fund	Non-mutual		74.00%	74.00%	74.00%		Dominant	74.00%	YES		Method 1: Adjusted equity method
GB	2138007BQDBN2IPHX193	Liontrust Sustainable Future Global Growth Fund	Other	Fund	Non-mutual		20.00%	20.00%	20.00%		Significant	20.00%	YES		Method 1: Adjusted equity method
GB	213800C34VK9JUDU6X45	Liontrust Sustainable Future Managed Fund	Other	Fund	Non-mutual		40.00%	40.00%	40.00%		Significant	40.00%	YES		Method 1: Adjusted equity method
GB	2138006Y52SGQMA3JH93	Liontrust Sustainable Future UK Growth Fund	Other	Fund	Non-mutual		24.00%	24.00%	24.00%		Significant	24.00%	YES		Method 1: Adjusted equity method
GB	213800DK5336XGCECH57	Liontrust Sustainable Future European Growth Fund	Other	Fund	Non-mutual		30.00%	30.00%	30.00%		Significant	30.00%	YES		Method 1: Adjusted equity method
GB	213800SB2OZ9O5S3SC16	Liontrust Sustainable Future Corporate Bond Fund	Other	Fund	Non-mutual		27.00%	27.00%	27.00%		Significant	27.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE00805	1 Fitzroy Place Jersey Unit Trust	Other	Fund	Non-mutual		50.00%	100.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G82GB70006	Bermondsey Yards General Partner Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G82GB70007	Bermondsey Yards Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G82GB70008	Bermondsey Yards Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800YB1LSRDQEUZR18	F&C European Capital Partners LP	Other	Fund	Non-mutual		29.56%	29.56%	29.56%		Significant	29.56%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G82GB98556	Slas Axa Private Equity	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB11147	2015 Sunbeam Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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Country	Identification code of the undertaking	Legal Name of the undertaking	Type of undertaking	Legal form	Category (mutual/ non mutual)	Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for group solvency calculation	YES/NO	Date of decision if art. 214 is applied	Method used and under method 1, treatment of the undertaking
C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
JE	YF0Y5B0IB8SM0ZFG9G81JE00804	20 Gracechurch Unit Trust	Other	Fund	Non-mutual		25.00%	25.00%	25.00%		Significant	25.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01762	20 Gracechurch (General Partner) Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE8501	20 Station Road Unit Trust	Other	Fund	Non-mutual		50.00%	100.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB8500	20 Station Road LP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01761	2-10 Mortimer Street GP Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01760	2-10 Mortimer Street (GP No 1) Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
LU	54930006SKUIX6OOFX87	Xtrackers II Eurozone Government Bond 15-30 UCITS ETF	Other	Fund	Non-mutual		37.15%	37.15%	37.15%		Significant	37.15%	YES		Method 1: Adjusted equity method
LU	5299007N1ILRODYO3P34	Patriarch Classic B&W Global Freestyle	Other	Fund	Non-mutual		38.37%	38.37%	38.37%		Significant	38.37%	YES		Method 1: Adjusted equity method
GB	21380084XP6DH9QL2706	BMO North American Equity Fund	Other	Fund	Non-mutual		29.00%	29.00%	29.00%		Significant	29.00%	YES		Method 1: Adjusted equity method
GB	549300BWNB8P6HMM7S16	Aviva Investors Portfolio Funds ICVC - Aviva Investors Multi-Asset Plus Fund II	Other	Limited by Shares	Non-mutual		31.00%	31.00%	31.00%		Significant	31.00%	YES		Method 1: Adjusted equity method
IE	635400DSA5HNG6GJQ461	Aviva Investors Sterling Liquidity Plus Fund	Other	Limited by Shares	Non-mutual		82.00%	82.00%	82.00%		Dominant	82.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB8003	SUE Developments LP	Other	Limited by Shares	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE00803	2 Fitzroy Place Jersey Unit Trust	Other	Fund	Non-mutual		50.00%	100.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE00798	30-31 Golden Square Unit Trust	Other	Fund	Non-mutual		50.00%	100.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01759	30-31 Golden Square LP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01758	30-31 Golden Square Nominee 1 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01757	30-31 Golden Square Nominee 2 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G82GB70009	30 Station Road Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G82GB70010	30 Station Road Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800FJL43GP6KYMU74	Liontrust UK Ethical Fund	Other	Fund	Non-mutual		48.00%	48.00%	48.00%		Significant	48.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE8001	30 Station Road Unit Trust	Other	Limited by Shares	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE8002	50-60 Station Road Unit Trust	Other	Limited by Shares	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
LU	213800A6AOB7Y14PIW48	BMO European Growth & Income Fund	Other	Fund	Non-mutual		99.00%	99.00%	99.00%		Dominant	99.00%	YES		Method 1: Adjusted equity method
LU	549300NMQMC1S9MLYP26	Lyxor Net Zero 2050 S&P World Climate PAB (DR) UCITS ETF	Other	Fund	Non-mutual		71.00%	100.00%	71.00%		Dominant	71.00%	YES		Method 1: Adjusted equity method
LU	213800L9BDAYUZEA7I39	BMO Diversified Growth Fund	Other	Fund	Non-mutual		94.00%	94.00%	94.00%		Dominant	94.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	549300XO3LJ1ETMQWB05	BlackRock Sterling Short Duration Credit Fund	Other	Fund	Non-mutual		50.90%	100.00%	50.90%		Dominant	50.90%	YES		Method 1: Adjusted equity method
GB	213800CHQ5ZAJLKFY951	41-42 Lowndes Square Management Company Limited	Other	Fund	Non-mutual		75.00%	75.00%	75.00%		Dominant	75.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB8506	50-60 Station Road LP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G82GB70011	50-60 Station Road Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G82GB70012	50-60 Station Road Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	5493001MO4IPX7PWS070	Mercer Multi Asset Growth Fund	Other	Fund	Non-mutual		34.00%	34.00%	34.00%		Significant	34.00%	YES		Method 1: Adjusted equity method
IE	2138009L5DYOILUREA87	BMO Multi-Strategy Global Equity Fund	Other	Fund	Non-mutual		96.00%	100.00%	96.00%		Dominant	96.00%	YES		Method 1: Adjusted equity method
IE	549300HO5VCXYABWW768	SPDR FTSE EPRA Europe ex UK Real Estate UCITS ETF	Other	Fund	Non-mutual		21.00%	21.00%	21.00%		Significant	21.00%	YES		Method 1: Adjusted equity method
GB	213800RI6LYY15UVPA79	Baillie Gifford Investment Funds II ICVC - Baillie Gifford UK Equity	Other	Fund	Non-mutual		22.00%	22.00%	22.00%		Significant	22.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G82GB43265	30 Station Road LP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G82GB33402	BMO Emerging Markets Equity Fund	Other	Fund	Non-mutual		45.00%	45.00%	45.00%		Significant	45.00%	YES		Method 1: Adjusted equity method
IE	549300DKVQRAEEUK5Y14	Mercer Multi Asset Defensive Fund	Other	Fund	Non-mutual		21.00%	21.00%	21.00%		Significant	21.00%	YES		Method 1: Adjusted equity method
FR	5493006N8K7SU87KX506	AXA LBO Fund IV FCPR	Other	Fund	Non-mutual		38.00%	38.00%	38.00%		Significant	38.00%	YES		Method 1: Adjusted equity method
CA	YF0Y5B0IB8SM0ZFG9G81CA00002	9543864 Canada Inc.	Insurance holding company as defined in Article 212(1)	Private Corporation	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	2138007H7PCU1UHWD993	Friends AELRIS Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00056	Friends AEL Trustees Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00115	Aviva Europe Services	Ancillary services undertaking as defined in	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00132	Sesame Regulatory Services Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81GB01753	AFRP S.à r.l.	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IN	213800ONOB13621WL113	A.G.S. Customer Services (India) Private Limited	Other	Private Company	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G99LU00777	Aviva Investors Alternative Income Solutions Investments	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300HJJZQ417PMX056	Aviva Investors Climate Transition Global Equity Fund	Other	Fund	Non-mutual		31.00%	31.00%	31.00%		Significant	31.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU8502	Aviva Investors E-RELI SCSp	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CZ	YF0Y5B0IB8SM0ZFG9G81GB01752	AIEREF Renewable Energy s.r.o.	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00591	AIEREF Holding 1 S.à r.l.	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
LU	YF0Y5B0IB8SM0ZFG9G81LU00592	AIEREF Holding 2 S.à r.l.	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU9999	Aviva Investors Global EUR ReturnPlus Fund	Other	Fund	Non-mutual		62.00%	62.00%	62.00%		Dominant	62.00%	YES		Method 1: Adjusted equity method
LU	54930035PTW8OC4XL868	Aviva Investors Global GBP ReturnPlus Fund	Other	Fund	Non-mutual		93.00%	93.00%	93.00%		Dominant	93.00%	YES		Method 1: Adjusted equity method
IE	213800JMPSZ7KSGUG977	Aviva Insurance Ireland Designated Activity Company	Non life insurance undertaking	Designated Activity Company (Ltd. by	Non-mutual	Central Bank of Ireland	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB2074	Aviva Investors Infrastructure Income No.7 Limited	Other	Limited by Shares	Non-mutual		64.10%	64.10%	64.10%		Dominant	64.10%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB2073	Aviva Investors Infrastructure Income B Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	2138001MKU8IVU7O3771	Aviva Investors Luxembourg Services S.à r.l.	Credit institution, investment firm and	Société à Responsabilité	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
US	YF0Y5B0IB8SM0ZFG9G81US00952	AI-RECAP Carry I, LP	Other	Fund	Non-mutual		82.36%	82.36%	82.36%		Dominant	82.36%	YES		Method 1: Adjusted equity method
US	YF0Y5B0IB8SM0ZFG9G81US00103	AI-RECAP GP I, LLC	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00001	Aviva Investors Alternative Income Solutions General Partner	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	YF0Y5B0IB8SM0ZFG9G81IE9999	Aviva Investors US Dollar Liquidity Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	635400YD7OOB4VLZJC20	AVIVA LIFE & PENSIONS IRELAND DESIGNATED ACTIVITY COMPANY	Life insurance undertaking	Designated Activity Company (Ltd. by	Non-mutual	Central Bank of Ireland	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB01079	Boston Biomass Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00684	Anesco Mid Devon Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00685	Anesco South West Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300O2OH1SMRSIE785	Artemis UK Special Situations Fund	Other	Fund	Non-mutual		25.49%	25.49%	25.49%		Significant	25.49%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01702	Ascot Real Estate Investments LP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01703	Ascot Real Estate Investments GP LLP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
IE	YF0Y5B0IB8SM0ZFG9G81FF00001	Ashtown Management Company Limited	Other	Private Company Limited by Shares	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	213800CQLT391RYIOG22	Aspire Financial Management Limited	Non-regulated undertaking carrying out financial	Limited by Shares	Non-mutual		46.52%	46.52%	46.52%		Significant	46.52%	YES		Method 1: Sectoral rules
GB	213800DK62SIRX4EO566	Atlas Park Management Company Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300OCFNNUQSICSF40	Aviva Investors 30 70 GLobal Eq Ccy Hedged Ind Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	5493001PUA1OIS2XXI95	Aviva Investors Funds ACS AI Continental European Equity	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	2138002Z9YUFQ5JPPY03	Aviva Investors Funds ACS AI Index Linked Gilt Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01771	Aviva Investors Funds ACS AI Japan Equity Alpha Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	213800FGORYEJNAATD58	Aviva Investors Funds ACS AI Asia Pacific Ex Japan Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800COLF8AUBBRD618	Aviva Investors Funds ACS AI Pre-Annuity Fixed Interest Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	5493008I8OBCDX7R9S24	Aviva Investors Funds ACS AI UK Equity Alpha Fund	Other	Fund	Non-mutual		92.00%	92.00%	92.00%		Dominant	92.00%	YES		Method 1: Adjusted equity method
GB	5493005OQ50WBONIT777	Aviva Investors Funds ACS AI UK Equity Dividend Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800Q9B1O4HBDKOC48	Aviva Investors Funds ACS AI Europe Equity EX UK Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800E5NACRMG3X5283	Aviva Investors Funds ACS AI Stewardship UK Equity Income	Other	Fund	Non-mutual		96.00%	96.00%	96.00%		Dominant	96.00%	YES		Method 1: Adjusted equity method
GB	2138006SCQQKC19PCA98	Aviva Investors Funds ACS AI US Large Cap Equity Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00971	Aviva Investors Emerging Markets Equity Small Cap Fund	Other	Fund	Non-mutual		75.00%	75.00%	75.00%		Dominant	75.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00972	Aviva Investors Emerging Markets Local Currency Bond Fund	Other	Fund	Non-mutual		92.00%	92.00%	92.00%		Dominant	92.00%	YES		Method 1: Adjusted equity method
GB	213800TOQ7KUA3E4EG58	Aviva Investors Funds ACS AI Global Equity Alpha Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800RPL1QJU8TWJN11	Aviva Investors Funds ACS AI Money Market VNAV Fund	Other	Fund	Non-mutual		99.00%	99.00%	99.00%		Dominant	99.00%	YES		Method 1: Adjusted equity method
GB	213800HVVI8GMZJDIT68	Aviva Investors Funds ACS AI North American Equity Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	21380057P1LXHFXS6L65	Aviva Investors Funds ACS AI Sterling Corporate Bond Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800K12SJ9VVG4KL55	Aviva Investors Funds ACS AI Stewardship Fixed Interest Fund	Other	Fund	Non-mutual		99.00%	99.00%	99.00%		Dominant	99.00%	YES		Method 1: Adjusted equity method
GB	213800Q9ANQDOOQ1ET94	Aviva Investors Funds ACS AI Strategic Global Equity Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800YEQXEL1GVZSO43	Aviva Investors Funds ACS AI Stewardship International Equity	Other	Fund	Non-mutual		99.00%	99.00%	99.00%		Dominant	99.00%	YES		Method 1: Adjusted equity method
GB	213800H4IV7IX1LRCQ58	Aviva Investors Funds ACS AI Stewardship UK Equity Fund	Other	Fund	Non-mutual		99.00%	99.00%	99.00%		Dominant	99.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7061	Aviva Investors Funds ACS AI UK Equity Income Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	WNKB3JPLTJ81WSTUSR75	Aviva Investors Investment Funds ICVC Aviva Investors Corporate	Other	Fund	Non-mutual		96.00%	96.00%	96.00%		Dominant	96.00%	YES		Method 1: Adjusted equity method
GB	549300BNVQZICIRG3Z67	Aviva Investors Investment Funds ICVC Aviva Investors Global	Other	Fund	Non-mutual		70.00%	70.00%	70.00%		Dominant	70.00%	YES		Method 1: Adjusted equity method
GB	549300KCKDPU7H2PB637	Aviva Investors Investment Funds ICVC Aviva Investors International	Other	Fund	Non-mutual		76.00%	76.00%	76.00%		Dominant	76.00%	YES		Method 1: Adjusted equity method
GB	5493003EVQGCFXKAC536	Aviva Investors Investment Funds ICVC Aviva Investors Managed	Other	Fund	Non-mutual		64.00%	64.00%	64.00%		Dominant	64.00%	YES		Method 1: Adjusted equity method
GB	549300ZLRNTMWVAQ5411	Aviva Investors Investment Funds ICVC Aviva Investors Strategic	Other	Fund	Non-mutual		41.00%	41.00%	41.00%		Significant	41.00%	YES		Method 1: Adjusted equity method
GB	549300ZM2XGLIO5KMF39	Aviva Investors Investment Funds ICVC Aviva Investors UK Equity	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	5493007GW4RAYBR7UO27	Aviva Investors Investment Funds ICVC Aviva Investors UK Index	Other	Fund	Non-mutual		69.00%	69.00%	69.00%		Dominant	69.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
LU	YF0Y5B0IB8SM0ZFG9G99LU00785	Aviva Investors Global Investment Grade Corporate Bond Fund	Other	Fund	Non-mutual		82.00%	82.00%	82.00%		Dominant	82.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G83GB41056	Aviva Investors Global Emerging Markets Equity Unconstrained	Other	Fund	Non-mutual		31.00%	31.00%	31.00%		Significant	31.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00739	Aviva Life Investments International (General Partner)	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	635400SKWIKGDVSOH807	Aviva Investors Liquidity Funds plc Aviva Investors Euro Liquidity	Other	Fund	Non-mutual		75.00%	75.00%	75.00%		Dominant	75.00%	YES		Method 1: Adjusted equity method
IE	635400WK8B3C88WECB10	Aviva Investors Liquidity Funds plc Aviva Investors Sterling	Other	Fund	Non-mutual		98.00%	98.00%	98.00%		Dominant	98.00%	YES		Method 1: Adjusted equity method
IE	635400LGLXZG1XJEPL62	Aviva Investors Liquidity Funds plc Aviva Investors Sterling	Other	Fund	Non-mutual		82.00%	82.00%	82.00%		Dominant	82.00%	YES		Method 1: Adjusted equity method
GB	54930034KGUYTV84DN90	Aviva Investors Manager of Manager ICVC (ICVC2) Aviva	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	5493004Z3CXSFGXBCF13	Aviva Investors Passive Funds ACS AI 40 60 Global Equity Index	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300TDLF4V5Q629M65	Aviva Investors Passive Funds ACS AI 50 50 Global Equity Index	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	5493008CZBJ12QU4J279	Aviva Investors Passive Funds ACS AI 60 40 Global Equity Index	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300KCNG9URI8Y5M29	Aviva Investors Passive Funds ACS AI Developed Asia Pacific Ex	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300VTDDX1OT5IL464	Aviva Investors Passive Funds ACS AI Developed European Ex	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	54930035AQ6RT73PQT59	Aviva Investors Passive Funds ACS AI Developed Overseas	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300W3PDF2HHQFLS11	Aviva Investors Passive Funds ACS AI Index-Linked Gilts Over 5	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	5493006Q5F7VPQMNW489	Aviva Investors Passive Funds ACS AI Japanese Equity Index	Other	Fund	Non-mutual		95.00%	95.00%	95.00%		Dominant	95.00%	YES		Method 1: Adjusted equity method
GB	549300QFXHKD30RF2842	Aviva Investors Passive Funds ACS AI Multi-Asset (40-85%	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300WQMG72NQZPTD66	Aviva Investors Passive Funds ACS AI Non-gilt Bond All Stocks	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	5493004JXUT4R07XYP41	Aviva Investors Passive Funds ACS AI Non-Gilt Bond Over 15	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300K5OT5AWF935F04	Aviva Investors Passive Funds ACS AI UK Equity Index Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300LAANOCCQDOT948	Aviva Investors Passive Funds ACS AI UK Gilts All Stocks Index	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300Q5LSPC8EHJ6A76	Aviva Investors Passive Funds ACS AI UK Gilts over 15 years	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	5493007IAWVFNDY96310	Aviva Investors Property Funds ICVC Aviva Investors European	Other	Fund	Non-mutual		73.00%	73.00%	73.00%		Dominant	73.00%	YES		Method 1: Adjusted equity method
GB	549300HAZDS0DUKMIV45	Aviva Investors Portfolio Funds ICVC Aviva Investors Multi-	Other	Fund	Non-mutual		81.00%	81.00%	81.00%		Dominant	81.00%	YES		Method 1: Adjusted equity method
GB	5493008RVDHT2VPXMX96	Aviva Investors Portfolio Funds ICVC Aviva Investors Multi-	Other	Fund	Non-mutual		79.00%	79.00%	79.00%		Dominant	79.00%	YES		Method 1: Adjusted equity method
GB	5493001NAHZEDK0NWA65	Aviva Investors Portfolio Funds ICVC Aviva Investors Multi-asset	Other	Fund	Non-mutual		48.00%	48.00%	48.00%		Significant	48.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	549300EHZST0IXOIUQ87	Aviva Investors Portfolio Funds ICVC Aviva Investors Multi-asset	Other	Fund	Non-mutual		33.00%	33.00%	33.00%		Significant	33.00%	YES		Method 1: Adjusted equity method
GB	549300Z2YVKNIFT1RK19	Aviva Investors Portfolio Funds ICVC Aviva Investors Multi-	Other	Fund	Non-mutual		80.00%	80.00%	80.00%		Dominant	80.00%	YES		Method 1: Adjusted equity method
GB	549300J7N89NSWX9N033	Aviva Investors UK Eq Ex Aviva Inv Trusts Index Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
SG	549300D1GVBLNBQJNP96	Aviva Ltd	Composite undertaking	Public Company	Non-mutual	Central Provident Fund Board	25.95%	25.95%	25.95%		Significant	25.95%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00091	Aviva Brands Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CA	213800C2RVHC2P4IU323	Aviva Canada Inc.	Insurance holding company as defined in Article 212(1)	Private Corporation	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
IE	213800ZABU51HRB4N259	Aviva DC Trustee Company Ireland Designated Activity	Other	Private Company Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
SG	213800RWW9J19QWEKX18	Aviva Global Services (Management Services) Private	Other	Private Company	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	5493008BD7S5RZVUUC62	Aviva Investors Asian Equity Income Fund	Other	Fund	Non-mutual		97.00%	97.00%	97.00%		Dominant	97.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00973	Aviva Investors European Corporate Bond Fund	Other	Fund	Non-mutual		31.00%	31.00%	31.00%		Significant	31.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00975	Aviva Investors European Equity Income Fund	Other	Fund	Non-mutual		96.00%	96.00%	96.00%		Dominant	96.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00967	Aviva Investors Emerging Markets Bond Fund	Other	Fund	Non-mutual		61.00%	61.00%	61.00%		Dominant	61.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G99LU00783	Aviva Investors EBC S.à r.l.	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	549300IC1Z1RRVTYG329	Aviva Investors Global Equity Endurance Fund	Other	Fund	Non-mutual		29.00%	29.00%	29.00%		Significant	29.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G83GB41057	Aviva Investors Global Equity Unconstrained Fund	Other	Fund	Non-mutual		31.00%	31.00%	31.00%		Significant	31.00%	YES		Method 1: Adjusted equity method
IT	815600DD71582D382402	Aviva Italia Holding S.p.A	Insurance holding company as defined in Article 212(1)	Societá per Azioni (SpA)	Non-mutual	Commissione Nazionale per le Società e la Borsa	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB01152	Aviva Investors Infrastructure Income No.2B Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB2070	Aviva Investors Infrastructure Income No.6 Limited	Other	Limited by Shares	Non-mutual		58.70%	58.70%	58.70%		Dominant	58.70%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB07142	Aviva Investors Infrastructure Income No.6B Limited	Other	Limited by Shares	Non-mutual		32.10%	32.10%	32.10%		Significant	32.10%	YES		Method 1: Adjusted equity method
JE	213800FSD6OXUX1GT963	Aviva Investors Jersey Unit Trusts Management Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00987	Aviva Investors Multi-Strategy Target Return Fund	Other	Fund	Non-mutual		49.00%	49.00%	49.00%		Significant	49.00%	YES		Method 1: Adjusted equity method
GB	549300YEYDFL99EJ7G81	Aviva Insurance Limited	Non life insurance undertaking	Limited by Shares	Non-mutual	Prudential Regulation Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
LU	YF0Y5B0IB8SM0ZFG9G99LU00776	Aviva Investors Alternative Income Solutions SCSP	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	B235708	Aviva Investors Perpetual Capital (GP) SARL	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00730	Aviva Investors Infrastructure Income No.1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YF0Y5B0IB8SM0ZFG9G81GB00731	Aviva Investors Infrastructure Income No.2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00732	Aviva Investors Infrastructure Income No.3 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00733	Aviva Investors Infrastructure Income No.4A Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00734	Aviva Investors Infrastructure Income No.4B Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU2090	Aviva Investors Sustainable Income & Growth Fund	Other	Fund	Non-mutual		84.00%	84.00%	84.00%		Dominant	84.00%	YES		Method 1: Adjusted equity method
GB	2138007R5QMBMWU6NW33	Aviva Investors Secure Income REIT Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00990	UK Listed Equity High Alpha Fund	Other	Fund	Non-mutual		94.00%	94.00%	94.00%		Dominant	94.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01717	Aviva Special PFI Limited Partnership	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81	Aviva plc	Insurance holding company as defined in Article 212(1)	Public Limited Company	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
SG	213800D6RLWJIUKXWV49	Aviva Asia Management Pte. Ltd.	Other	Private Company	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
PL	213800OYDF73VGTIRV78	Aviva Services Spółka z ograniczoną odpowiedzialnością	Other	Private Company	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800ZUJ98EFZ9DF930	Aviva Central Services UK Limited	Ancillary services undertaking as defined in	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	213800F8H2HAI1RV8M06	Aviva Commercial Finance Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800NHWV8Q6Q76SF08	Aviva Credit Services UK Limited	Non-regulated undertaking carrying out financial	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
IE	213800UYZGYM5QG6E120	Aviva Direct Ireland Limited	Credit institution, investment firm and	Private Company Limited by Shares	Non-mutual	Central Bank of Ireland	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	YF0Y5B0IB8SM0ZFG9G81GB00118	Aviva UKLAP De-risking Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	213800H1VS15YGMW9E91	Aviva Driving School Ireland Limited	Other	Private Company Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	21380077FR2ST4ZDKX44	Aviva Employment Services Limited	Ancillary services undertaking as defined in	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	375OYQ6H0Q4PK394M105	Aviva Equity Release UK Limited	Credit institution, investment firm and	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	213800J8VNRRHRJWKU77	Aviva Europe UK Societas	Insurance holding company as defined in Article 212(1)	Societas Europaea (SE)	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
CA	YF0Y5B0IB8SM0ZFG9G81CA00001	Aviva General Insurance Company	Non life insurance undertaking	Private Corporation	Non-mutual	Office of the Superintendent of Financial	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	5493008NEQ31JQSE1K52	Aviva Group Holdings Limited	Insurance holding company as defined in Article 212(1)	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
IE	213800Y4ZKU9KP4O5J90	Aviva Group Services Ireland Limited	Ancillary services undertaking as defined in	Private Company Limited by Shares	Non-mutual	Pensions Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	213800UWBEW1ZJRF5624	Aviva Health UK Limited	Ancillary services undertaking as defined in	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	549300V0STT14KKQ7558	Aviva Investors Continental Euro Equity Index Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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Country	Identification code of the undertaking	Legal Name of the undertaking	Type of undertaking	Legal form	Category (mutual/ non mutual)	Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for group solvency calculation	YES/NO	Date of decision if art. 214 is applied	Method used and under method 1, treatment of the undertaking
C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YF0Y5B0IB8SM0ZFG9G82GB00707	Aviva Investors Energy Centres No.1 GP Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00968	Aviva Investors Emerging Markets Corporate Bond Fund	Other	Fund	Non-mutual		48.00%	48.00%	48.00%		Significant	48.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00970	Aviva Investors Emerging Markets Equity Income Fund	Other	Fund	Non-mutual		99.00%	99.00%	99.00%		Dominant	99.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81GB01747	Aviva Investors European Renewable Energy S.A.	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800QHAK1PQOF2FQ67	Aviva Investors Funds ACS AI Balanced Life Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800KV3Q3Q33YJKC55	Aviva Investors Funds ACS AI Balanced Pension Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800YE3Z5RWTRDTK61	Aviva Investors Funds ACS AI Cautious Pension Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800ETJFFG1M8MXR36	Aviva Investors Funds ACS AI Distribution Life Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	2138005OR58GSE74VE95	Aviva Investors Funds ACS AI Global Equity Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800DRNCHY9KH8QP26	Aviva Investors Funds ACS AI Japan Equity Fund	Other	Fund	Non-mutual		89.00%	89.00%	89.00%		Dominant	89.00%	YES		Method 1: Adjusted equity method
GB	213800BQITU4TGOH7G43	Aviva Investors Funds ACS AI Sterling Gilt Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800YLECGTOTU32547	Aviva Investors Funds ACS AI UK Equity Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00980	Aviva Investors Global Convertibles Absolute Return	Other	Fund	Non-mutual		77.00%	77.00%	77.00%		Dominant	77.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00982	Aviva Investors Global Emerging Markets Index Fund	Other	Fund	Non-mutual		78.00%	78.00%	78.00%		Dominant	78.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00983	Aviva Investors Global High Yield Bond Fund	Other	Fund	Non-mutual		58.00%	58.00%	58.00%		Dominant	58.00%	YES		Method 1: Adjusted equity method
GB	549300UNKVBRDEYTPW56	Aviva Investors North American Equity Index Fund	Other	Fund	Non-mutual		94.00%	94.00%	94.00%		Dominant	94.00%	YES		Method 1: Adjusted equity method
US	54930016JCCSDQVZBE19	Aviva Investors Americas LLC	Credit institution, investment firm and	Limited Liability Company	Non-mutual	Securities and Exchange Commission	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
SG	549300VCTPPTZIGOYU60	Aviva Investors Asia Pte. Limited	Credit institution, investment firm and	Private Company	Non-mutual	Monetary Authority of Singapore	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	YF0Y5B0IB8SM0ZFG9G81GB00700	Aviva Investors Commercial Assets GP Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB07138	Aviva Investors Commercial Assets Nominee Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01746	Aviva Investors EBC GP Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	WJHQ8HJCNBR1V6EQ1R27	Aviva Investors Global Services Limited	Credit institution, investment firm and	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	YF0Y5B0IB8SM0ZFG9G99LU00782	Aviva Investors (GP) Scotland Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800KNENEKZ31V2H15	Aviva ERFA 15 UK Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00719	Aviva Investors Ground Rent GP Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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Country	Identification code of the undertaking	Legal Name of the undertaking	Type of undertaking	Legal form	Category (mutual/ non mutual)	Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for group solvency calculation	YES/NO	Date of decision if art. 214 is applied	Method used and under method 1, treatment of the undertaking
C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YF0Y5B0IB8SM0ZFG9G81GB00720	Aviva Investors Ground Rent Holdco Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00709	Aviva Investors GR SPV 15 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00710	Aviva Investors GR SPV 4 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00711	Aviva Investors GR SPV 5 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00712	Aviva Investors GR SPV 6 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00713	Aviva Investors GR SPV 7 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00714	Aviva Investors GR SPV 8 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00718	Aviva Investors GR SPV3 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00717	Aviva Investors GR SPV 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GX07139	Aviva Investors GR SPV 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GX07140	Aviva Investors GR SPV 16 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00721	Aviva Investors Infrastructure GP Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
US	213800FN4QZNBOOWMQ08	Aviva Investors North America Holdings, Inc	Other	Corporation	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CA	549300D65EK4IWUDTC98	Aviva Insurance Company of Canada	Non life insurance undertaking	Private Corporation	Non-mutual	Office of the Superintendent of Financial	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
AU	549300SPF3VO763NWP52	Aviva Investors Pacific Pty Ltd	Credit institution, investment firm and	Proprietary Limited	Non-mutual	Australian Securities and Investments Commission	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	YF0Y5B0IB8SM0ZFG9G81GB01745	Aviva Investors Polish Retail GP Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01744	Aviva Investors Property Fund Management Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G99LU00781	Aviva Investors Real Estate Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CH	YF0Y5B0IB8SM0ZFG9G81CH00005	Aviva Investors Schweiz GmbH	Non-regulated undertaking carrying out financial	Gesellschaft mit beschränkter	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	213800OKSQ9GXTHLPB88	Aviva Insurance Services UK Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB00735	Aviva Investors Social Housing GP Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00736	Aviva Investors Social Housing Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800RQGKQPDEHBNR90	Undershaft FAL Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00007	Aviva Insurance UK Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800NBNVCKDZKLWL64	Aviva International Holdings Limited	Insurance holding company as defined in Article 212(1)	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation

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Country	Identification code of the undertaking	Legal Name of the undertaking	Type of undertaking	Legal form	Category (mutual/ non mutual)	Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for group solvency calculation	YES/NO	Date of decision if art. 214 is applied	Method used and under method 1, treatment of the undertaking
C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YSNZLTNDXKLPB9QGOZ10	Aviva International Insurance Limited	Reinsurance undertaking	Limited by Shares	Non-mutual	Prudential Regulation Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB00737	Aviva Investors UK CRESD GP Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	5493007VV85UTQ8CV292	Aviva Investors UK Fund Services Limited	Credit institution, investment firm and	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
CA	549300MLBJFJX8EYP785	Aviva Investors Canada Inc.	Credit institution, investment firm and	Private Corporation	Non-mutual	Ontario Securities Commission	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	YF0Y5B0IB8SM0ZFG9G99LU00780	Aviva Investors (FP) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300193P3A4TN7LU07	Aviva Investors Holdings Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	549300V8JA4BMYPQUJ49	Aviva Investors Luxembourg	Credit institution, investment firm and	Société Anonyme	Non-mutual	Commission de Surveillance du Secteur	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	GW2DWCFPKNYH3HYDE780	Aviva Investors Pensions Limited	Life insurance undertaking	Limited by Shares	Non-mutual	Prudential Regulation Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB01743	Aviva Investors Polish Retail S.à r.l.	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00722	Aviva Investors PIP Solar PV (General Partner) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00723	Aviva Investors Pip Solar PV No.1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CN	213800SESKMN51A5R665	Aviva-Cofco Life Insurance Co. Ltd	Life insurance undertaking	Private Company	Non-mutual	China Insurance Regulatory Commission	50.00%	100.00%	50.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	213800R5KOS6SXS8NL24	Aviva Life Holdings UK Limited	Insurance holding company as defined in Article 212(1)	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
IN	213800TGX4PTNC39XX35	Aviva Life Insurance Company India Limited	Life insurance undertaking	Public Company	Non-mutual	Insurance Regulatory and Development Authority of	49.00%	49.00%	49.00%		Significant	49.00%	YES		Method 1: Adjusted equity method
GB	IHNZN3GVPQJ4BFKMDO95	Aviva Life & Pensions UK Limited	Life insurance undertaking	Limited by Shares	Non-mutual	Prudential Regulation Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	2138006JVBQW12P27J28	Aviva Life Services UK Limited	Ancillary services undertaking as defined in	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB00094	Aviva Client Nominees UK Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00098	Aviva Overseas Holdings Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00015	Aviva (Peak No.1) UK Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00016	Aviva (Peak No.2) UK Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800EAQGGC37SGYS04	Aviva Pension Trustees UK Limited	Credit institution, investment firm and	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	YF0Y5B0IB8SM0ZFG9G81GB01054	Aviva Public Private Finance Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00117	Aviva Company Secretarial Services Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
SG	2549005ZUGHJ62CO4U86	Aviva Singlife Holdings Pte. Ltd	Insurance holding company as defined in Article 212(1)	Private Limted Company	Non-mutual		25.95%	25.95%	25.95%		Significant	25.95%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00742	Aviva Special PFI GP Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	549300F7DBOD216GB097	Aviva Staff Pension Trustee Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	549300IE5HB38SRLB009	Aviva Trustee Company Ireland Limited	Other	Designated Activity Company (Ltd. by	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00093	Aviva Trustees UK Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	2138006BFAKHS8UKT527	Aviva UK Digital Limited	Credit institution, investment firm and	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	5493006NO0E0RU0BSO29	Aviva UKGI Investments Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CA	213800X28AO8V887L368	Aviva Warranty Services Inc.	Other	Private Corporation	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	2138008EY5V67I9UY420	Aviva Wrap UK Limited	Credit institution, investment firm and	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
CN	YF0Y5B0IB8SM0ZFG9G81CN00035	Aviva-Cofco Yi Li Asset Management Co Ltd	Credit institution, investment firm and	Private Company	Non-mutual	China Insurance Regulatory Commission	20.50%	20.50%	20.50%		Significant	20.50%	YES		Method 1: Sectoral rules
SG	YF0Y5B0IB8SM0ZFG9G81SG5003	Aviva Singlife Pte Ltd	Life insurance undertaking	Limited by Shares	Non-mutual	Monetary Authority of Singapore	25.95%	100.00%	25.95%		Significant	100.00%	YES		Method 1: Full consolidation
GB	213800AKBSV8PUHZN119	AXA Ethical Distribution Fund	Other	Fund	Non-mutual		33.99%	33.99%	33.99%		Significant	33.99%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00404	Axcess 10 Management Company Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01742	Barratt House Nominee 1 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01741	Barratt House LP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE00800	Barratt House Unit Trust	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01740	Barratt House Nominee 2 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01739	Barwell Business Park Nominee Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CA	213800MUNQBMAQSG8Q07	Bay-Mill Specialty Insurance Adjusters Inc.	Other	Private Corporation	Non-mutual	Financial Services Commission of Ontario	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE8509	Bermondsey Yards Unit Trust	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800YHP3VDM1MKQ347	Bankhall Support Services Limited	Credit institution, investment firm and	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	2138009ZHAJ56NONAY14	Aviva Life Investments International (Recovery) Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB2075	Biomass UK No.4 Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G99LU00779	Biomass UK No.1 LLP	Other	Fund	Non-mutual		75.00%	75.00%	75.00%		Dominant	75.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00748	Biomass UK No.2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G99LU00778	Biomass UK No. 3 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01738	Boston Wood Recovery Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	549300MQT7YRWQ7R2C91	BlackRock Market Advantage Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB17143	Brockloch Rig Windfarm Limited	Other	Limited by Shares	Non-mutual		49.00%	49.00%	49.00%		Significant	49.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00010	Synergy Sunrise (Broadlands) Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01737	Building a Future (Newham Schools) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB2066	Cannock Consortium LLP	Other	Limited Liability Partnership	Non-mutual		42.50%	42.50%	42.50%		Significant	42.50%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01718	Cannock Designer Outlet (GP Holdings) Limited	Other	Limited by Shares	Non-mutual		42.50%	42.50%	42.50%		Significant	42.50%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01719	Cannock Designer Outlet (GP) Limited	Other	Limited by Shares	Non-mutual		42.50%	42.50%	42.50%		Significant	42.50%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01720	Cannock Designer Outlet (Nominee 1) Limited	Other	Limited by Shares	Non-mutual		42.50%	42.50%	42.50%		Significant	42.50%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01721	Cannock Designer Outlet (Nominee 2) Limited	Other	Limited by Shares	Non-mutual		43.00%	43.00%	43.00%		Significant	43.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB2082	Cara Renewables Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00730	Centaurus CER (Aviva Investors) Sarl	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00095	CGNU Life Assurance Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
NL	YF0Y5B0IB8SM0ZFG9G81NL00116	CGU International Holdings BV	Other	Besloten vennootschap (BV)	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01162	Chesterford Park (General Partner) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01163	Chesterford Park (Nominee) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	2138003ACI482856HG62	Baillie Gifford UK & Balanced Funds ICVC - Baillie Gifford	Other	Fund	Non-mutual		22.00%	22.00%	22.00%		Significant	22.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01151	Aviva Investors GR SPV 17 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00009	Commercial Union Corporate Member Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00096	Commercial Union Life Assurance Company Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB07144	County Broadband Holdings Limited	Other	Limited by Shares	Non-mutual		28.76%	28.76%	28.76%		Significant	28.76%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81FF00004	Crieff Road Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB5001	Criterion Tec Holdings Ltd	Other	Limited by Shares	Non-mutual		23.64%	23.64%	23.64%		Significant	23.64%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB5002	Criterion Tec Ltd	Other	Limited by Shares	Non-mutual		23.64%	23.64%	23.64%		Significant	23.64%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB07145	Crystal Rig III Limited	Other	Limited by Shares	Non-mutual		49.00%	49.00%	49.00%		Significant	49.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01090	Den Brook Energy Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
JE	YF0Y5B0IB8SM0ZFG9G81JE00589	The Designer Retail Outlet Centres Unit Trust	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00946	The Designer Retail Outlet Centres (Mansfield) General	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00947	The Designer Retail Outlet Centres (York) General Partner	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00870	Renewable Clean Energy Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	254900OREERUC1P22274	Allspring (Lux) Worldwide Fund - Global Small Cap Equity Fund	Other	Fund	Non-mutual		66.00%	100.00%	66.00%		Dominant	66.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00776	EES Operations 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01078	Electric Avenue Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
ES	959800281QPFRE5ZGH29	Eólica Almatret S.L.	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
CA	2138008NNYIEXUG8X681	Elite Insurance Company	Non life insurance undertaking	Private Corporation	Non-mutual	Office of the Superintendent of Financial	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB00706	Aviva Investors GR SPV 12 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01059	Tenet Financial Services Limited	Other	Limited by Shares	Non-mutual		37.11%	37.11%	37.11%		Significant	37.11%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G83LU00003	Aviva Investors E-RELI (GP) SARL	Other	Société à Responsabilité	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
US	213800T9D4VFR4O2RV32	Exeter Properties Inc.	Other	Corporation	Non-mutual		95.00%	95.00%	95.00%		Dominant	95.00%	YES		Method 1: Adjusted equity method
GB	5493004KDO649D8KU893	Schroder QEP Us Core Fund	Other	Fund	Non-mutual		45.00%	45.00%	45.00%		Significant	45.00%	YES		Method 1: Adjusted equity method
GB	213800IK3CGGYYZKPS39	AXA Rosenberg Asia Pacific ex Japan Fund	Other	Fund	Non-mutual		95.00%	95.00%	95.00%		Dominant	95.00%	YES		Method 1: Adjusted equity method
GB	213800FWGMU293N79Q93	AXA Rosenberg Japan Fund	Other	Fund	Non-mutual		95.00%	95.00%	95.00%		Dominant	95.00%	YES		Method 1: Adjusted equity method
GB	213800RKG27WRRSXWZ12	AXA Rosenberg Global Fund	Other	Fund	Non-mutual		93.00%	93.00%	93.00%		Dominant	93.00%	YES		Method 1: Adjusted equity method
GB	213800UW1WGYGZ22QZ13	AXA Rosenberg American Fund	Other	Fund	Non-mutual		97.59%	97.59%	97.59%		Dominant	97.59%	YES		Method 1: Adjusted equity method
IE	213800WLJY3FQZXTTR69	L&G Multi-Index EUR V	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300EBZC8311XVSD74	Lazard Multicap UK Income Fund	Other	Fund	Non-mutual		50.98%	50.98%	50.98%		Dominant	50.98%	YES		Method 1: Adjusted equity method
FR	969500EY74WTS2C6D770	CGU Equilibre	Other	Fund	Non-mutual		99.00%	100.00%	99.00%		Dominant	99.00%	YES		Method 1: Adjusted equity method
IE	213800A4UWV48TULB996	L&G Multi-Index EUR III	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	213800P3EKBH6ORRH688	L&G Multi-Index EUR IV	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	21380016PBQKIEIZDH29	Legal & General ICAV - L&G World Equity Index Fund	Other	Fund	Non-mutual		61.00%	100.00%	61.00%		Dominant	61.00%	YES		Method 1: Adjusted equity method
GB	549300CECUL6BL6V6685	Aviva Investors High Yield Bond Fund	Other	Fund	Non-mutual		54.00%	54.00%	54.00%		Dominant	54.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YF0Y5B0IB8SM0ZFG9G81GB01734	1 Fitzroy Place Limited Partnership	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01733	2 Fitzroy Place Limited Partnership	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01732	2-10 Mortimer Street Limited Partnership	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01731	20 Gracechurch Limited Partnership	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01100	Rugby Radio Station Limited Partnership	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01172	Lombard (London) 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01722	Chesterford Park Limited Partnership	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01770	Aviva Investors UK Equity Ex Tobacco	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01772	Aviva Investors Non-Gilt Bond Up to 5 Yrs Index Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00162	Friends AELLAS Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GG	213800A2B1H4ULF3K397	BMO Commercial Property Trust Limited	Other	Limited by Shares	Non-mutual		20.00%	20.00%	20.00%		Significant	20.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81FF00003	FF UK Select Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7001	AICT GBP Real Estate (Curtain House) General Partner Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7002	AICT GBP Real Estate (Telford) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7003	AICT Real Estate (Curtain House) LP	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7004	Aviva Investors 40 Spring Gardens (General Partner) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7009	Aviva Investors Climate Transition GBP Real Estate	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7010	Aviva Investors Climate Transition GBP Real Estate	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300YIK42HP7UWRP31	Aviva Investors Climate Transition Real Assets Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7012	Aviva Investors Polish EBC LP	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7013	Aviva Investors Polish Retail LP	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7016	Bermondsey Yards LP	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7017	CCPF No.4 LP	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7021	Longcross General Partner Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7023	Longcross Limited Partnership	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YF0Y5B0IB8SM0ZFG9G81GB7024	Longcross Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7025	Longcross Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	5493004WPW8R8A0BLK64	Aviva Investors Multi-Asset Plus V Fund	Other	Fund	Non-mutual		34.00%	34.00%	34.00%		Significant	34.00%	YES		Method 1: Adjusted equity method
GB	549300ZI8S6R96MK3H61	Aviva Investors Stewardship Fixed Interest Feeder Fund	Other	Fund	Non-mutual		95.00%	95.00%	95.00%		Dominant	95.00%	YES		Method 1: Adjusted equity method
GB	549300DXQOVS8ROHWP25	Aviva Investors Stewardship Int'l Eq Feeder Fund	Other	Fund	Non-mutual		99.00%	99.00%	99.00%		Dominant	99.00%	YES		Method 1: Adjusted equity method
GB	549300IBRSF0U2DLOK61	Aviva Investors Stewardship UK Eq Feeder Fund	Other	Fund	Non-mutual		99.00%	99.00%	99.00%		Dominant	99.00%	YES		Method 1: Adjusted equity method
GB	54930073UJFY8XLOWX06	Aviva Investors Stewardship UK EqInc Feeder Fund	Other	Fund	Non-mutual		99.00%	99.00%	99.00%		Dominant	99.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7034	Aviva Investors UK Listed Equity Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800Z1YYVFRNIAS166	Aviva Investors UK Listed Equity Income Fund	Other	Fund	Non-mutual		51.00%	51.00%	51.00%		Dominant	51.00%	YES		Method 1: Adjusted equity method
GB	5493007JT46QG3B0SD26	Aviva Investors UK Listed High Alpha Fund	Other	Fund	Non-mutual		87.00%	87.00%	87.00%		Dominant	87.00%	YES		Method 1: Adjusted equity method
GB	5493003F60BKO1SJUG24	AI Developed World ex UK Equity Index Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300ZT2L0UX18HKY55	AI Pacific EX Japan Equity Index Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300LDXY94FTIFTF20	AI UK Gilts up to 5 Years Index Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7040	AI UK Listed Equity Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7042	10 Station Road LP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7043	10 Station Road Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7044	10 Station Road Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7046	101 Moorgate GP Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7047	101 Moorgate Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7048	101 Moorgate Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7050	20 Station Road Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7051	20 Station Road Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7054	Aviva Investors Energy Centres No.1 Limited Partnership	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7060	Aviva Investors GR SPV10 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7063	Aviva Investors Infrastructure Income No.5 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YF0Y5B0IB8SM0ZFG9G81GB7064	Aviva Investors Infrastructure Income No.6a1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7065	Aviva Investors Infrastructure Income No.6c Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7066	Aviva Investors Infrastructure Income No.6c1 Limited	Other	Fund	Non-mutual		58.70%	58.70%	58.70%		Dominant	58.70%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7067	Aviva Investors Infrastructure Income No.8 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7069	Aviva Investors PIP Solar PV Limited Partnership	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7070	Bersey Warehouse Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7071	Bersey Warehouse Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7072	Digital Garage Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7073	Digital Garage Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7076	GES Solar2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7077	GES Solar3 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7079	Houghton Regis Management Company Limited	Other	Fund	Non-mutual		33.33%	33.33%	33.33%		Significant	33.33%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7081	Lime Property Fund Limited Partnership	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7083	Mamhilad Solar Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7084	NCH Solar1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7085	Norwich Union Public Private Partnership Fund ('NUPPP')	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7086	Riley Factory Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7087	Riley Factory Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7089	Station Road General Partner LLP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7090	The Rutherford Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7091	The Rutherford Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7092	The Southgate Property Limited Partnership	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7093	WR 11 Solar Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	YF0Y5B0IB8SM0ZFG9G81GB7094	Fppe Private Equity	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7095	Axa Sun Life Private	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
LU	YF0Y5B0IB8SM0ZFG9G81GB7096	Haspa TrendKonzept V	Other	Fund	Non-mutual		53.00%	100.00%	53.00%		Dominant	53.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7097	ASR Separate Account Mortgage Fund Open Ended	Other	Fund	Non-mutual		98.00%	100.00%	98.00%		Dominant	98.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7098	ASL Infrastructure Equity Npv	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7099	Cannock Designer Outlet LP	Other	Fund	Non-mutual		36.82%	36.82%	36.82%		Significant	36.82%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7100	Cannock Designer Outlet Unit Trust (Jersey)	Other	Fund	Non-mutual		37.19%	37.19%	37.19%		Significant	37.19%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7101	1 Liverpool Street General Partners Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7102	1 Liverpool Street Nominee 1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB7103	1 Liverpool Street Nominee 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE7018	CCPF No.4 Unit Trust	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE7022	Longcross Jersey Unit Trust	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE7045	10 Station Road Unit Trust	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE7075	Galleri K Retail ApS	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE7078	Hams Hall Unit Trust	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE7080	Lime Mayfair Unit Trust	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE7082	Lime Property Fund Unit Trust	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE7088	Southgate Property Unit Trust	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU7005	Aviva Investors Climate Transition EUR Infrastructure	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU7006	Aviva Investors Climate Transition EUR Real Estate Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU7007	Aviva Investors Climate Transition GBP Infrastructure	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU7008	Aviva Investors Climate Transition GBP Real Estate Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU7014	Aviva Investors Real Assets Climate Transition Fund	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	5493007VNELBIOF7EH34	Aviva Investors Climate Transition Global Credit Fund	Other	Fund	Non-mutual		69.00%	69.00%	69.00%		Dominant	69.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU7052	AIDE (Aviva Infrastructure Debt Europe I SA)	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU7053	AIESIC - Aviva Infrastructure European Secondary	Other	Fund	Non-mutual		67.00%	67.00%	67.00%		Dominant	67.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU7055	Aviva Investors E-RELI Danone Sarl	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
LU	YF0Y5B0IB8SM0ZFG9G81LU7056	Aviva Investors E-RELI Duisburg Sarl	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU7057	Aviva Investors E-RELI Holding Sarl	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU7059	Aviva Investors E-RELI Stern Sarl	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	549300T2MX3SNXTZOT37	Aviva Investors Perpetual Capital SCSp SICAV RAIF	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU7074	Galleri K (GP) Sarl	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
NO	YF0Y5B0IB8SM0ZFG9G81NO7058	Aviva Investors E-RELI Norway Holding AS	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
PL	YF0Y5B0IB8SM0ZFG9G81PL7019	Focus Mall Zielona Gora Sp zoo	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
PL	YF0Y5B0IB8SM0ZFG9G81PL7020	Focus Park Piotrkow Trybunalski Sp zoo	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
PL	YF0Y5B0IB8SM0ZFG9G81PL7026	PBC Lodz SP zoo	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
PL	YF0Y5B0IB8SM0ZFG9G81PL7027	PBC Wroclaw Sp zoo	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00778	Fitzroy Place Management Co Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00779	Fitzroy Place Residential Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00777	Fitzroy Place GP 2 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00059	Friends Life Assurance Society Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800AF9R6ANNVL4V97	Friends Life Company Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	5493007CDYM7I1M5DZ80	Aviva Investment Solutions UK Limited	Credit institution, investment firm and	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	213800PL3PRHOJJPX274	Friends Life FPG Limited	Insurance holding company as defined in Article 212(1)	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	213800WTATMITUGXJQ69	Friends Life Holdings plc	Other	Public Limited Company	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00064	Undershaft FPLLA Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800ZRHYVMTNLZ3W96	Friends Life FPLMA Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB00065	Friends' Provident Managed Pension Funds Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	2138003CYXQ7ZSMFIW51	Aviva Management Services UK Limited	Ancillary services undertaking as defined in	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
IE	2138008ZQS9EN5Z5KM53	FPPE Fund Public Limited Company	Other	Public Limited Company	Non-mutual	Central Bank of Ireland	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800LZUBDOS1TXEB39	Friends Life FPL Limited	Insurance holding company as defined in Article 212(1)	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	21380047CPEK7DHLLD31	Friends Provident Pension Scheme Trustees Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YF0Y5B0IB8SM0ZFG9G81GB07146	Fred. Olsen CBH Limited	Other	Limited by Shares	Non-mutual		49.00%	49.00%	49.00%		Significant	49.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00780	Free Solar (Stage 1) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00781	Free Solar (Stage 2) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
NO	YF0Y5B0IB8SM0ZFG9G99NO00786	Freetricity South East Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300NYP1X2VF6BTW90	Friends Life and Pensions Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	549300KTLIAIKSMMBO32	Aviva Administration Limited	Credit institution, investment firm and	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	YVWKAYL3K13YWXAVNZ95	Friends Life Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	2138005J84RYUEEHDO66	Friends Provident Investment Holdings Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00066	Friends Provident Life Assurance Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800GJT26929P77P35	General Accident plc	Other	Public Limited Company	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00784	Gobafoss General Partner Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01092	Gobafoss Partnership Nominee No 1 Ltd	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00617	Goodman European Business Park Fund (Lux) S.àr.l.	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU2016	Greenman Open Fund Class H	Other	Fund	Non-mutual		64.00%	64.00%	64.00%		Dominant	64.00%	YES		Method 1: Adjusted equity method
GB	2138003FG2HTZMDU6M40	Gresham Insurance Company Limited	Non life insurance undertaking	Limited by Shares	Non-mutual	Prudential Regulation Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB00807	Medium Scale Wind No.1 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01062	Healthcare Purchasing Alliance Limited	Other	Limited by Shares	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	213800KA5DH8W46SEF79	Healthcode Limited	Other	Limited by Shares	Non-mutual		20.00%	20.00%	20.00%		Significant	20.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB2069	Heath Farm Energy Limited	Other	Limited by Shares	Non-mutual		64.10%	64.10%	64.10%		Dominant	64.10%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00618	Hexagone S.à r.l.	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00787	Hillswood Management Limited	Other	Fund	Non-mutual		23.53%	23.53%	23.53%		Significant	23.53%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00788	Homesun 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00789	Homesun 3 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00790	Homesun 4 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00791	Homesun 5 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YF0Y5B0IB8SM0ZFG9G81GB00792	Homesun Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB07147	Hooton Bio Power Limited	Other	Limited by Shares	Non-mutual		55.80%	55.80%	55.80%		Dominant	55.80%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GX07148	Houlton Commercial Management Company Limited	Other	Limited by Guarantee	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00127	Wealth Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00927	Igloo Regeneration Developments LP	Other	Fund	Non-mutual		20.00%	20.00%	20.00%		Significant	20.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00949	Igloo Regeneration Property Unit Trust	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00797	Igloo Regeneration Developments (General Partner)	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00795	Igloo Regeneration (General Partner) Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00796	Igloo Regeneration (Nominee) Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB8510	Igloo Regeneration Partnership LP	Other	Fund	Non-mutual		50.00%	100.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB2067	Medium Scale Wind No.2 Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CA	213800EWPH8ER7FTBR95	Insurance Agent Service Inc.	Other	Private Corporation	Non-mutual	Financial Services Commission of Ontario	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800TS9W8PN1Y94J21	IQUO Limited	Ancillary services undertaking as defined in	Limited by Shares	Non-mutual		50.00%	100.00%	50.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB00914	Irongate House LP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE00797	Irongate House Unit Trust	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00799	Irongate House Nominee 1 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00800	Irongate House Nominee 2 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	213800V5ARWN4EF3W443	Jacks Lane Energy Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	549300ZYKD7WYUUP7461	ACS World ESG Insights Equity Fund	Other	Fund	Non-mutual		89.00%	100.00%	89.00%		Dominant	89.00%	YES		Method 1: Adjusted equity method
LU	21380046KIEHX3S28951	BMO Global Total Return Bond Fund	Other	Fund	Non-mutual		74.00%	100.00%	74.00%		Dominant	74.00%	YES		Method 1: Adjusted equity method
NO	YF0Y5B0IB8SM0ZFG9G99NO00789	Kongsgard Alle 20 AS	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	549300HDL1QKVHQ9J237	Russell Investment Company plc - Acadian Multi-Asset Absolute	Other	Fund	Non-mutual		44.00%	44.00%	44.00%		Significant	44.00%	YES		Method 1: Adjusted equity method
GB	213800WX34B26U97VY16	Lancashire and Yorkshire Reversionary Interest Company	Non-regulated undertaking carrying out financial	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	YF0Y5B0IB8SM0ZFG9G81GB00801	Lime Property Fund (General Partner) Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00802	Lime Property Fund (Nominee) Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	2138007FBM1RVJIB1S65	Liontrust Sustainable Future Managed Growth Fund	Other	Fund	Non-mutual		27.00%	27.00%	27.00%		Significant	27.00%	YES		Method 1: Adjusted equity method
GB	213800S774FDVGM56C45	London and Manchester Group Limited	Insurance holding company as defined in Article 212(1)	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB01701	Lombard (London) 2 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00008	London and Edinburgh Insurance Company Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00805	Aviva Savings Limited	Credit institution, investment firm and	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
IE	635400NFMIGIPUCPRG22	Mercer Diversified Retirement Fund	Other	Fund	Non-mutual		28.00%	28.00%	28.00%		Significant	28.00%	YES		Method 1: Adjusted equity method
IE	213800THI17LXZEL1G64	Merrion Managed Fund	Other	Fund	Non-mutual		59.00%	59.00%	59.00%		Dominant	59.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01147	Acre Platforms Limited	Other	Limited by Shares	Non-mutual		40.00%	40.00%	40.00%		Significant	40.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01175	Minnygap Energy Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00811	Mortimer Street Associated Co 1 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00812	Mortimer Street Associated Co 2 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00813	Mortimer Street Nominee 1 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00814	Mortimer Street Nominee 2 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00815	Mortimer Street Nominee 3 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00705	Aviva Investors GR SPV 11 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CA	21380031KS3KAVV9V969	2161605 Ontario Inc.	Other	Private Corporation	Non-mutual	Alberta Insurance Council	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CA	YF0Y5B0IB8SM0ZFG9G81CA70006	Nautimax Ltd.	Other	Private Corporation	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE00801	New Broad Street House Unit Trust	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00915	New Broad Street House LP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00817	New Broad Street House Nominee 1 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00818	New Broad Street House Nominee 2 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00819	New Energy Residential Solar Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB2083	NIRO Renewables Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	549300DGNNV8Z51QTZ82	MGI UK Equity	Other	Fund	Non-mutual		21.00%	21.00%	21.00%		Significant	21.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00822	Norton Energy SLS Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YF0Y5B0IB8SM0ZFG9G81GB00825	Norwich Union (Shareholder GP) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00826	NU 3PS Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00828	NU Developments (Brighton) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00831	NU Local Care Centres (Chichester No.1) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00832	NU Local Care Centres (Chichester No.2) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00833	NU Local Care Centres (Chichester No.3) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00834	NU Local Care Centres (Chichester No.4) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00835	NU Local Care Centres (Chichester No.5) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00836	NU Local Care Centres (Chichester No.6) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00829	NU Library For Brighton Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00830	NU Local Care Centres (Bradford) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00837	NU Local Care Centres (Farnham) Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00840	NU Offices for Redcar Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00845	NUPPP (Care Technology and Learning Centres) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00846	NUPPP (GP) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00848	NUPPP Nominees Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00842	NU Schools for Redbridge Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00843	NU Technology and Learning Centres (Hackney) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	549300BBNW4C7MFSGG11	NN (L) - Alternative Beta	Other	Fund	Non-mutual		21.00%	21.00%	21.00%		Significant	21.00%	YES		Method 1: Adjusted equity method
GB	549300T5CO5TX15CPK15	The Ocean Marine Insurance Company Limited	Non life insurance undertaking	Limited by Shares	Non-mutual	Prudential Regulation Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
CA	2138004LS49VE7I7XP35	OIS Ontario Insurance Service Limited	Other	Private Corporation	Non-mutual	Registered Insurance Brokers of Ontario	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800GB3M485E5SIJ50	Opal Information Systems Limited	Other	Limited by Shares	Non-mutual		28.52%	28.52%	28.52%		Significant	28.52%	YES		Method 1: Adjusted equity method
GB	213800ODSFH727DWUG33	Opal (UK) Holdings Limited	Other	Limited by Shares	Non-mutual		28.52%	28.52%	28.52%		Significant	28.52%	YES		Method 1: Adjusted equity method
GB	213800WF9T5RAGP31J59	Opus Park Management Limited	Other	Limited by Guarantee	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01146	Origo Services Limited	Other	Limited by Shares	Non-mutual		21.61%	21.61%	21.61%		Significant	21.61%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	213800UMRAY8892OMK28	Outsourced Professional Administration Limited	Other	Limited by Shares	Non-mutual		28.52%	28.52%	28.52%		Significant	28.52%	YES		Method 1: Adjusted equity method
GG	2138002NLLYGLUK8WE42	Paragon Insurance Company Guernsey Limited	Other	Limited by Shares	Non-mutual	Guernsey Financial Services Commission	46.00%	46.00%	46.00%		Significant	46.00%	YES		Method 1: Adjusted equity method
IE	549300CO16LZRCVM0U19	Peak Re Designated Activity Company	Non-regulated undertaking carrying out financial	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB00851	Pegasus House and Nuffield House Nominee 1 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00852	Pegasus House and Nuffield House Nominee 2 Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00916	Pegasus House and Nuffield House LP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81JE00796	Pegasus House and Nuffield House Unit Trust	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00707	Aviva Investors GR SPV 13 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00708	Aviva Investors GR SPV 14 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CA	549300PMLQBE19M15F61	Pilot Insurance Company	Non life insurance undertaking	Private Corporation	Non-mutual	Office of the Superintendent of Financial	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB01141	Premier Mortgage Service Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800Q93FUZEKDNTD30	Polaris U.K. Limited	Other	Limited by Shares	Non-mutual		38.52%	38.52%	38.52%		Significant	38.52%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00853	Porth Teigr Management Company Limited	Other	Limited by Shares	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
CA	YF0Y5B0IB8SM0ZFG9G81CA70007	Prolink Insurance Inc.	Other	Private Corporation	Non-mutual	Registered Insurance Brokers of Ontario	34.33%	34.33%	34.33%		Significant	34.33%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00854	Quantum Property Partnership (General Partner) Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00855	Quantum Property Partnership (Nominee) Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00856	Quarryvale One Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	54930085R8U8HOG2DK36	RAC Pension Trustees Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB2085	RDF Energy No.1 Limited	Other	Limited by Shares	Non-mutual		57.20%	57.20%	57.20%		Dominant	57.20%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01099	Renewable Clean Energy 3 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
DE	YF0Y5B0IB8SM0ZFG9G81DE00552	Reschop Carré Hattingen GmbH	Other	Fund	Non-mutual		94.00%	94.00%	94.00%		Dominant	94.00%	YES		Method 1: Adjusted equity method
DE	YF0Y5B0IB8SM0ZFG9G81DE00553	Reschop Carré Marketing GmbH	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	GY33BV78RICKYR2RFZ08	MFS Meridian Funds - Continental European Equity Fund	Other	Fund	Non-mutual		32.03%	32.03%	32.03%		Significant	32.03%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU2017	Robeco QI Global Multi-Factor Bonds	Other	Fund	Non-mutual		69.00%	69.00%	69.00%		Dominant	69.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00872	Rugby Radio Station (General Partner) Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YF0Y5B0IB8SM0ZFG9G81GB00873	Rugby Radio Station (Nominee) Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	213800RBUXTOSUDEN413	Sesame Limited	Credit institution, investment firm and	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
LU	YF0Y5B0IB8SM0ZFG9G81LU00626	Sapphire Ile de France 2 S.à r.l.	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00625	Sapphire Ile de France 1 S.à.r.l.	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800P3H6VP4IE2TA21	Stonebridge Cross Management Limited	Other	Limited by Guarantee	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CA	213800XGCRNUVFL6YA32	Scottish & York Insurance Co. Limited	Non life insurance undertaking	Private Corporation	Non-mutual	Office of the Superintendent of Financial	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
CA	213800F9V6ZECUV2I443	Aviva Agency Services Inc.	Other	Private Corporation	Non-mutual	Autorité des Marchés Financiers	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IN	213800NVJ6D5GDJ7DN26	Sesame Group India Private Limited	Other	Private Company	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800HMXWRSS9ZJ4D73	Sesame Bankhall Group Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800SIS1U8O6VJJ697	Sesame General Insurance Services Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01058	Living in Retirement Limited	Other	Limited by Shares	Non-mutual		46.52%	46.52%	46.52%		Significant	46.52%	YES		Method 1: Adjusted equity method
GB	213800FB37RSH65YWP61	Suntrust Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01729	Friends SL Nominees Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01707	Undershaft SLPM Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00104	Friends SLUA Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00878	Solar Clean Energy Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800EWQSA9QGOT3X46	Solus (London) Limited	Ancillary services undertaking as defined in	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB00881	Southgate General Partner Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00882	Southgate LP (Nominee 1) Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00883	Southgate LP (Nominee 2) Limited	Other	Limited by Shares	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01106	Spire Energy Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00894	The Square Brighton Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800634C1GHSJAB594	Sesame Bankhall Valuation Services Limited	Other	Limited by Shares	Non-mutual		75.00%	75.00%	75.00%		Dominant	75.00%	YES		Method 1: Adjusted equity method
GB	213800U4N8B1RZ3NDP78	Sesame Services Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	8KEPZEVXKHU6G2R0SD14	SSgA GRU Euro Index Equity Fund	Other	Fund	Non-mutual		36.00%	36.00%	36.00%		Significant	36.00%	YES		Method 1: Adjusted equity method

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
IE	YF0Y5B0IB8SM0ZFG9G81IX700514	State Street IUT Balanced Fund S30	Other	Fund	Non-mutual		24.00%	24.00%	24.00%		Significant	24.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G99LU11786	Station Road Cambridge LP	Other	Fund	Non-mutual		55.00%	55.00%	55.00%		Dominant	55.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00884	SUE GP LLP	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00885	SUE GP Nominee Limited	Other	Fund	Non-mutual		50.00%	50.00%	50.00%		Dominant	50.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00919	Swan Valley Management Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CA	21380078QKU7K8SUNV20	S&Y Insurance Company	Non life insurance undertaking	Private Corporation	Non-mutual	Office of the Superintendent of Financial	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	213800VKR8VVX6OFCA23	Synergy Financial Products Limited	Other	Limited by Shares	Non-mutual		28.52%	28.52%	28.52%		Significant	28.52%	YES		Method 1: Adjusted equity method
GE	529900TYTAQXIQH67D08	Warburg Global Fixed Income Fund	Other	Fund	Non-mutual		21.00%	21.00%	21.00%		Significant	21.00%	YES		Method 1: Adjusted equity method
GB	2138007VNE6HST7YCR60	Tenet Business Solutions Limited	Other	Limited by Shares	Non-mutual		46.52%	46.52%	46.52%		Significant	46.52%	YES		Method 1: Adjusted equity method
GB	213800K81TDSHG5NZQ52	Tenet Client Services Limited	Other	Limited by Shares	Non-mutual		46.52%	46.52%	46.52%		Significant	46.52%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB5003	Tenet Mortgage Solutions Limited	Non-regulated undertaking carrying out financial	Limited by Shares	Non-mutual		46.52%	46.52%	46.52%		Significant	46.52%	YES		Method 1: Sectoral rules
GB	213800LDHNCD94HYTO39	Tenet Limited	Other	Limited by Shares	Non-mutual		46.52%	46.52%	46.52%		Significant	46.52%	YES		Method 1: Adjusted equity method
GB	213800Q2URHZPC181H78	TenetConnect Limited	Other	Limited by Shares	Non-mutual	Financial Conduct Authority	46.52%	46.52%	46.52%		Significant	46.52%	YES		Method 1: Adjusted equity method
GB	21380089YAVOU765US98	Tenet Group Limited	Other	Limited by Shares	Non-mutual		46.52%	46.52%	46.52%		Significant	46.52%	YES		Method 1: Adjusted equity method
GB	2138008Z5VL5I7SQHW27	TenetLime Limited	Other	Limited by Shares	Non-mutual	Financial Conduct Authority	46.52%	46.52%	46.52%		Significant	46.52%	YES		Method 1: Adjusted equity method
GB	213800XT7PBSC4U42O44	Tenet Compliance Services Limited	Other	Limited by Shares	Non-mutual		46.52%	46.52%	46.52%		Significant	46.52%	YES		Method 1: Adjusted equity method
GB	213800YJRT3I88MTVZ07	TenetConnect Services Limited	Other	Limited by Shares	Non-mutual	Financial Conduct Authority	46.52%	46.52%	46.52%		Significant	46.52%	YES		Method 1: Adjusted equity method
GB	213800P46W22MDXEUS40	Tenet & You Limited	Non-regulated undertaking carrying out financial	Limited by Shares	Non-mutual		46.52%	46.52%	46.52%		Significant	46.52%	YES		Method 1: Sectoral rules
GB	YF0Y5B0IB8SM0ZFG9G81GB00887	TGHC Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81GB00890	The Designer Retail Outlet Centres (Mansfield) Unit Trust	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GX00890	The Designer Retail Outlet Centres (Mansfield) Limited	Other	Fund	Non-mutual		97.00%	97.00%	97.00%		Dominant	97.00%	YES		Method 1: Adjusted equity method
JE	YF0Y5B0IB8SM0ZFG9G81GB00891	The Designer Retail Outlet Centres (York) Unit Trust	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GX00891	The Designer Retail Outlet Centres (York) Limited	Other	Fund	Non-mutual		97.00%	97.00%	97.00%		Dominant	97.00%	YES		Method 1: Adjusted equity method
GB	2138006MPUJZINSD3Y02	Gateway Specialist Advice Services Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CA	213800PRT8BYL8J9B441	Traders General Insurance Company	Non life insurance undertaking	Private Corporation	Non-mutual	Office of the Superintendent of Financial	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation

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C0010	C0020	C0040	C0050	C0060	C0070	C0080	C0180	C0190	C0200	C0210	C0220	C0230	C0240	C0250	C0260
GB	YF0Y5B0IB8SM0ZFG9G81GB01112	Turncole Wind Farm Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00895	Tyne Assets (No 2) Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00896	Tyne Assets Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
US	213800KJUKBZ3XQGP218	UKP Holdings Inc.	Other	Corporation	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00097	Undershaft (NULLA) Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800R324WNWH8U7X39	Undershaft Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00715	Aviva Investors GR SPV 9 Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
LU	YF0Y5B0IB8SM0ZFG9G81LU00630	Victor Hugo 1 S.à r.l.	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
BB	YF0Y5B0IB8SM0ZFG9G81BB00011	Victoria Reinsurance Company Ltd.	Reinsurance undertaking	Private Company	Non-mutual	Office of the Superintendent of	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Full consolidation
GB	YF0Y5B0IB8SM0ZFG9G81GB2087	Voyager Park South Management Company Limited	Other	Limited by Shares	Non-mutual		51.85%	51.85%	51.85%		Dominant	51.85%	YES		Method 1: Adjusted equity method
US	21380042RYPHF15XCM29	Winslade Investments Inc.	Other	Corporation	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB01190	Wealthify Group Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800WXVR7DAHD34K62	Wealthify Limited	Credit institution, investment firm and	Limited by Shares	Non-mutual	Financial Conduct Authority	100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Sectoral rules
GB	YF0Y5B0IB8SM0ZFG9G81GB00111	Welsh Insurance Corporation Limited/The	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB2072	Westcountry Solar Solutions Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
CA	YF0Y5B0IB8SM0ZFG9G81CA9999	Westmount West Services Inc	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800VYHXZ3Y5YXOO05	Friends Life WL Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
GB	213800JLXTSVVUAKPK78	Woolley Hill Electrical Energy Limited	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
PL	YF0Y5B0IB8SM0ZFG9G81PL00654	Wroclaw BC sp. z.o.o	Other	Fund	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	213800J1Y9YKVMHC4W61	Merrion Multi-Asset 30 Fund	Other	Fund	Non-mutual		94.00%	100.00%	94.00%		Dominant	94.00%	YES		Method 1: Adjusted equity method
GB	YF0Y5B0IB8SM0ZFG9G81GB00092	The Yorkshire Insurance Company Limited	Other	Limited by Shares	Non-mutual		100.00%	100.00%	100.00%		Dominant	100.00%	YES		Method 1: Adjusted equity method
IE	21380089ZD5G6JPI2M25	Merrion Multi-Asset 50 Fund	Other	Fund	Non-mutual		94.00%	100.00%	94.00%		Dominant	94.00%	YES		Method 1: Adjusted equity method

F.3 Directors' certificate

We acknowledge our responsibility for preparing the Group Solvency and Financial Condition Report of Aviva plc at 31 December 2021 in all material respects in accordance with the PRA Rules and the Solvency II Regulations, and the approvals, determinations and modifications listed in section F.4.

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

a) Throughout the financial year in question, the Group has complied in all material respects with the requirements of the PRA Rules and the Solvency II Regulations as applicable at the level of the Group and with the approvals, determinations and modifications listed in section F.4; and

b) It is reasonable to believe that in respect of the period from 31 December 2021 to the date of the publication of the SFCR, the Group has continued so to comply and that it will continue so to comply for the remainder of the financial year to 31 December 2022.

Jason Windsor
Chief Financial Officer
27 April 2022

F.4 Approvals, determinations and modifications

The following approvals, determinations and modifications apply for Aviva plc at 31 December 2021:

Approvals

Approval	Legal entity	PRA/Regulator reference
Matching adjustment in the calculation of technical provisions	Aviva Life & Pension UK Limited (UKLAP) Aviva International Insurance Limited (AII)	24 August 2017: 4657691 6 August 2019: 51436856 29 June 2020: 00001365 4 November 2021: 00003456, 00003457
Matching Adjustment – Merger of Friends Life limited MAPs	Aviva Life & Pension UK Limited (UKLAP)	8 August 2019: 5143674
Volatility adjustment in the calculation of technical provisions	Aviva Life & Pension UK Limited (UKLAP) Aviva International Insurance Limited (AII) Aviva Insurance Limited (AIL), Ocean Marine & Gresham Aviva Life & Pensions Ireland DAC	24 August 2017: 4658257 30 November 2015: 2200426 30 November 2015: 2191473, 2191475 & 2191491 26 November 2019
Transitional measures on technical provisions	Aviva Life & Pension UK Limited (UKLAP) Aviva International Insurance Limited (AII)	December 2017 reset: 4850459 December 2019 reset: 5418763 December 2017 reset: 4850458 December 2019 reset: 5400813 June 2020: 00001373 10 December 2021: 00003601, 00003602
Partial internal model in the calculation of provisions the SCR	5 December 2015: IMAP approval for Aviva Group SCR including UKLAP, UKA, AIL, Ocean Marine and AII	5 December 2015: 2243186, 2243951, 2243953, 2243957 and 2243963
	1 March 2016: An extension of scope to include France Life and major change approval of the partial internal model integration technique	1 March 2016: 2429705, 2429709, 2429715, 2429728 and 2429745
	23 March 2017: An extension of scope to include Friends Life non-profit business. Major changes approved included revised SII Model Governance Business Standard, credit hedge calibrations, Canadian General Insurance correlations, equity calibrations, asset side credit model, French switch-loss contracts and other cumulative Group-wide changes	23 March 2017: 4105641, 4105642, 4105643, 4105644, 3605395, 4239664, 4239666
	21 December 2017: An extension in scope to include the modelling of Group currency risk and Irish Life Business in UKLAP. Major changes approved included changes relating to the modelling of operational risk, commercial mortgages and lapse risk for UKLAP; allowance of modelling of RBC Insurance Canada; allowing dynamic volatility adjustment in respect of France Life entities (for solo reporting only), new local model change policy, nominal interest rates, interest rate volatility and expense risk for France Life; and other cumulative Group-wide changes	21 December 2017: 4800491, 4800492, 4800493 4800494, 4800495, 4800496, 4800497
	10 December 2018: Two extensions of scope and one major change. The first extension of scope was to include the Friends Life with-profits funds and a second to include the calculation of Aviva Towarzystwo Ubezpieczen na Zycie S.A. (i.e. Poland Life) lapse, equity and interest rate risks' contribution to the Group SCR. The major change is to reflect at the Group level the use of Dynamic Volatility Adjustment for Aviva Vie S.A. and Aviva Epargne Retraite S.A.	10 December 2018: 5090845, 5090844, 5090869, 4973445

Approval	Legal entity	PRA/Regulator reference
	25 October 2019: This approved application contained five major changes groupwide in total. Two relating to an update of the Interest Rate Calibration – one with and one without Aviva Towarzystwo Ubezpieczen na Zycie S.A. One for a revised methodology to model Matching Adjustment in Stress for UKLAP. One to update the Aviva Group Solvency II Model Governance Business Standard and one to update the France Life Internal Model Change Policy for Aviva Vie and AER.	25 October 2019: 5276051, 5276050, 5276052, 5276048
	9 December 2020: An extension in scope to include Aviva Assurances for the purposes of calculating SCR and major changes to the modelling of aggregation methodology and dependencies.	9 December 2020: 00002047, 00002048, 00002049, 00002050
	1 December 2021: Internal model approval for Aviva Group SCR including Aviva Life & Pensions UK Ltd, Aviva Insurance Limited, Aviva International Insurance Limited and Ocean Marine Insurance Company Limited	1 December 2021: 00003513, 00003514, 00003515, 00003516

In Aviva plc, there are no ancillary own funds, 'non-standard' items in own funds, use of transitional measure on the risk-free interest rate, application of the duration-based equity risk sub-module for standard formula operations or application of undertaking specific parameters for standard formula operations.

Determinations
Correspondence with the PRA in the first half of 2015 in respect of fungibility and transferability of own funds as set out in Article 330 of the Solvency II Delegated Acts.

Modifications
There are no modifications. No permission has been sought for the following:
- Non-disclosure of information in the SFCR;
- A single Group-wide SFCR;
- Exclusion of entities from the scope of Group supervision; and
- Use of the deduction and aggregation method in the calculation of the Group SCR.

UK entities within the Group that fall below the small business threshold have not been audited during the period.

F.5 Audit opinion

Report of the external independent auditors to the Directors of Aviva plc ('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 Group Solvency and Financial Condition Report

Opinion

Except as stated below, we have audited the following documents prepared by the Company as at 31 December 2021:

- The 'Valuation for solvency purposes' and 'Capital Management' sections of the Group Solvency and Financial Condition Report of the Company as at 31 December 2021, (**'the Narrative Disclosures subject to audit'**); and
- Group templates S.02.01.02, S.22.01.22, S.23.01.22 and S.32.01.22 (**'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 Group 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 Group 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 Group Solvency and Financial Condition Report;
- Group templates S.05.01.02, S.05.02.01 and S.25.02.22;
- Information calculated in accordance with the previous regime used in the calculation of the transitional measure on technical provisions, and as a consequence all information relating to the transitional measure on technical provisions as set out in the Appendix to this report;
- The written acknowledgement by management of their responsibilities, including for the preparation of the Group Solvency and Financial Condition Report (**'the Directors' certificate'**); and
- Information which pertains to an undertaking that is not a Solvency II undertaking and has been prepared in accordance with PRA rules other than those implementing the Solvency II Directive or in accordance with an EU instrument other than the Solvency II regulations (**'the sectoral information'**) as identified in the Appendix to this report.

To the extent the information subject to audit in the relevant elements of the Group 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 Group Solvency and Financial Condition Report of the Company as at 31 December 2021 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 modified by relevant supervisory modifications, and as supplemented by supervisory approvals and determinations.

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 Group 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 Group 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

Our evaluation of the Directors' assessment of the Company's ability to continue to adopt the going concern basis of accounting included:

- Obtained the Directors' Going Concern assessment and challenged the rationale for the downside scenarios adopted and material assumptions made using our knowledge of Aviva's business performance, review of regulatory correspondence and obtaining further corroborating evidence;
- Considered management's assessment of the regulatory Solvency coverage and liquidity position in the forward looking scenarios considered which have been driven from Aviva's ORSA;
- Considered information obtained during the course of the audit and publicly available market information to identify any evidence that would contradict management's assessment of going concern (including the impacts of COVID-19); and
- Enquired and understood the actions taken by management to mitigate the impacts of COVID-19 and the geopolitical uncertainty in Ukraine, including review of Board Risk Committee minutes and attendance of all Audit Committees.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Company's ability to continue as a going concern for a period of at least twelve months from the date on which the Group Solvency and Financial Condition Report is authorised for issue.

In auditing the Group Solvency and Financial Condition Report, we have concluded that the Directors' use of the going concern basis of accounting in the preparation of the Group Solvency and Financial Condition Report is appropriate.

However, because not all future events or conditions can be predicted, this conclusion is not a guarantee as to the Company's ability to continue as a going concern.

Our responsibilities and the responsibilities of the Directors with respect to going concern are described in the relevant sections of this report.

Emphasis of Matter – Basis of Accounting

We draw attention to the 'Valuation for solvency purposes', 'Capital Management' and 'Approvals, determinations and modifications' sections of the Group Solvency and Financial Condition Report, which describe the basis of accounting. The Group 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 Group 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 Group 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 Group 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 Group 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 Group 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 Group 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 Group Solvency and Financial Condition Report

The Directors are responsible for the preparation of the Group Solvency and Financial Condition Report in accordance with the financial reporting provisions of the PRA rules and Solvency II regulations supplemented by the approvals and determinations made by the PRA under section 138A of FSMA, the PRA Rules and Solvency II regulations on which they are based, as detailed in section F.4: 'Approvals, determinations and modifications' of the Group Solvency and Financial Condition Report.

The Directors are also responsible for such internal control as they determine is necessary to enable the preparation of a Group 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 Group 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 Group Solvency and Financial Condition Report 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.

Our objectives are to obtain reasonable assurance about whether the relevant elements of the Group 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 Group Solvency and Financial Condition Report.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below.

Based on our understanding of the Company/industry, we identified that the principal risks of non-compliance with laws and regulations related to UK and European regulatory principles, such as those governed by the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA), and we considered the extent to which non-compliance might have a material effect on the Group Solvency and Financial Condition Report. We also considered those laws and regulations that have a direct impact on the Group Solvency and Financial Condition Report such as, the Companies Act 2006, UK and EU regulatory principles, Financial Services and Markets Act 2000. We evaluated management's incentives and opportunities for fraudulent manipulation of the Group Solvency and Financial Condition Report (including the risk of override of controls), and determined that the principal risks were related to management bias in accounting estimates and judgemental areas of the Solvency and Financial Condition Report. Audit procedures performed included:

- Discussions with the Board, management, Internal Audit, senior management involved in the Risk and Compliance functions and Group and Company's legal function, including consideration of known or suspected instances of non-compliance with laws and regulation and fraud;
- Evaluation and testing of the operating effectiveness of management's controls designed to prevent and detect irregularities;

- Assessment of matters reported on the Group and Company's whistleblowing helpline and fraud register and the results of management's investigation of such matters;
- Meeting with the PRA periodically and reading key correspondence with the PRA and the FCA, including those in relation to compliance with laws and regulations;
- Reviewing relevant meeting minutes including those of the Board of Directors, Audit, Remuneration and Disclosure Committees;
- Identifying and testing journal entries based on risk criteria;
- Designing audit procedures to incorporate unpredictability around the nature, timing or extent of our testing;
- Testing transactions entered into outside of the normal course of the Group and Company's business;
- Reviewing the Group's register of litigation and claims, Internal Audit reports, and Compliance reports in so far as they related to non-compliance with laws and regulations and fraud; and
- Attendance at Audit and Risk Committee meetings.

There are inherent limitations in the audit procedures described above. We are less likely to become aware of instances of non-compliance with laws and regulations that are not closely related to events and transactions reflected in the Group Solvency and Financial Condition Report. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

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

Use of this report
This report, including the opinion, has been prepared for the Board of Directors of the Company in accordance with 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 or to any other party save where expressly agreed by our prior consent in writing.

Other Matter
The Company has authority to calculate its Group 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

Sectoral Information
In our opinion, in accordance with Rule 4.2 of the External Audit Part of the PRA Rulebook, the sectoral information has been properly compiled in accordance with the PRA rules and EU instruments relating to that undertaking from information provided by members of the group and the relevant insurance group undertaking.

Other Information
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.

The engagement partner on the audit resulting in this independent auditors' report is Alex Bertolotti.

PricewaterhouseCoopers LLP
Chartered Accountants
London
28 April 2022

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

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

- The following elements of Group 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 Group template S.22.01.22
  - Column C0030 – Impact of transitional on technical provisions
  - Row R0010 – Technical provisions
  - Row R0090 – Solvency Capital Requirement
- The following elements of Group template S.23.01.22
  - Row R0020: Non-available called but not paid in ordinary share capital at group level
  - Row R0060: Non-available subordinated mutual member accounts at group level
  - Row R0080: Non-available surplus at group level
  - Row R0100: Non-available preference shares at group level
  - Row R0120: Non-available share premium account related to preference shares at group level
  - Row R0150: Non-available subordinated liabilities at group level
  - Row R0170: The amount equal to the value of net deferred tax assets not available at the group level
  - Row R0190: Non-available own funds related to other own funds items approved by supervisory authority
  - Row R0210: Non-available minority interests at group level
  - Row R0380: Non-available ancillary own funds at group level
  - Rows R0410 to R0440 – Own funds of other financial sectors
  - Row R0680: Group SCR
  - Row R0740: Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fenced funds
  - Row R0750: Other non available own funds
- Elements of the Narrative Disclosures subject to audit identified as ‘unaudited’.