

1. Our opinion is unmodified

We have audited the consolidated financial statements of Lancashire Holdings Limited ("the Group") for the year ended 31 December 2021 which comprise the consolidated statement of comprehensive income, the consolidated balance sheet, the consolidated statement of changes in shareholders' equity, the statement of consolidated cash flows, and the related notes, including the accounting policies on pages 129 to 135 of this Annual Report and Accounts.

In our opinion:

- the consolidated financial statements give a true and fair view of the state of the Group's affairs as at 31 December 2021 and of the Group's loss for the year then ended; and
- the consolidated financial statements have been properly prepared in accordance with International Financial Reporting Standards as adopted by the European Union.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We have fulfilled our ethical responsibilities under, and are independent of the Group in accordance with, UK ethical requirements including the FRC Ethical Standard as applied to other listed entities.

We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion.

2. Key audit matters: our assessment of risks of material misstatement

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the consolidated financial statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by us, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. In arriving at our audit opinion above, the key audit matters, in decreasing order of audit significance, were as follows:

Valuation of insurance contract liabilities for losses and loss adjustment expenses of IBNR on a gross and net of outwards reinsurance basis

(2021: \$1,291.1 million gross, \$872.3 million net of outwards reinsurance, of which incurred but not reported represented \$664.2 million gross, \$364.1 million net of outwards reinsurance; 2020: \$952.8 million gross, \$614.1 million net of outwards reinsurance, of which incurred but not reported (IBNR) represented \$422.7 million gross, \$211.1 million net of outwards reinsurance)

Refer to pages 75 to 80 (Audit Committee report), page 132 (accounting policy) and pages 169 to 171 (financial disclosures)

Risk vs 2020: ◀▶

The risk	Our response
<p>The Group maintains insurance contract liabilities to cover the estimated ultimate cost of settling all losses and loss adjustment expenses arising from events which have occurred up to the balance sheet date, regardless of whether those losses have been reported to the Group.</p> <p>Subjective valuation:</p> <p>Insurance contract liabilities represent the single largest liability for the Group. Valuation of the incurred but not reported liabilities is highly judgemental because it requires a number of assumptions to be made with high estimation uncertainty such as initial expected loss ratios, estimates of ultimate premium, claim development patterns and rate changes. The determination and application of the methodology and performance of the calculations are also complex.</p> <p>These judgemental and complex calculations for insurance contract liabilities are also used to derive the valuation of the related reinsurance assets.</p> <p>In setting the provision for insurance contract liabilities, an allowance is made for specific risks. The determination of the allowance is a subjective judgement based on the perceived uncertainty and potential for volatility in the underlying claims.</p> <p>The effect of these matters is that, as part of our risk assessment, we determined that valuation of gross and net insurance contract liabilities for losses and loss adjustment expenses has a high degree of estimation uncertainty, with a potential range of reasonable outcomes greater than our materiality for the consolidated financial statements as a whole, and possibly many times that amount. The consolidated financial statements (note 13) disclose the sensitivity estimated by the Group.</p>	<p>We have used our own actuarial specialists to assist us in performing our procedures in this area.</p> <p>Our procedures included:</p> <p>Control design and implementation</p> <p>Evaluating and testing the design and implementation of key controls around the review and approval of insurance contract liabilities.</p> <p>Due to the nature of this balance we would expect to obtain audit evidence primarily through detailed substantive procedures as outlined below. As such, the work over the design and implementation of controls is used to support our conclusions to the extent that the necessary evidence around key controls could be obtained.</p> <p>Assessment of assumptions and methodology</p> <p>Assessing and challenging the reserving assumptions and methodology (on a gross and net of outwards reinsurance basis) for reasonableness and consistency year on year based on our knowledge and understanding of the reserving policy within the Group. This has also involved comparing the Group's reserving methodology with industry practice and understanding the rationale for any key differences.</p> <p>Historical experience</p> <p>Challenging the quality of the Group's historical reserving estimates by monitoring the development of losses against initial estimates.</p> <p>Independent re-projections</p> <p>Applying our own assumptions, across all attritional classes of business, to perform re-projections on the insurance contract liabilities on both a gross and net of inwards reinsurance basis and comparing these to the Group's projected results including any allowance for specific risks. Where there were significant variances in the results, we have challenged the Group's assumptions.</p> <p>Sector experience and benchmarking of large losses</p> <p>Assessing and challenging the reserving assumptions by comparing the Group's loss experience to peers in the market, on a gross and net of inwards reinsurance basis, including on a contract by contract basis for large loss and catastrophe events. A large loss is defined as a single loss or event greater than \$5m on a gross ultimate basis.</p> <p>In addition to the procedures above, the audit team performed the following procedures:</p> <p>Assessing transparency</p> <p>Considering the adequacy of the Group's disclosures in respect of the valuation of insurance liabilities.</p>

Valuation of premiums receivable from insureds and cedants which are estimated

(2021: \$490.6 million, 2020: \$371.9 million) included within inwards premiums receivable from insureds and cedants

Refer to pages 75 to 80 (Audit Committee report), page 132 (accounting policy) and page 171 (financial disclosures)

Risk vs 2020: ◀▶

The risk	Our response
<p>Subjective valuation:</p> <p>There is a material proportion of premiums written through the syndicates (LSL), UK and Bermudan insurers (LUK and LICL), pricing for which is based on a best estimate of ultimate premiums. Judgement is involved in determining the ultimate estimates in order to establish the appropriate premium value and, ultimately, the cash to be received. As updated information is received over the life of the contract, adjustments are made to the premium recognised with inwards premiums receivable from insureds and cedants recorded on the consolidated balance sheet at the year end.</p> <p>Adjustments are made to gross premiums written to reflect the underlying adjustment to ultimate premium estimates such as declarations received on binding authority contracts, reinstatement premiums on reinsurance contracts and other routine adjustments to premium income due to policy amendments.</p> <p>LICL's revenue has increased in 2021 driven by both growth in existing lines of business and new lines of business. As a result the level of premiums based on a best estimate of ultimate premiums has increased materially since the prior year resulting in a significant increase in this balance for the Group at the year end.</p> <p>The effect of these matters is that, as part of our risk assessment, we determined that the valuation of inwards premiums receivable from insureds and cedants at the year-end has a high degree of estimation uncertainty, with a potential range of reasonable outcomes greater than our materiality for the consolidated financial statements as a whole, and possibly many times that amount.</p> <p>It should however be noted that it is only a portion of the inwards premiums receivable from insureds and cedants balance (and of total gross premiums written in the consolidated statement of comprehensive income) that is subject to this valuation risk.</p>	<p>Our procedures included:</p> <p>Control design and implementation</p> <p>Evaluating and testing the design and implementation of key controls over the periodic review of premium estimates booked.</p> <p>Due to the nature of this balance we would expect to obtain audit evidence primarily through detailed substantive procedures as outlined below. As such, the work over the design and implementation of controls is used to support our conclusions to the extent that the necessary evidence around key controls could be obtained.</p> <p>Methodology assessment</p> <p>Assessing estimated premium balances for a sample of policies, including consideration of the basis of estimation, and consistency in estimation methodology over time.</p> <p>Retrospective analysis</p> <p>Assessing the Group's past expertise in making premium estimates by comparing the estimates and actuals for prior year estimated debtor balance for a sample of policies.</p> <p>Assessing transparency</p> <p>Considering the adequacy of the Group's disclosures in respect of the valuation of premiums which are estimated.</p>

Valuation of level 3 investments

(2021: \$212.5 million, 2020: \$178.1 million)

Refer to pages 75 to 80 (Audit Committee report), page 133 (accounting policy) and pages 164 to 167 (financial disclosures)

Risk vs 2020: ◀▶

The risk	Our response
<p>A proportion of the Group's invested assets comprise holdings in hedge funds and private investment funds which are classified as level 3 investments.</p> <p>The valuations of these investments are based on the relevant fund managers' valuation reports. These assets are inherently harder to value due to the inability to obtain a market price of these assets as at the balance sheet date.</p> <p>The effect of these matters is that, as part of our risk assessment, we determined that valuation of level 3 investments has a high degree of estimation uncertainty, with a potential range of reasonable outcomes greater than our materiality for the consolidated financial statements as a whole, and possibly many times that amount.</p>	<p>Our procedures included:</p> <p>Control design and implementation Evaluating and testing the design and implementation of the controls associated with the valuation of level 3 investments.</p> <p>Due to the nature of this balance we would expect to obtain audit evidence primarily through detailed substantive procedures as outlined below. As such, the work over the design and implementation of controls is used to support our conclusions to the extent that the necessary evidence around key controls could be obtained.</p> <p>Comparing valuations Obtaining the fund managers' valuation reports and comparing the valuations recorded by the Group to assess for any material valuation differences.</p> <p>Benchmarking hedge funds & private debt funds Understanding the strategy for each investment fund held by the Group to identify relevant comparable indices and comparing their valuations with the hedge funds and private investment funds held by the Group. Where this benchmarking identifies a material difference we investigate the possible reasons for differences and assess if any adjustment is required at the year-end.</p> <p>Historical accuracy Retrospectively assessing the historical accuracy of the valuations used by the Group by comparing interim fund manager valuation reports to the final year-end reports for prior periods. Where this identifies a material difference we investigate the possible reasons for differences and assess if any adjustment is required at the year end.</p> <p>Assessing transparency Considering the adequacy of the Group's disclosures in respect of the valuation of level 3 investments.</p>

We continue to perform procedures over the impairment of goodwill and intangible assets. However, following improvement in the global economic environment, continued hardening of the insurance rating market and the financial performance of the cash generating units these assets are allocated to, we have not assessed this as one of the most significant risks in our current year audit and, therefore, it is not separately identified in our report this year.

3. Our application of materiality and an overview of the scope of our audit

Materiality for the consolidated financial statements as a whole was set at \$9.7 million (2020: \$7.3 million), determined with reference to a benchmark of gross premiums written (2020: gross premiums written), of which it represents 0.8% (2020: 0.9%). We consider gross premiums written to be the most appropriate benchmark given the size and complexity of the business as it provides a stable measure year on year. We also compared our materiality against other relevant benchmarks (total assets, net assets and loss before tax) to ensure the materiality selected was appropriate for our audit.

In line with our audit methodology, our procedures on individual account balances and disclosures were performed to a lower threshold, performance materiality, so as to reduce to an acceptable level the risk that individually immaterial misstatements in individual account balances add up to a material amount across the consolidated financial statements as a whole.

Performance materiality for the Group was set at 75% (2020: 75%) of materiality for the consolidated financial statements as a whole, which equates to \$7.2 million (2020: \$5.4million). We applied this percentage in our determination of performance materiality because we did not identify any factors indicating an elevated level of risk.

We agreed to report to the Audit Committee any corrected or uncorrected identified misstatements exceeding \$0.4 million (2020: \$0.3 million), in addition to other identified misstatements that warranted reporting on qualitative grounds.

We were able to rely upon the Group's internal control over financial reporting in several areas of our audit, where our controls testing supported this approach, which enabled us to reduce the scope of our substantive audit work; in the other areas the scope of the audit work performed was fully substantive.

Of the Group's nine (2020: nine) reporting components we subjected five (2020: five) to full scope audits for Group purposes which were the parent company (LHL), UK insurance company (LUK), Bermudan insurance company (LICL), UK service entity (LISL) and the Group's participation in Lloyd's Syndicate 2010 and 3010. Including the audit of the consolidation adjustments our scope covered 100% (2020: 100%) of gross premiums written, total assets and total liabilities.

The four (2020: four) components out of scope were not individually financially significant enough to require a full scope audit for Group purposes nor did they present specific individual risks that needed to be addressed. However, as part of our planning and completion procedures we did conduct analytical reviews of financial information.

The Group team instructed component auditors as to the significant areas to be covered, including the relevant risks detailed above and the information to be reported back.

The Group team determined the component materialities, which ranged from \$2.4 million to \$8.0 million (2019: \$2.1 million to \$7.2 million), having regard to the mix of size and risk profile of the Group across the components.

The work on four of the five full scope components (2020: four of the five components) was performed by component auditors with the audit of the parent company performed by the Group team.

As a result of the ongoing COVID-19 pandemic during 2021 the Group team were unable to visit the component location in Bermuda. However, video and telephone conference meetings were held with all component auditors throughout the year. At these meetings, the findings reported to the Group team were discussed in more detail, and any further work required by the Group team was then performed by the component auditor.

4. The impact of climate change on our audit

In planning our audit, we performed a risk assessment, including enquiries of management, to determine how the impact of commitments made by the Group in respect of the transition to net zero carbon emissions, as well as the physical risks of climate change, and transition risks faced by the Group's customer base, could impact on the financial statements and our audit. We held discussions with our own climate change professionals to challenge our risk assessment. Through the procedures we performed, we did not identify any material impact of climate change on the Group's material accounting estimates and there was no significant impact of this assessment on our key audit matters.

The Group predominantly underwrites short-tail catastrophe risks. Climate change may result in an increase in the frequency and severity of climate-related catastrophe events, leading to higher insurance pay-outs. However, the short-term nature of the Group's insurance contracts means that the impact of losses from catastrophes for the year ended 31 December 2021 is already recorded within the group's insurance contract liabilities at the balance sheet date. The Group considers this loss experience in evaluating individual risk exposures, and the setting of insurance premium rates for both new policies and the periodic renewal of its existing insurance underwriting portfolio. The Group expects any increase in the frequency and severity of climate-related catastrophe events to be reflected in future market premium rates. These considerations are factored into the Group's going concern assessments, in the assessment of which the Group performed a specific climate change stress scenario.

The Group also holds investments and during the year introduced measures to start assessing climate risk exposure within the portfolio. Given the predominantly short-term nature of these investments, we have assessed that there is no significant risk related to climate with regards to the valuation of these investments at the balance sheet date.

Taking into account the extent of the headroom of the recoverable amount over the carrying amount of the cash generating units including the Group's intangible assets with indefinite useful lives, we assessed the risk of climate change to the carrying amount of these assets at the balance sheet date to be not significant.

We have read the disclosures of climate related information in the Annual Report and Accounts and considered their consistency with the consolidated financial statements and our audit knowledge. We have not been engaged to provide assurance over the accuracy of the climate risk disclosures in the Annual Report and Accounts.

5. Going concern

The Directors have prepared the consolidated financial statements on the going concern basis as they do not intend to liquidate the Group or to cease their operations, and as they have concluded that the Group's financial position means that this is realistic. They have also concluded that there are no material uncertainties that could have cast significant doubt over their ability to continue as a going concern for at least a year from the date of approval of the consolidated financial statements ("the going concern period").

We used our knowledge of the Group, its industry, and the general economic environment to identify the inherent risks to its business model and analysed how those risks might affect the Group's financial resources or ability to continue operations over the going concern period. The risk that we considered most likely to adversely affect the Group's available financial resources over this period was the valuation of insurance contract liabilities given the estimation and judgement involved in setting these reserves.

We also considered less predictable but realistic second order impacts that could affect demand in the Group's markets, such as the impact of climate change on the Group's results and operations, the performance of the investment portfolio, credit ratings for key insurance subsidiaries, solvency and capital adequacy.

We considered whether these risks could plausibly affect the liquidity and solvency in the going concern period by comparing severe, but plausible downside scenarios and the degree of downside assumptions that, individually and collectively, could result in a liquidity and solvency issue (a reverse stress test), taking into account the Company's current and projected financial resources.

We considered whether the going concern disclosure on page 129 of the consolidated financial statements gives a full and accurate description of the Directors' assessment of going concern, including the identified risks and dependencies.

Our conclusions based on this work:

- we consider that the Directors' use of the going concern basis of accounting in the preparation of the consolidated financial statements is appropriate;
- we have not identified, and concur with the Directors' assessment that there is not, a material uncertainty related to events or conditions that, individually or collectively, may cast significant doubt on the Group's ability to continue as a going concern for the going concern period;
- we have nothing material to add or draw attention to in relation to the Directors' statement on page 114 of the consolidated financial statements on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the Group's use of that basis for the going concern period, and we found the going concern disclosure on page 129 to be acceptable.

However, as we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the above conclusions are not a guarantee that the Group or the Company will continue in operation.

6. Fraud and breaches of laws and regulations – ability to detect

Identifying and responding to risks of material misstatement due to fraud

To identify risks of material misstatement due to fraud ("fraud risks") we assessed events or conditions that could indicate an incentive or pressure to commit fraud or provide an opportunity to commit fraud. Our risk assessment procedures included:

- Enquiring of Directors, the Audit Committee, Internal Audit, the Risk function, Head of Group legal, the Company Secretary and inspection of policy documentation as to the Group's high-level policies and procedures to prevent and detect fraud, including the internal audit function, and the Group's channel for "whistleblowing", as well as whether they have knowledge of any actual, suspected or alleged fraud.
- Reading Board and Audit Committee minutes.
- Considering remuneration incentive schemes and performance conditions for management remuneration which includes the annual change in fully converted book value per share and absolute total shareholder return.
- Using analytical procedures to identify any unusual or unexpected relationships.

We communicated identified fraud risks throughout the audit team and remained alert to any indications of fraud throughout the audit. This included communications from the Group to full scope component audit teams of relevant fraud risks identified at the Group level and requests to full scope component audit teams to report to the Group audit team any instances of fraud that could give rise to a material misstatement at the Group level.

As required by auditing standards, and taking into account possible pressures to meet profit targets, recent revisions to guidance and our overall knowledge of the control environment, we perform procedures to address the risk of management override of controls and the risk of fraudulent revenue recognition, in particular the risk that management may be in a position to make inappropriate accounting entries and the risk of bias in accounting estimates and judgements such as the portion of premium which is estimated.

We also identified a fraud risk in relation to the following areas:

- The valuation of insurance contract liabilities due to the estimation required in setting these liabilities and the ability for changes in the valuation to be used to impact profit.
- Management compensation schemes and the pressure these place on management to deliver results.

Further detail in respect of our procedures around the valuation of insurance contract liabilities and the valuation of premiums which are estimated is set out in the key audit matter disclosures in section 2 of this independent auditor's report. The Audit Committee report on pages 75 to 80 also references the entity level controls in operation across the Group.

In determining the audit procedures we took into account the results of our evaluation and testing of the operating effectiveness of some of the Group-wide fraud risk management controls. In order to address the risk of fraud specifically as it relates to the valuation of insurance contract liabilities, we involved actuarial specialists to assist in our challenge of management. We challenged management in relation to the selection of assumptions and the consistency of those assumptions both year on year and across different aspects of the financial reporting process.

With respect to the valuation of premiums receivable which are estimated, we evaluated and tested the design and implementation of key controls over the periodic review of premium estimates booked and assessed estimated premium balances for a sample of policies, including consideration of the basis of estimation, and consistency in estimation methodology over time.

We also performed procedures including:

- Identifying journal entries and other adjustments to test for all full scope components based on risk criteria and comparing the identified entries to supporting documentation. These included those posted by senior finance management or individuals who do not frequently post journals, those posted with descriptions containing key words or phrases, those posted to unusual accounts including those related to cash, consolidation journals and post-closing journals meeting certain criteria;
- Evaluating the business purpose of significant unusual transactions; and
- Assessing significant accounting estimates for bias.

Identifying and responding to risks of material misstatement due to non-compliance with laws and regulations

We identified areas of laws and regulations that could reasonably be expected to have a material effect on the consolidated financial statements from our general commercial and sector experience, through discussion with the Directors and other management (as required by auditing standards), from inspection of the Group's regulatory and legal correspondence and discussed with the Directors and other management the policies and procedures regarding compliance with laws and regulations.

As certain entities with the Group are regulated, our assessment of risks involved gaining an understanding of the control environment including an entity's procedures for complying with regulatory requirements. This was achieved through the procedures noted above.

We communicated identified laws and regulations throughout our team and remained alert to any indications of non-compliance throughout the audit. This included communication from the Group audit team to full-scope component audit teams of relevant laws and regulations identified at the Group level, and a request for full scope component auditors to report to the Group audit team any instances of non-compliance with laws and regulations that could give rise to a material misstatement at the Group level.

The potential effect of these laws and regulations on the consolidated financial statements varies considerably.

Firstly, the Group is subject to laws and regulations that directly affect the consolidated financial statements including financial reporting legislation (including related companies legislation), distributable profits legislation, taxation legislation and regulatory capital, solvency and liquidity regulations and we assessed the extent of compliance with these laws and regulations as part of our procedures on the related financial statement items.

Secondly, the Group is subject to many other laws and regulations where the consequences of non-compliance could have a material effect on amounts or disclosures in the consolidated financial statements, for instance through the imposition of fines, litigation or loss of regulatory approval to write insurance contracts. We identified the following areas as those most likely to have such an effect: anti-bribery and certain aspects of company legislation recognising the financial and regulated nature of certain of the Group's activities and its legal form. Auditing standards limit the required audit procedures to identify non-compliance with these laws and regulations to enquiry of the Directors and other management and inspection of regulatory and legal correspondence, if any. Therefore, if a breach of operational regulations is not disclosed to us or evident from relevant correspondence, an audit will not detect that breach.

We discussed with the Audit Committee and those charged with governance matters related to actual or suspected breaches of laws or regulations, for which disclosure is not necessary, and considered any implications for our audit.

Context of the ability of the audit to detect fraud or breaches of law or regulation

Owing to the inherent limitations of an audit, there is an unavoidable risk that we may not have detected some material misstatements in the consolidated financial statements, even though we have properly planned and performed our audit in accordance with auditing standards. For example, the further removed non-compliance with laws and regulations is from the events and transactions reflected in the consolidated financial statements, the less likely the inherently limited procedures required by auditing standards would identify it.

In addition, as with any audit, there remained a higher risk of non-detection of fraud, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls. Our audit procedures are designed to detect material misstatement. We are not responsible for preventing non-compliance or fraud and cannot be expected to detect non-compliance with all laws and regulations.

7. We have nothing to report on the other information in the Annual Report and Accounts

The Directors are responsible for the other information presented in the Annual Report and Accounts together with the consolidated financial statements. Our opinion on the consolidated financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our consolidated financial statements audit work, the information therein is materially misstated or inconsistent with the consolidated financial statements or our audit knowledge. Based solely on that work we have not identified material misstatements in the other information.

Directors' remuneration report

In addition to our audit of the consolidated financial statements, the Directors have engaged us to audit the information in the Directors' Remuneration Report that is described as having been audited, which the Directors have decided to prepare as if the Company was required to comply with the requirements of Schedule 8 to The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (SI 2008 No. 410) made under the UK Companies Act 2006.

In our opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the UK Companies Act 2006, as if those requirements applied to the Company.

Disclosures of emerging and principal risks and longer-term viability

We are required to perform procedures to identify whether there is a material inconsistency between the Directors' disclosures in respect of emerging and principal risks and the viability statement, and the consolidated financial statements and our audit knowledge.

Based on those procedures, we have nothing material to add or draw attention to in relation to:

- the Directors' confirmation within the viability statement that they have carried out a robust assessment of the emerging and principal risks facing the Group, including those that would threaten its business model, future performance, solvency and liquidity;
- the Emerging and Principal Risks disclosures describing these risks and how emerging risks are identified, and explaining how they are being managed and mitigated; and
- the Directors' explanation in the viability statement of how they have assessed the prospects of the Group, over what period they have done so and why they considered that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

Our work is limited to assessing these matters in the context of only the knowledge acquired during our consolidated financial statements audit. As we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the absence of anything to report on these statements is not a guarantee as to the Group's longer-term viability.

Corporate governance disclosures

We are required to perform procedures to identify whether there is a material inconsistency between the Directors' corporate governance disclosures and the consolidated financial statements and our audit knowledge.

Based on those procedures, we have concluded that each of the following is materially consistent with the consolidated financial statements and our audit knowledge:

- the Directors' statement that they consider that the Annual Report and Accounts taken as a whole is fair, balanced and understandable, and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy;
- the section of the Annual Report and Accounts describing the work of the Audit Committee, including the significant issues that the Audit Committee considered in relation to the consolidated financial statements, and how these issues were addressed; and
- the section of the Annual Report and Accounts that describes the review of the effectiveness of the Group's risk management and internal control systems.

We are required to review the part of the Corporate Governance Statement relating to the Group's compliance with the provisions of the UK Corporate Governance Code specified by the Listing Rules for our review. We have nothing to report in this respect.

8. Respective responsibilities

Directors' responsibilities

As explained more fully in their statement set out on page 115, the Directors are responsible for: the preparation of the consolidated financial statements including being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error; assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and using the going concern basis of accounting unless they either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not 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 aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

A fuller description of our responsibilities is provided on the FRC's website at www.frc.org.uk/auditorsresponsibilities.

9. The purpose of our audit work and to whom we owe our responsibilities

This report is made solely to the Company's members, as a body, in accordance with section 90 of the Bermuda Companies Act 1981 and the terms of our engagement. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members, as a body, for our audit work, for this report, or for the opinions we have formed.



Rees Aronson

for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
15 Canada Square, London, E14 5GL
10 February 2022

Consolidated statement of comprehensive (loss) income

For the year ended 31 December 2021

	Notes	2021 \$m	2020 \$m
Gross premiums written	2	1,225.2	814.1
Outwards reinsurance premiums	2	(409.1)	(294.7)
Net premiums written		816.1	519.4
Change in unearned premiums	2	(140.0)	(51.5)
Change in unearned premiums on premiums ceded	2	20.4	7.9
Net premiums earned		696.5	475.8
Net investment income	3	23.0	29.0
Net other investment income	3	3.8	6.5
Net realised gains (losses) and impairments	3	6.1	12.8
Share of (loss) profit of associate	16	(3.9)	10.7
Other income	5	18.2	15.3
Net foreign exchange gains		3.5	1.4
Total net revenue		747.2	551.5
Insurance losses and loss adjustment expenses	2, 13	667.6	363.6
Insurance losses and loss adjustment expenses recoverable	2, 13	(197.1)	(79.8)
Net insurance losses		470.5	283.8
Insurance acquisition expenses	2, 4	188.6	139.0
Insurance acquisition expenses ceded	2, 4	(31.6)	(24.0)
Equity based compensation	7	11.1	12.3
Other operating expenses	6, 7, 20	119.6	114.4
Total expenses		758.2	525.5
Results of operating activities		(11.0)	26.0
Financing costs	8	45.8	20.1
(Loss) profit before tax		(56.8)	5.9
Tax charge	9	(4.8)	(1.4)
(Loss) profit for the year		(61.6)	4.5
(Loss) profit for the year attributable to:			
Equity shareholders of LHL		(62.2)	4.2
Non-controlling interests		0.6	0.3
(Loss) profit for the year		(61.6)	4.5
Other comprehensive (loss) income to be reclassified to profit or loss in subsequent periods			
Net change in unrealised gains/losses on investments	3, 11	(31.6)	20.8
Tax credit (charge) on net change in unrealised gains/losses on investments	11, 15	0.9	(0.7)
Other comprehensive (loss) income		(30.7)	20.1
Total comprehensive (loss) income for the year		(92.3)	24.6
Total comprehensive (loss) income attributable to:			
Equity shareholders of LHL		(92.9)	24.3
Non-controlling interests		0.6	0.3
Total comprehensive (loss) income for the year		(92.3)	24.6
(Loss) earnings per share			
Basic	22	(\$0.26)	\$0.02
Diluted	22	(\$0.26)	\$0.02

Consolidated balance sheet

As at 31 December 2021

	Notes	2021 \$m	2020 \$m
Assets			
Cash and cash equivalents	10, 18	517.7	432.4
Accrued interest receivable		7.1	8.0
Investments	11, 12, 18	2,048.1	1,856.0
Inwards premiums receivable from insureds and cedants	14	490.6	371.9
Reinsurance assets			
• Unearned premiums on premiums ceded		117.8	97.4
• Reinsurance recoveries	13	418.8	338.7
• Other receivables	14	38.2	31.1
Other receivables	14	18.8	27.3
Investment in associate	12, 16	118.7	127.2
Property, plant and equipment		0.8	0.7
Right-of-use assets	20	13.4	16.1
Deferred acquisition costs		121.6	89.0
Intangible assets	17	157.9	154.5
Total assets		4,069.5	3,550.3
Liabilities			
Insurance contracts			
• Losses and loss adjustment expenses	13	1,291.1	952.8
• Unearned premiums		597.9	457.9
• Other payables		20.3	22.5
Amounts payable to reinsurers		205.6	151.7
Deferred acquisition costs ceded		27.0	19.6
Other payables		37.4	46.1
Corporation tax payable		1.6	1.5
Deferred tax liability	15	12.2	10.9
Lease liabilities	20	17.9	20.9
Long-term debt	18	445.7	327.5
Total liabilities		2,656.7	2,011.4
Shareholders' equity			
Share capital	19	122.0	122.0
Own shares	19	(18.1)	(21.2)
Other reserves	19	1,221.6	1,221.6
Accumulated other comprehensive income	11	2.9	33.6
Retained earnings		83.9	182.5
Total shareholders' equity attributable to equity shareholders of LHL		1,412.3	1,538.5
Non-controlling interests	23	0.5	0.4
Total shareholders' equity		1,412.8	1,538.9
Total liabilities and shareholders' equity		4,069.5	3,550.3

The consolidated financial statements were approved by the Board of Directors on 10 February 2022 and signed on its behalf by:



Peter Clarke
Director/Chairman



Natalie Kershaw
Director/CFO

Consolidated statement of changes in shareholders' equity

For the year ended 31 December 2021

	Notes	Share capital \$m	Own shares \$m	Other reserves \$m	Accumulated other comprehensive income \$m	Retained earnings \$m	Shareholders' equity attributable to equity shareholders of LHL \$m	Non- controlling interests \$m	Total shareholders' equity \$m
Balance as at 31 December 2019		101.5	(13.3)	881.3	13.5	210.6	1,193.6	0.6	1,194.2
Total comprehensive income for the year		–	–	–	20.1	4.2	24.3	0.3	24.6
Issue of common shares	19	19.8	–	320.5	–	–	340.3	–	340.3
Shares purchased by the trust	19, 23	0.7	(15.0)	14.3	–	–	–	–	–
Distributed by the trust	19	–	7.1	(7.9)	–	–	(0.8)	–	(0.8)
Dividends paid on common shares	19	–	–	–	–	(32.3)	(32.3)	–	(32.3)
Dividends paid to minority interest holders	23	–	–	–	–	–	–	(0.5)	(0.5)
Net deferred tax	15	–	–	0.4	–	–	0.4	–	0.4
Equity based compensation		–	–	13.0	–	–	13.0	–	13.0
Balance as at 31 December 2020		122.0	(21.2)	1,221.6	33.6	182.5	1,538.5	0.4	1,538.9
Total comprehensive loss for the year		–	–	–	(30.7)	(62.2)	(92.9)	0.6	(92.3)
Share repurchases	19	–	(6.9)	–	–	–	(6.9)	–	(6.9)
Distributed by the trust	19	–	9.9	(10.9)	–	–	(1.0)	–	(1.0)
Shares donated to the trust	19	–	0.1	(0.1)	–	–	–	–	–
Dividends on common shares	19	–	–	–	–	(36.4)	(36.4)	–	(36.4)
Dividends paid to minority interest holders	23	–	–	–	–	–	–	(0.5)	(0.5)
Net deferred tax	15	–	–	(0.5)	–	–	(0.5)	–	(0.5)
Equity based compensation		–	–	11.5	–	–	11.5	–	11.5
Balance as at 31 December 2021		122.0	(18.1)	1,221.6	2.9	83.9	1,412.3	0.5	1,412.8

Statement of consolidated cash flows

For the year ended 31 December 2021

	Notes	2021 \$m	2020 \$m
Cash flows from operating activities			
(Loss) profit before tax		(56.8)	5.9
Adjustments for:			
Tax paid		(3.2)	(1.6)
Depreciation	6, 20	3.3	3.3
Interest expense on long-term debt	8	25.8	15.7
Interest expense on lease liabilities	20	1.1	1.3
Interest income	3	(34.1)	(36.9)
Net amortisation of fixed maturity securities		7.0	4.9
Redemption cost on senior and subordinated loan notes	8	12.8	–
Net realised / unrealised losses (gains) on interest rate swaps	8	3.4	(1.1)
Equity based compensation	7	11.1	12.3
Foreign exchange gains		(0.4)	(3.2)
Share of loss (profit) of associate	16	3.9	(10.7)
Net other investment income		(4.7)	(7.4)
Net realised (gains) losses and impairments	3	(6.1)	(12.8)
Changes in operational assets and liabilities			
• Insurance and reinsurance contracts		285.6	84.5
• Other assets and liabilities		(4.9)	26.7
Net cash flows from operating activities		243.8	80.9
Cash flows used in investing activities			
Interest received		42.7	39.9
Purchase of property, plant and equipment		(0.7)	–
Purchase of underwriting capacity	17	(0.2)	–
Internally generated intangible asset	17	(3.2)	–
Investment in associate	23	4.6	(8.2)
Purchase of investments		(1,348.5)	(1,129.7)
Proceeds on sale of investments		1,118.5	837.9
Net cash flows used in investing activities		(186.8)	(260.1)
Cash flows from financing activities			
Interest paid		(20.8)	(15.9)
Interest rate swap	8	(3.4)	–
Lease liabilities paid	20	(4.0)	(3.5)
Proceeds from issue of common shares	19	–	340.3
Proceeds from issue of long-term debt	18	445.4	–
Redemption of long-term debt	18	(339.6)	–
Dividends paid	19	(36.4)	(32.3)
Dividends paid to minority interest holders	23	(0.5)	(0.5)
Share repurchases	19	(6.9)	–
Distributions by trust		(1.0)	(0.8)
Net cash flows from financing activities		32.8	287.3
Net increase in cash and cash equivalents		89.8	108.1
Cash and cash equivalents at beginning of year		432.4	320.4
Effect of exchange rate fluctuations on cash and cash equivalents		(4.5)	3.9
Cash and cash equivalents at end of year	10	517.7	432.4

Accounting policies

For the year ended 31 December 2021

Summary of significant accounting policies

The basis of preparation, use of judgements and estimates, consolidation principles and significant accounting policies adopted in the preparation of these consolidated financial statements are set out below.

BASIS OF PREPARATION

GOING CONCERN BASIS OF ACCOUNTING

The consolidated financial statements are prepared on a going concern basis using accounting policies consistent with IFRS Standards as adopted by the EU.

In assessing the Group's going concern position as at 31 December 2021, the Directors have considered a number of factors. These include the current balance sheet and liquidity position, the level and composition of the Group's capital and solvency ratios, the Group's ability to service its long-term debt financing arrangements, the current performance against the Group's strategic and financial business plan, the Group's dividend distribution policy, and the current market environment including consideration of the ongoing COVID-19 pandemic and climate change.

The Group's financial forecasts reflect the outcomes that the Directors consider most likely, based on the information available at the date of signing these consolidated financial statements. To assess the Group's going concern, the financial stability of the Group was modelled for a period of at least 12 months and a number of sensitivity, stress and scenario tests were applied. This included, among other analysis, a best estimate forecast as well as various scenarios. This incorporated different magnitudes of reserve releases and, attritional, large and catastrophe loss events plus optimistic and pessimistic investment return scenarios. To further stress the financial stability of the Group, additional stress testing was performed. This included modelling the breakeven capital requirements of our regulators and rating agencies, the impact of potential management actions to reduce the Group's exposure to climate change-related risks, an operational risk stress of the main input assumption to the base case, the occurrence of a number of high severity loss events impacting the Group in 2022 alongside an investment shock and finally a reverse stress test scenario designed to render the business model unviable. The testing identified that even under the more severe but plausible stress scenarios, the Group had more than adequate liquidity and solvency headroom.

Based on the going concern assessment performed as at 31 December 2021, the Directors consider there to be no material uncertainties that may cast significant doubt over the Group's ability to continue to operate as a going concern. The Directors have formed a judgement that there is a reasonable expectation that the Group has adequate resources to continue in operational existence in the foreseeable future, a period of at least 12 months from the date of signing these consolidated financial statements.

USE OF JUDGEMENTS AND ESTIMATES

The preparation of the Group's consolidated financial statements requires management to make judgements and estimates that affect the reported amounts of revenue, expenses, assets, liabilities and the accompanying financial statement disclosures. In the course of preparing the consolidated financial statements no key judgements have been made in the process of applying the Group's accounting policies that do not include a related element of estimation uncertainty.

The key assumptions and other sources of estimation uncertainty as at 31 December 2021, that have a significant risk of resulting in a material adjustment to the carrying amount of assets and liabilities in the next financial year, are described below. Assumptions and estimates are based on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change or circumstances may arise, that are beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

The most significant judgements and estimates made by management are in relation to losses and loss adjustment expenses, both gross and net of outwards reinsurance recoverable. These are discussed on page 132, within the risk disclosures section from page 137 and within note 13.

Less significant estimates are made in determining the fair value of certain financial instruments and judgement is applied in determining impairment charges. The estimation of the fair value, specifically 'Level (iii)' investments, is discussed on page 133 and in note 11.

The consolidated balance sheet includes indefinite life intangible assets and internally generated intangible assets. Whilst not significant, estimates are utilised in the valuation of these intangible assets and the assumptions made by management in performing annual impairment tests of these intangible assets are also subject to estimation uncertainty (see note 17).

A portion of gross premiums written is based on estimates of the ultimate premiums expected to be received (see the premium and acquisition costs accounting policy on page 132). Judgement is involved in determining the ultimate estimates in order to establish the appropriate premium value and, ultimately, the cash to be received.

OTHER BASIS OF PREPARATION

Where IFRS 4, Insurance Contracts is silent, as it is in respect of certain aspects relating to the measurement of insurance products, the IFRS framework allows reference to another comprehensive body of accounting principles. In such instances, the Group's management determines appropriate measurement bases, to provide the most useful information to users of the consolidated financial statements, using their judgement and considering U.S. GAAP.

The consolidated balance sheet is presented in order of decreasing liquidity. All amounts, excluding share data or where otherwise stated, are in millions of U.S. dollars.

CHANGES IN ACCOUNTING STANDARDS

There were no new standards that became effective in the year ended 31 December 2021 that have had a material impact on the Group.

FUTURE ACCOUNTING CHANGES**IFRS 17, Insurance Contracts**

IFRS 17, issued in May 2017, including amendments issued in June 2020, specifies the financial reporting for insurance contracts and supersedes IFRS 4, Insurance Contracts. IFRS 17 will be effective for accounting periods beginning on or after 1 January 2023.

The Group is currently in the 'build phase' of its IFRS 17 project with parallel testing of systems and processes due to commence in 2022. The standard includes a number of significant changes regarding the measurement and disclosure of insurance contracts both in terms of liability measurement and profit recognition.

The IFRS 17 general measurement model requires insurance contract liabilities to be measured using:

- probability-weighted estimates of future cash flows;
- discounting;
- a risk adjustment for non-financial risk; and
- a contractual service margin representing the unearned profit that will be recognised over the coverage period.

IFRS 17 is a principles-based accounting standard. There are a number of accounting policy choices that are allowed under the standard and this will require the application of judgement and an increased use of estimation techniques. As an example, the Group has performed an assessment and currently anticipates that it will be eligible to apply the simplified model (premium allocation approach) to its portfolios and groups of contracts. This will however continue to be assessed throughout 2022.

IFRS 17 will result in a number of presentation differences compared to the existing IFRS 4 consolidated financial statements. The insurance service result will comprise insurance revenue, insurance service expense and insurance finance income or expense. Reinsurance contracts held are required to be presented separately from insurance contracts issued. Reinstatement premiums will be considered contingent on claims and therefore recognised against insurance service expense while commissions paid to cedants will be recognised as a deduction from insurance revenue. Non-distinct investment components, which are defined as amounts that are repayable in all circumstances, are required to be excluded from insurance revenue and expenses.

Under IFRS 17, insurance contracts that are subject to similar risks and that are managed together are classified into a portfolio of insurance contracts. Each portfolio of insurance contracts is then divided into a minimum of three groups:

- A group of contracts that are onerous at initial recognition;
- A group of contracts that at initial recognition have no significant possibility of becoming onerous; and
- A group of the remaining contracts in the portfolio.

A group of contracts that are considered onerous at initial recognition will result in a loss being recognised immediately in the consolidated statement of comprehensive (loss) income. In the consolidated balance sheet, we would be required to recognise a loss component in the liability for remaining coverage. The Group is currently reviewing its portfolios and groups of contracts to determine if there are any onerous contracts that may result in a transition adjustment on adoption of IFRS 17.

IFRS 17 requires that all future cash flows related to the fulfilment of insurance contracts be captured within portfolios and applied to groups of insurance contracts. The Group anticipates recognising a liability for the future expenses expected to be incurred in the servicing of insurance contracts. This will form part of the transition adjustment recognised by the Group on adoption of IFRS 17.

The Group currently anticipates that it will apply the fully retrospective transition approach when adopting IFRS 17.

In December 2021, the IASB issued initial application of IFRS 17 and IFRS 9 - Comparative Information (Amendment to IFRS 17). The amendment was made to address possible accounting mismatches between financial assets and insurance contract liabilities in the comparative information presented on initial application of IFRS 9 and IFRS 17. IFRS 17 has been endorsed by the EU and the UK Endorsement Board process is still ongoing.

The Group will continue to assess the impact that IFRS 17 will have on its results and its presentation and disclosure requirements.

IFRS 9, Financial Instruments: Classification and Measurement

IFRS 9 is effective for annual periods beginning on or after 1 January 2018. The amendments to IFRS 4, Insurance Contracts, issued in 2016, provide a temporary exemption from applying IFRS 9. The Group continues to qualify for, and has elected to apply, the temporary exemption available to companies whose predominant activity is to issue insurance contracts. The exemption lasts until the implementation date of IFRS 17 and addresses the accounting consequences of applying IFRS 9 to insurers prior to the adoption of IFRS 17. IFRS 9 introduces new classification and measurement requirements for financial instruments, an expected credit loss impairment model that replaces the IAS 39 incurred loss model and new hedge accounting requirements. Applying the new requirements of IFRS 9, the Group currently anticipates that all investments held by the Group will be classified as at FVTPL mandatory, because they are managed on a fair value basis. As a result, all investments currently disclosed in note 11 as AFS will be reclassified as at FVTPL mandatory with changes in unrealised gains (losses) currently recorded within other comprehensive (loss) income to be reclassified and recorded within net investment income in profit or loss. The reclassification from AFS to FVTPL mandatory will not result in a change in the carrying value of the investments disclosed in note 11 of the consolidated financial statements. The change in classification from AFS to FVTPL mandatory will result in balances within accumulated other comprehensive income being reclassified to retained earnings on the date of transition.

CONSOLIDATION PRINCIPLES

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries as at and for the year ended 31 December 2021. Subsidiaries are fully consolidated from the date of acquisition, being the date on which the Group obtains control, and continue to be consolidated until the date when such control ceases. Intercompany balances, profits and transactions are eliminated. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the subsidiary and has the ability to affect those returns through its power over the subsidiary.

The Group participates in two syndicates at Lloyd's, which are managed by the Group's managing agent subsidiary. In view of the several liability of underwriting members at Lloyd's, the Group recognises its proportion of all the transactions undertaken by the syndicates in which it participates within its consolidated statement of comprehensive (loss) income. Similarly, the Group's proportion of the syndicates' assets and liabilities has been reflected in its consolidated balance sheet. This proportion is calculated by reference to the Group's participation as a percentage of each syndicate's total capacity for each year of account.

Subsidiaries' accounting policies are generally consistent with the Group's accounting policies. Where they differ, adjustments are made on consolidation to bring accounting policies in line.

ASSOCIATE

Investments in which the Group has significant influence over the operational and financial policies of the investee are recognised at cost and thereafter accounted for using the equity method. Under this method, the Group records its proportionate share of income from such investments in its consolidated statement of comprehensive (loss) income for the period. Adjustments are made to associate accounting policies, where necessary, in order to be consistent with the Group's accounting policies.

FOREIGN CURRENCY

FUNCTIONAL CURRENCY

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which operations are conducted (the 'functional currency'). The consolidated financial statements are presented in U.S. dollars (the 'presentation currency').

TRANSACTIONS AND BALANCES

Foreign currency transactions are recorded in the functional currency for each entity using the exchange rates prevailing at the dates of the transactions, or at the average rate for the period when this is a reasonable approximation. Monetary assets and liabilities denominated in foreign currencies are revalued at period end exchange rates. The resulting exchange differences on revaluation are recorded in the consolidated statement of comprehensive (loss) income within net foreign exchange gains (losses). Non-monetary assets and liabilities denominated in a foreign currency are carried at historic rates. Non-monetary assets and liabilities carried at estimated fair value and denominated in a foreign currency are translated at the exchange rate at the date the estimated fair value was determined.

FOREIGN OPERATIONS

The results and financial position of all the Group entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities are translated at the closing rate on the balance sheet date;
- income and expenses are translated at average exchange rates for the period; and
- all resulting foreign exchange differences are recognised in other comprehensive income and as a separate component of shareholders' equity.

On disposal of foreign operations, cumulative exchange differences previously recognised in other comprehensive (loss) income are recognised in profit or loss as part of the gain or loss on disposal.

INTANGIBLE ASSETS

The Group's intangible assets comprise indefinite life intangible assets and internally generated intangible assets.

The Group's indefinite life intangible assets comprise syndicate participation rights and goodwill. The cost of syndicate participation rights and goodwill acquired in a business combination is their fair value as at the date of acquisition. Additional syndicate participation rights may be purchased from time to time and are recorded at the cost on the date of the syndicate capacity auction. Goodwill and syndicate participation rights are considered to have an indefinite useful life and are not amortised. They are carried at cost less any accumulated impairment losses. Intangible assets with an indefinite useful life are tested annually for impairment at the CGU level by comparing the net present value of the future cash flow stream of the CGU to the carrying value of the CGU and related intangible assets. The useful life of an indefinite life intangible asset is reviewed annually to determine if the assessment continues to be supportable.

Internally generated intangible assets represent directly attributable costs incurred in the development phase of implementing a cloud based target operating model. An internally generated intangible asset is recognised if it can be demonstrated that there is an intent, available resource and technical feasibility to complete the intangible asset so that it is available for use and that it will generate probable future economic benefits. The costs must be capable of being measured reliably. They are carried at cost less any accumulated impairment losses. Intangible assets not yet available for use are tested annually for impairment at the CGU level by comparing the net present value of the future cash flow stream of the CGU to the carrying value of the CGU and related intangible assets.

Internally generated intangible assets available for use are considered to have a finite life. Applying the cost model, intangible assets with finite lives are amortised over their estimated useful economic life and assessed for impairment whenever there are indicators of impairment.

INSURANCE CONTRACTS

CLASSIFICATION

Insurance contracts are those contracts that transfer significant insurance risk at the inception of the contract. Contracts that do not transfer significant insurance risk are accounted for as investment contracts. Insurance risk is transferred when an insurer agrees to compensate a policyholder if a specified uncertain future event adversely affects the policyholder.

PREMIUMS AND ACQUISITION COSTS

Premiums are first recognised as written at the later of a contract's binding or inception date. The Group writes both excess of loss and pro-rata (proportional) contracts. For the majority of excess of loss contracts, premiums written are recorded based on the minimum and deposit or flat premium, as defined in the contract. Subsequent adjustments to the minimum and deposit premium are recognised in the period in which they are determined. For pro-rata contracts and excess of loss contracts where no deposit is specified in the contract, premiums written are recognised based on estimates of ultimate premiums provided by the insureds or ceding companies. Initial estimates of premiums written are recognised in the period in which the contract incepts, or the period in which the contract is bound if later. Subsequent adjustments, based on reports of actual premium by the insureds or ceding companies, or revisions in estimates, are recorded in the period in which they are determined.

Premiums written are earned evenly over the term of the underlying risk period of the insurance contract, except where the period of risk differs significantly from the contract period. In these circumstances, premiums are recognised over the period of risk in proportion to the amount of insurance protection provided. The portion of the premium related to the unexpired portion of the risk period is reflected in unearned premiums.

Where contract terms require the reinstatement of coverage after an insured's or ceding company's loss, the estimated mandatory reinstatement premiums are recorded as premiums written when a specific loss event occurs. Reinstatement premiums are not recorded for losses included within the provision for IBNR that do not relate to a specific loss event.

Inwards premiums receivable from insureds and cedants are recorded net of commissions, brokerage, premium taxes and other levies on premiums, unless the contract specifies otherwise. These balances are regularly reviewed for impairment, with any impairment loss recognised as an expense in the period in which it is determined.

Acquisition costs represent commissions, brokerage, profit commissions and other variable costs that relate directly to the successful securing of new contracts and the renewing of existing contracts. They are generally deferred over the period in which the related premiums are earned to the extent they are recoverable out of expected future revenue margins. All other acquisition costs are recognised as an expense when incurred.

OUTWARDS REINSURANCE

Outwards reinsurance premiums comprise the cost of reinsurance contracts held entered into. Outwards reinsurance premiums are accounted for in the period in which the contract incepts, or the period in which the contract is bound if later. The provision for the reinsurers' share of unearned premiums represents that part of reinsurance premiums ceded which are estimated to be earned in future financial periods. Unearned reinsurance commissions are recognised as a liability using the same principles.

Any amounts recoverable from reinsurers are estimated using the same methodology as for the underlying losses. The Group monitors the creditworthiness of its reinsurers on an ongoing basis and assesses any reinsurance assets for impairment, with any impairment loss recognised as an expense in the period in which it is determined.

LOSSES

Losses comprise losses and loss adjustment expenses paid in the period and changes in the provision for outstanding losses and ACR, including the provision for IBNR and related expenses. Losses and loss adjustment expenses are charged to profit or loss as they are incurred.

Losses and loss adjustment expenses represent the estimated ultimate cost of settling all insurance claims arising from events which have occurred up to the balance sheet date, including a provision for IBNR. The Group does not discount its liabilities for unpaid losses. Outstanding losses are initially set on the basis of reported losses received from third parties. ACR are determined where management's best estimate of the reported loss is greater than that reported and are allocated with IBNR in the Group's financial reporting. Estimated IBNR reserves may also consist of a provision for additional development in excess of losses reported by insureds or ceding companies, as well as a provision for losses which have occurred but which have not yet been reported by insureds or ceding companies. IBNR reserves are estimated by management using various actuarial methods as well as a combination of the Group's own loss experience, historical insurance industry loss experience, underwriters' experience, estimates of pricing adequacy trends and management's professional judgement.

A portion of the Group's business is in classes with high attachment points of coverage, including property catastrophe excess of loss. Reserving for losses in such programmes is inherently complicated in that losses in excess of the attachment level of the Group's policies are characterised by high severity and low frequency and other factors which could vary significantly as losses are settled. This limits the volume of industry loss experience available from which to reliably predict ultimate losses following a loss event.

The estimation of the ultimate loss and loss adjustment expense liability is a complex process which incorporates a significant amount of judgement. It is reasonably possible that uncertainties inherent in the reserving process, delays in insureds or ceding companies reporting losses to the Group, together with the potential for unforeseen adverse developments, could lead to a material change in estimated losses and loss adjustment expenses.

LIABILITY ADEQUACY TESTS

At each balance sheet date, the Group performs a liability adequacy test to determine if there is an overall excess of expected claims over unearned premiums for the period of unexpired risk by using current best estimates of future cash outflows generated by its insurance contracts, plus any investment income thereon. If, as a result of these tests, the carrying amount of the Group's insurance liabilities is found to be inadequate, the deficiency is charged to income for the period, initially by writing off deferred acquisition costs and subsequently by establishing a provision.

FINANCIAL INSTRUMENTS

CASH AND CASH EQUIVALENTS

Cash and cash equivalents are carried in the consolidated balance sheet at amortised cost and include cash in hand, deposits held on call with banks and other short-term, highly-liquid investments with a maturity of three months or less at the date of purchase. Carrying amounts approximate fair value due to the short-term nature and high liquidity of the instruments.

Interest income earned on cash and cash equivalents is recognised on the effective interest rate method. The carrying value of accrued interest income approximates estimated fair value due to its short-term nature and high liquidity.

INVESTMENTS

The Group's fixed maturity securities include quoted and unquoted investments that are classified as either AFS or at FVTPL and are carried at fair value. The classification of the Group's financial assets is determined at the time of initial purchase and depends on the nature of the investment. A financial asset is classified at FVTPL if it is managed and evaluated on a fair value basis or if acquired principally for the purpose of selling in the short term, or if it forms part of a portfolio of financial assets in which there is evidence of short-term profit taking. Equity securities classified as AFS are those that are neither classified as held for trading nor designated at FVTPL. Fixed maturity securities classified as AFS are those that are intended to be held for an indefinite period. The composition, duration and allocation of these investments are reviewed by management on a regular basis in order to respond to needs for liquidity, changes in interest rates and other market conditions.

The Group has elected to designate certain fixed maturity securities, index linked securities, exchange traded funds and its private investment funds at FVTPL upon initial recognition. This category includes instruments in which the cash flows are linked to the performance of an underlying pool of securities. Presentation of these securities in the FVTPL category is consistent with how management monitors and evaluates the performance of these securities.

The Group's hedge funds are unquoted investments classified at FVTPL and are carried at fair value. Fair values are determined using a combination of the most recent NAVs provided by each fund's independent administrator and the estimated performance provided by each hedge fund manager.

Regular way purchases and sales of investments are recognised at fair value including, in the case of investments not carried at FVTPL, transaction costs attributable to the acquisition of that investment on the trade date and are subsequently carried at fair value. The fair values of quoted and unquoted investments are determined based on bid prices from recognised exchanges, broker-dealers, recognised indices or pricing vendors. Unrealised gains and losses from changes in the fair value of AFS investments are included in accumulated other comprehensive income in shareholders' equity. Changes in fair value of investments classified at FVTPL are recognised in the consolidated statement of comprehensive (loss) income within net other investment income.

Investments are derecognised when the Group has transferred substantially all of the risks and rewards of ownership. On derecognition of an AFS investment, previously recorded unrealised gains and losses are recycled from accumulated other comprehensive income in shareholders' equity and included in the consolidated statement of comprehensive (loss) income as a realised gain or loss within net realised gains (losses) and impairments.

Amortisation and accretion of premiums and discounts on AFS fixed maturity securities are calculated using the effective interest rate method and are recognised in current period net investment income. Interest income is recognised on the effective interest rate method. The carrying value of accrued interest income approximates estimated fair value due to its short-term nature and high liquidity. Dividends on equity securities are recorded as income on the date the dividends become payable to the holders of record.

The Group regularly reviews the carrying value of its AFS investments for evidence of impairment. Such evidence would include a prolonged decline in estimated fair value below cost or amortised cost, where other factors, such as expected cash flows, do not support a recovery in value. If an impairment is deemed appropriate, the difference between cost or amortised cost and estimated fair value is removed from accumulated other comprehensive income in shareholders' equity and charged to current period profit or loss. Impairment losses on fixed maturity securities may be subsequently reversed through profit or loss while impairment losses on equity securities are not subsequently reversed through profit or loss.

DERIVATIVE FINANCIAL INSTRUMENTS

Derivatives are classified as financial assets or liabilities at FVTPL. They are initially recognised at fair value on the date a contract is entered into, the trade date, and are subsequently carried at fair value. Derivative instruments with a positive estimated fair value are recorded as derivative financial assets and those with a negative fair value are recorded as derivative financial liabilities.

Derivative financial instruments include exchange-traded future and option contracts, forward foreign currency contracts, interest rate swaps, credit default swaps and interest rate swaptions. They derive their value from the underlying instrument and are subject to the same risks as that underlying instrument, including liquidity, credit and market risk. Fair values are based on exchange or broker-dealer quotations, where available, or discounted cash flow models, which incorporate the pricing of the underlying instrument, yield curves and other factors. Changes in the estimated fair value of derivative instruments are recognised in the consolidated statement of comprehensive (loss) income within net other investment income. The Group does not currently apply hedge accounting to any derivative contracts. For discounted cash flow techniques, estimated future cash flows are based on management's best estimates and the discount rate used is an appropriate market rate.

Derivative financial assets and liabilities are offset and the net amount is reported in the consolidated balance sheet only to the extent there is a legally enforceable right of offset and there is an intention to settle on a net basis, or to realise the assets and liabilities simultaneously. Derivative financial assets and liabilities are derecognised when the Group has transferred substantially all of the risks and rewards of ownership or the liability is discharged, cancelled or expired.

OTHER INCOME

Other income is measured based on the consideration specified in a contract and excludes amounts collected on behalf of third parties.

NATURE OF SERVICES

The table below shows the nature, specific performance obligation and significant payment terms for the services within the scope of IFRS 15, Revenue from Contracts with Customers.

Services	Nature, timing of satisfaction of performance obligation and significant payment terms
LCM underwriting fees	The Group recognises underwriting fees over the underwriting cycle based on the underlying exposure of the covered contracts. Underwriting fees are received by or before the collateral funding date, which is prior to commencement of the underwriting cycle.
LCM profit commission	The Group recognises profit commission following the end of the underwriting cycle based on the underlying performance of the covered contracts and as collateral is released. Profit commissions may only be received once the profit commission hurdle has been met.
LSL consortium management fees	The Group recognises consortium fees over the risk period based on the underlying exposure of the covered contracts. Consortium fees are received quarterly.
LSL consortium profit commission	The Group recognises profit commission in line with the underlying performance of covered contracts once the year of account closes, which is also when the profit commissions are received.
LSL managing agency fees	The Group recognises managing agency fees in line with services provided for each year of account. Managing agency fees are received quarterly.
LSL managing agency profit commission	The Group recognises profit commission on open years of account when measurement is highly probable. Profit commissions are received once the year of account closes.

LONG-TERM DEBT

Long-term debt is recognised initially at fair value, net of transaction costs incurred. Thereafter it is held at amortised cost, with the amortisation calculated using the effective interest rate method. Derecognition occurs when the obligation has been extinguished.

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is carried at historical cost, less accumulated depreciation and any impairment in value. Depreciation is calculated to write off the cost over the estimated useful economic life on a straight-line basis as follows:

IT equipment	33% per annum
Office furniture and equipment	20% to 33% per annum
Leasehold improvements	20% per annum

The assets' residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each balance sheet date.

An item of property, plant or equipment is derecognised on disposal or when no future economic benefits are expected to arise from the continued use of the asset.

Gains and losses on the disposal of property, plant and equipment are determined by comparing proceeds with the carrying amount of the asset, and are included in the consolidated statement of comprehensive income. Costs for repairs and maintenance are charged to profit or loss as incurred.

LEASES

The Group assesses whether a contract is, or contains, a lease at the inception of a contract for all contracts that have been entered into or modified on or after 1 January 2019. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The Group is not a lessor to any lease contracts.

The lease liability is initially measured at the present value of the future lease payments at the lease commencement date. Lease payments are discounted using the rate implicit in the lease, if readily determinable, or the Group's incremental borrowing rate. Lease payments included in the measurement of the lease liability comprise:

- Fixed lease payments;
- Variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date; or
- Payments in respect of purchase options, lease termination options or lease extension options that the Group is reasonably certain to exercise.

The lease liability is subsequently measured by increasing the lease carrying amount to reflect the interest due on the lease liability using the effective interest rate method and by reducing the carrying amount to reflect the lease payments made.

The Group re-measures the lease liability and the related right-of-use asset whenever:

- The lease term changes as a result of the Group changing its assessment of whether it will exercise a purchase, extension or termination option, in which case the lease liability is re-measured by discounting the revised lease payments using a revised discount rate;
- The lease payments change due to changes in an index or rate or a change in expected payment under a guaranteed residual value, in which case the lease liability is re-measured by discounting the revised lease payments using the initial discount rate; or
- A lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is re-measured by discounting the revised lease payments using a revised discount rate.

The right-of-use asset is initially measured at cost, which comprises the initial measurement of the corresponding lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of any costs to be incurred at expiration of the lease agreement.

Right-of-use assets are subsequently measured at cost less accumulated depreciation and any impairment losses. Straight-line depreciation is calculated from the commencement date of the lease to the earlier of either the end date of the lease term or the useful life of the underlying asset.

Both the right-of-use assets and lease liabilities are presented as separate financial statement line items on the consolidated balance sheet.

EMPLOYEE BENEFITS

EQUITY COMPENSATION PLANS

The Group currently operates a RSS under which nil-cost options have been granted. The fair value of the equity instruments granted is estimated on the date of grant. The estimated fair value is recognised as an expense pro-rata over the vesting period of the instrument, adjusted for the impact of any non-market vesting conditions. No adjustment to vesting assumptions is made in respect of market vesting conditions.

At each balance sheet date, the Group revises its estimate of the number of RSS nil-cost options that are expected to become exercisable. It recognises the impact of the revision of original estimates, if any, as equity based compensation expense in the consolidated statement of comprehensive income, and a corresponding adjustment is made to other reserves in shareholders' equity over the remaining vesting period.

On exercise, the differences between the expense charged to the consolidated statement of comprehensive income and the actual cost to the Group, if any, is transferred within the components of other reserves in shareholders' equity.

PENSIONS

The Group operates a defined contribution plan. On payment of contributions to the plan there is no further obligation for the Group. Contributions are recognised as employee benefits in the consolidated statement of comprehensive (loss) income in the period when the services are rendered.

TAX

Income tax represents the sum of tax currently payable and any deferred tax. The tax payable is calculated based on taxable profit for the period using tax rates and tax laws enacted or substantively enacted at the year end reporting date and any adjustments to tax payable in respect of prior periods. Taxable profit for the period can differ from that reported in the consolidated statement of comprehensive (loss) income due to non-taxable income and certain items which are not tax deductible or which are deferred to subsequent periods.

Deferred tax is recognised on all temporary differences between the carrying value of the assets and liabilities in the consolidated balance sheet and their tax base, except when the deferred tax liability arises from the initial recognition of goodwill. Deferred tax assets or liabilities are accounted for using the balance sheet liability method. Deferred tax assets are recognised to the extent that realising the related tax benefit through future taxable profits is likely and are reassessed each year for recognition.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to the same fiscal authority.

Where the current estimated fair value of equity based compensation awards differs from the estimated fair value at the time of grant, adjusted where applicable for dividends, the related corporation tax and deferred tax charge or credit is recognised directly in other reserves.

The Group determines, based on its tax compliance and transfer pricing study, the probability/certainty of the tax treatments being accepted by the taxation authorities and accounts for these in line with its determination.

OWN SHARES

Own shares include shares repurchased under share repurchase authorisations and held in treasury, plus shares repurchased and held in trust, for the purposes of employee equity-based compensation schemes. Own shares are deducted from shareholders' equity. No gain or loss is recognised on the purchase, sale, cancellation or issue of own shares and any consideration paid or received is recognised directly in equity.

Risk disclosures

For the year ended 31 December 2021

RISK DISCLOSURES: INTRODUCTION

The Group is exposed to risks from several sources, classified into six primary risk categories. These are insurance risk, market risk, liquidity risk, credit risk, operational risk and strategic risk. The primary risk to the Group is insurance risk.

The primary objective of the Group's ERM framework is to ensure that the capital resources held are matched to the risk profile of the Group and that the balance between risk and return is considered as part of all key business decisions. The Group has formulated, and keeps under review, a risk appetite which is set by the Board of Directors. The Group's appetite for risk will vary from time to time to reflect the potential risks and returns that present themselves. However, protecting the Group's capital and maximising risk-adjusted returns for investors over the long term are constants. The risk appetite of the Group is central to how the business is run and permeates into the risk appetites that the individual operating entity boards of directors have adopted. These risk appetites are expressed through detailed risk tolerances at both a Group and an operating entity level. Risk tolerances represent the maximum amount of capital, generally on a modelled basis, that the Group and its entities are prepared to expose to certain risks.

The Board of Directors is responsible for setting and monitoring the Group's risk appetite and tolerances, whereas the individual entity boards of directors are responsible for setting and monitoring entity level risk tolerances. All risk tolerances are subject to at least an annual review and consideration by the respective boards of directors. The LHL Board and individual entity boards of directors review actual risk levels versus tolerances, emerging risks and any risk learning events at least quarterly. In addition, on a monthly basis, management assesses the modelled potential catastrophe losses against the risk tolerances and ensures that risk levels are managed in accordance with them.

CURRENT EVENTS

CLIMATE CHANGE

The Group is exposed to both climate-related risks and opportunities. The two major categories of risk being transition and physical risk.

Transition risks are those relating to the transition to a lower carbon economy and include risks such as policy and legal risk, technology risk, market risk and reputation risk. Physical risks are those relating to the physical impacts of climate change which can be acute (those from increased frequency and severity of climate related events) or chronic (due to longer-term shifts in climate patterns). As a (re)insurance company, the Group is more significantly affected by physical risk through its exposure to acute and chronic climate change. The potential financial impact from these climate-related risks is assessed through scenario testing and mitigated by the Group's strategic and risk management decisions around managing these risks. A risk radar has been prepared to illustrate the risks identified and the likelihood of these risks; this diagram can be found on page 58. The risk assessment also considers the products currently offered by the Group and how these might change over time during the transition to a lower carbon economy. The Group's current assessment of risk in relation to climate change is discussed in more detail within the ESG section on pages 60 to 63.

In our underwriting operations, we manage this risk effectively by supplementing our internal systems, data and procedures with external vendor models. Underwriting guidelines were developed in 2021 to support the underwriting process and provide guidance to assist underwriters in their decision making. Performance against guidelines is monitored via the UMCC and related reporting. We have clear tolerances and preferences in place to actively manage exposures, and the Board regularly monitors our PMLs. The risks to the asset side of the balance sheet from climate change are monitored through the use of a Climate VaR which is monitored versus the MSCI benchmark in part through regular reviews of our third-party asset managers, our asset allocation, and the underlying securities within our portfolio.

GLOBAL TAX REFORM

The Group continues to monitor and assess the implications arising from the Organisation for Economic Co-operation and Development's inclusive framework agreement that aims to implement a global minimum tax rate of 15%, along with the potential impacts of other global tax reforms that are relevant to the Group's business operations.

COVID-19

On 12 March 2020, the World Health Organisation classified the COVID-19 outbreak as a pandemic. The COVID-19 pandemic has caused significant disruption in global financial markets and to worldwide economies. The COVID-19 pandemic is an ongoing situation making it exceptionally difficult to predict what the ultimate impact for the Group or the insurance industry will be. The Group continues to monitor the impact of the COVID-19 pandemic on our business. During the year ended 31 December 2021, the Group's ultimate loss estimate, net of reinsurance and the impact of inwards and outwards reinstatement premiums, for COVID-19 related losses has remained consistent with that booked in 2020.

ECONOMIC CAPITAL MODELS

The Group maintains economic capital models at the LHL, LUK and syndicate levels. These models are primarily focused on insurance risks, however they are also used to model other risks including market, credit and operational risks. The syndicate models are vetted by Lloyd's as part of its own capital and solvency regulations.

The economic capital models produce data in the form of stochastic distributions for all classes, including non-elemental classes. The distributions include the mean outcome and the result at various return periods, including very remote events. Projected financial outcomes for each insurance class are calculated, as well as the overall portfolio including diversification credit. Diversification credit arises as individual risks are generally not strongly correlated and are unlikely to all produce profits or losses at the same time.

A. INSURANCE RISK

The Group underwrites worldwide, predominantly short-tail, insurance and reinsurance contracts that transfer insurance risk, including risks exposed to both natural and man-made catastrophes. The Group's exposure in connection with insurance contracts is, in the event of insured losses, whether premiums will be sufficient to cover the loss payments and expenses. Insurance and reinsurance markets are cyclical and premium rates and terms and conditions vary by line of business depending on market conditions and the stage of the cycle. Market conditions are impacted by capacity and recent loss events, and broader economic cycle impacts amongst other factors. The Group's underwriters assess likely losses using their experience and knowledge of past loss experience, industry trends and current circumstances. This allows them to estimate the premiums sufficient to meet likely losses and expenses and desired levels of profitability.

The Group considers insurance risk at an individual contract level, at a segment level, at a geographic level and at an aggregate portfolio level. This ensures that careful risk selection, limits on concentration and appropriate portfolio diversification are accomplished. The five principal classes of business for the Group are property and casualty reinsurance, property and casualty insurance, aviation, energy and marine. These classes are deemed to be the Group's five operating segments. The level of insurance risk tolerance per peril is set by the Board and the boards of directors at individual entity level.

A number of controls are deployed to manage the amount of insurance exposure assumed:

- the Group has a rolling three-year strategic plan that helps establish the over-riding business goals that the Board of Directors aims to achieve;
- a detailed business plan is produced annually, which includes expected premiums and combined ratios by class and considers risk-adjusted profitability, capital usage and requirements. The plan is approved by the Board of Directors and is monitored, reviewed and updated on an ongoing basis;
- for LSL, the syndicates' business forecasts and business plans are subject to review and approval by Lloyd's;
- economic capital models are used to measure occurrence risks, aggregate risks and correlations between classes and other non-insurance risks;
- each authorised class has a predetermined normal maximum line structure;
- each underwriter has a clearly defined limit of underwriting authority;
- the Group and individual operating entities have predetermined tolerances on probabilistic and deterministic losses of capital for certain single events;
- risk levels versus tolerances are monitored on a regular basis;
- a daily underwriting call is held for LIL and LUK to peer review insurance proposals, opportunities and emerging risks;
- a daily post-binding review process with exception reporting to management based on underwriting authority operates at LSL;
- sophisticated pricing and aggregation models are utilised in certain areas of the underwriting process;
- a number of modelling tools are deployed to model catastrophes and resultant losses to the portfolio and the Group; and
- reinsurance may be purchased to mitigate both frequency and severity of losses on a facultative, excess of loss treaty or proportional treaty basis.

Some of the Group's business provides coverage for natural catastrophes (e.g. hurricanes, earthquakes, wildfires and floods) and is subject to potential seasonal variation and the effects of climate change. A proportion of the Group's business is exposed to large catastrophe losses in North America, Europe and Japan as a result of windstorms. The level of windstorm activity, and landfall thereof, during the North American, European and Japanese wind seasons may materially impact the Group's loss experience. The North American and Japanese wind seasons are typically June to November and the European wind season November to March. The Group also bears exposure to large losses arising from other non-seasonal natural catastrophes, such as earthquakes, tsunamis, droughts, floods and tornadoes, from risk losses throughout the year and from war, terrorism and political risk and other events. The Group's associate bears exposure to catastrophe losses and any significant loss event could potentially result in impairment in the value of the Group's investment in associate.

CATASTROPHE MANAGEMENT

The Group actively monitors risk levels and manages catastrophe risk accumulations using reinsurance and PML based risk tolerances, which are monitored as part of our climate-related risks as outlined on page 61. The Group's exposures to certain peak zone elemental losses, as a percentage of tangible capital, including long-term debt, are shown below. Net loss estimates are before income tax and net of reinstatement premiums and outwards reinsurance on a first occurrence return period basis. The exposure to catastrophe losses that would result in an impairment to the investment in associate is included in the figures below.

As at 31 December 2021		100 year return period estimated net loss		250 year return period estimated net loss	
		\$m	% of tangible capital	\$m	% of tangible capital
Zones	Perils				
Gulf of Mexico ¹	Hurricane	309.0	18.2	558.2	32.8
Non-Gulf of Mexico – U.S.	Hurricane	206.8	12.2	600.5	35.3
California	Earthquake	160.5	9.4	325.4	19.1
Pan-European	Windstorm	154.1	9.1	228.5	13.4
Japan	Typhoon	118.3	7.0	131.7	7.7
Japan	Earthquake	89.9	5.3	143.3	8.4
Pacific North West	Earthquake	26.8	1.6	139.0	8.2

1. Landing hurricane from Florida to Texas.

As at 31 December 2020		100 year return period estimated net loss		250 year return period estimated net loss	
		\$m	% of tangible capital	\$m	% of tangible capital
Zones	Perils				
Gulf of Mexico ¹	Hurricane	166.5	9.7	323.0	18.9
Non-Gulf of Mexico – U.S.	Hurricane	108.9	6.4	361.2	21.1
California	Earthquake	111.9	6.5	151.2	8.8
Pan-European	Windstorm	71.8	4.2	85.7	5.0
Japan	Typhoon	60.4	3.5	71.7	4.2
Japan	Earthquake	63.7	3.7	105.9	6.2
Pacific North West	Earthquake	20.1	1.2	85.0	5.0

1. Landing hurricane from Florida to Texas.

There can be no guarantee that the modelled assumptions and techniques deployed in calculating these figures are accurate. There could also be an unmodelled loss which exceeds these figures. In addition, the models contain loss scenarios which could cause a larger loss to capital than the modelled expectation from the above return periods.

Details of annual gross premiums written by geographic area of risks insured are provided below:

	2021		2020	
	\$m	%	\$m	%
U.S. and Canada	465.2	38.0	300.8	37.0
Worldwide – multi territory	424.8	34.7	284.5	34.9
Europe	138.8	11.3	80.9	9.9
Rest of world	196.4	16.0	147.9	18.2
Total	1,225.2	100.0	814.1	100.0

Details of annual gross premiums written by business segment and the associated insurance risks are provided below:

	2021		2020	
	\$m	%	\$m	%
Property and casualty reinsurance	560.0	45.7	279.8	34.3
Property and casualty insurance	210.5	17.2	147.1	18.1
Aviation	176.4	14.4	151.0	18.6
Energy	184.8	15.1	144.7	17.8
Marine	93.5	7.6	91.5	11.2
Total	1,225.2	100.0	814.1	100.0

I. PROPERTY AND CASUALTY REINSURANCE

Property catastrophe excess of loss covers elemental risks and is written on an excess of loss treaty basis. The property catastrophe excess of loss portfolio is written within the U.S. and also internationally. Cover is offered for specific perils and regions or countries.

Property risk excess of loss is written on an excess of loss basis through UNL treaty arrangements, predominantly covering fire and allied perils in addition to natural catastrophe exposure. The portfolio is written on a worldwide basis, with particular focus on the U.S. market.

Property retrocession is written on an excess of loss basis through treaty arrangements and covers elemental risks. Cover may be on a worldwide or regional basis and may cover specific risks or all catastrophe perils. Coverage may be given on a UNL basis, meaning that loss payments are linked directly to the ceding company's own loss, or on a UNL basis warranted on an overall industry loss, as measured by third party index providers, known as ILW coverage.

Accident & health is written on a direct and reinsurance basis. The vast majority of the reinsurance business is excess of loss, either facultative or treaty. The direct book is a combination of open-market placements, some binding authorities and broker lineslips, with the focus being Group and commercial personal accident and disability. The distribution is global but with a focus on the U.S., Canada, UK and EU. There is very little exposure in Asia, Australasia, Africa or South America. Typical coverage offered is death & disablement, medical expenses, evacuation and repatriation, and other limited ancillary expenses.

The casualty book is written predominantly on a quota share basis with a limited amount of excess of loss sold. The book is made up of predominantly U.S. exposure in general casualty and professional lines with some smaller specialty casualty deals and excess casualty.

The specialty reinsurance book is written predominantly on an excess of loss basis and comprises similar exposures to those underwritten out of our insurance operation with a focus on 'Blue Chip' clients.

The Group is exposed to large natural catastrophe losses, such as windstorm and earthquake losses, primarily from assuming property catastrophe excess of loss and property retrocession portfolio risks. Exposure to such events is controlled and measured by setting limits on stochastic modelling exposures in certain classes per geographic zone and through loss modelling. The accuracy of the latter exposure analysis is limited by the quality of data and the effectiveness of the modelling. It is possible that a catastrophic event significantly exceeds the expected modelled event loss.

Reinsurance may be purchased to mitigate exposures to large natural catastrophe losses. Reinsurance may also be purchased to reduce the Group's worldwide exposure to large risk losses. Reinsurance is typically purchased on an excess of loss basis, however ILWs or proportional treaty arrangements may be entered into.

II. PROPERTY AND CASUALTY INSURANCE

Property direct and facultative is a worldwide book of largely commercial property business, written both in the open market and under delegated authorities. The account spans small individual locations to Fortune 500 accounts but with a bias towards small to medium-sized risks. Policies are generally provided both for non-elemental and elemental perils, although not all risks include both elemental and non-elemental coverage. Coverage is generally written on a full value, primary or excess of loss basis, although the very largest accounts are currently seldom written at the primary level.

Terrorism business can be written either ground-up or for primary or excess layers, with cover provided for U.S. and worldwide property risks, but typically excluding nuclear, chemical, biological and cyber coverage in most territories. Cover is generally provided to medium to large commercial and industrial enterprises. Policies are typically written for scheduled locations and exposure is controlled by setting limits on aggregate exposure within a 'blast zone' radius. The term of these contracts is often multi-year reflecting the term of the underlying exposures. Some national pools are also written, which may include nuclear, chemical and biological coverage and may have an element of life coverage.

Property political risk cover is written either ground-up or on an excess of loss basis. Coverage that the Group provides in the political risk book is split between confiscation perils coverage and sovereign/quasi-sovereign obligor coverage. Confiscation perils coverage protects against CEND and may be extended to include other perils. Sovereign/quasi-sovereign obligors coverage protects against the non-payment or non-honouring of an obligation by a sovereign or quasi-sovereign entity. Cover is provided to medium to large commercial and industrial clients as well as bank and commodity trading clients. The term of these contracts is often multi-year reflecting the term of the underlying exposures. The Group does not provide cover against purely private obligor credit risk.

Reinsurance may also be purchased to reduce the Group's worldwide exposure to large risk losses. Reinsurance is typically purchased on an excess of loss basis, however ILWs or proportional treaty arrangements may be entered into.

III. AVIATION

Aviation deductible business is a specialist area with small individual limits normally up to \$1.0 million and covers the deductible the airline would normally have for each and every loss under the terms of their airline policy.

Aviation hull and liability provides cover to the airlines directly and includes cover for the aircraft themselves as well as losses arising from passenger and third-party liability claims against airlines and/or manufacturers.

AV52 is written on a risk-attaching excess of loss basis and provides coverage for third-party liability, excluding own passenger liability, resulting from acts of war or hijack of aircraft. Cover excludes countries whose governments provide a backstop coverage, but does include some U.S. commercial airlines.

Aviation reinsurance provides excess of loss catastrophe cover to the insurers of the world's major airlines and aircraft manufacturers and includes cover for the aircraft themselves as well as losses arising from passenger and third-party liability claims against airlines and/or manufacturers.

Aviation war covers loss or damage to aviation assets from war, terrorism and similar causes.

Reinsurance may be purchased to mitigate exposures to an AV52 event loss. Reinsurance is typically purchased on a treaty excess of loss basis. Proportional treaty reinsurance is typically used to reduce the Group's exposure to aviation deductible and the aviation hull and liability business.

IV. ENERGY

Energy risks are written mostly on a direct basis and may be ground-up or for primary or excess layers on either a first loss or full value basis. Upstream energy policies are typically package policies which may include physical damage, business interruption and third-party liability sections. Coverage can include fire and explosion and elemental risks. Individual assets covered can be high value and are therefore mostly written on a subscription basis, meaning that coverage is placed with multiple risk carriers.

Downstream energy risks are generally those with an operational hydrocarbon risk – either processing and/or storage and/or transmission – and may also include the production of chemicals and intermediates. Policies typically cover property for physical damage (including natural catastrophe) and machinery breakdown perils plus consequential business interruption exposure and may be written on a proportional or excess of loss basis, often with loss limits set at a level commensurate with a modelled estimated maximum loss scenario. The portfolio encompasses a global spread of accounts. Critical natural catastrophe coverage is usually sub-limited, with underwriting assessment employing industry-accepted modelling tools to assess this exposure where possible. The sector provides cover for operational assets, albeit some construction risk is covered where it is not deemed the policy's primary exposure. Third-party liabilities are not covered except where required under legislation for small sub-limited property damage.

Power generation and utility business can be written either ground-up or on a primary or excess basis. The core composition of the portfolio is operational conventional thermal power generation, renewable energy and associated transmission and distribution assets.

The Group writes energy liability business on a stand-alone basis. Unlike the liability contained within the energy packages policies, stand-alone energy liability is written on an excess of loss basis only. Coverage is worldwide and provides for variety of damages and loss to third parties. Coverage is generally restricted to upstream and midstream assets.

Gulf of Mexico offshore energy programmes cover elemental and non-elemental risks. Most policies have sub-limits on coverage for elemental losses. These programmes are exposed to Gulf of Mexico windstorms. Exposure to such events is measured through loss modelling. The accuracy of this exposure analysis is limited by the quality of data and the effectiveness of the modelling. It is possible that a catastrophic event significantly exceeds the expected modelled event loss.

Construction energy upstream contracts generally cover all risks of platform and drilling units under construction at yards and offshore, during towing and installation. Onshore construction contracts are generally not written.

Within the various energy sub-classes are also elements of energy renewables business written, which can cover the construction and subsequent operational phases of various renewable energy types. These cover a broad spectrum of power generation across the offshore and onshore renewable industry, including wind (offshore and onshore), solar, hydropower, geothermal and biomass.

Reinsurance protection may be purchased to protect a portion of loss from elemental and non-elemental energy claims, and from the accumulation of smaller, attritional losses. Reinsurance is typically purchased on an excess of loss basis but, from time to time, proportional treaty arrangements may be entered into. Reinsurance may be purchased on a facultative or treaty basis.

V. MARINE

Marine cargo is an international account and is written either on a direct basis or by way of reinsurance. It covers the (re)insurance of commodities or goods in transit. Typically, transit cover is provided on an all-risks basis for marine perils for the full value of the goods concerned, although higher value or capacity business may be written on a layered basis. Static cover is also provided for losses to cargo, from both elemental and non-elemental causes, whilst static at points along its route. In addition, the cargo account can include specie and fine art, vault risks, artwork on exhibition and marine war business relating to cargo in transit.

Marine hull and total loss is generally written on a direct basis and covers marine risks on a worldwide basis, primarily for physical damage. Most policies are written on a ground-up basis.

Marine liability is split into two main sections. The first is the general marine liability portfolio which encompasses a broad a spectrum of third-party risks emanating from global maritime industry and trade. The second area concerns Protection and Indemnity and is dominated by the reinsurance of the International Group of Protection and Indemnity Clubs and covers marine liabilities arising from their members' activities.

Marine builders' risk covers the building of ocean-going vessels in specialised yards worldwide and their testing and commissioning. Marine hull war is mostly direct insurance of the loss of vessels from war, piracy or terrorist attack, with a very limited amount of facultative reinsurance. Marine excess of loss is written on a treaty basis and covers ocean and inland marine risks.

The largest expected exposure in the marine class is from physical loss rather than from elemental loss events, although there is exposure to elemental perils and to the costs for removal of wrecks.

Reinsurance may be purchased to reduce the Group's exposure to both large risk losses and an accumulation of smaller, attritional losses. Reinsurance is typically purchased on a treaty excess of loss basis.

REINSURANCE

The Group, in the normal course of business and in accordance with its risk management practices, seeks to reduce certain types of losses that may arise from events that could cause unfavourable underwriting results by entering into reinsurance arrangements. Reinsurance does not relieve the Group of its obligations to policyholders. Under the Group's reinsurance security policy, reinsurers are assessed and approved as appropriate security based on their financial strength ratings, amongst other factors. The RSC considers reinsurers that are not rated or do not fall within the predefined rating categories on a case-by-case basis, and may require collateral to be posted to support such obligations. There are specific guidelines for these collateralised contracts. The RSC monitors the Group's reinsurers on an ongoing basis and formally reviews the Group's reinsurance arrangements at least quarterly. Exposure to the Group's reinsurance counterparties, compared to the Board-approved tolerances, is reported to the Board of Directors on a quarterly basis.

Reinsurance protection is typically purchased on an excess of loss basis, however it may also include ILW covers or proportional treaty arrangements. The mix of reinsurance cover is dependent on the specific loss mitigation requirements, market conditions and available capacity. Reinsurance may also be purchased to optimise the risk-adjusted return of the underwriting portfolio. The structure varies between types of peril and sub-class. The Group regularly reviews its catastrophe and other exposures and may purchase reinsurance in order to reduce the Group's net exposure to a large natural catastrophe loss and/or to reduce net exposures to other large losses. The Group can purchase both facultative and treaty reinsurance with varying cover and attachment points. The reinsurance coverage is not intended to be available to meet all potential loss circumstances. The Group will retain some losses, as the cover purchased is unlikely to transfer the totality of the Group's exposure. Any loss amount which exceeds the reinsurance programme would be retained by the Group. Some parts of the reinsurance programme have limited reinstatements, therefore the number of claims which may be recovered from second or subsequent losses in those particular circumstances is limited.

INSURANCE LIABILITIES

For most insurance and reinsurance companies, the most significant judgement made by management is the estimation of losses and loss adjustment expenses. The estimation of the ultimate liability arising from claims made under insurance and reinsurance contracts is a critical estimate for the Group, particularly given the nature of the business written.

Under GAAP, loss reserves are not permitted until the occurrence of an event which may give rise to a claim. As a result, only loss reserves applicable to losses incurred up to the reporting date are established, with no allowance for the provision of a contingency reserve to account for expected future losses or for the emergence of new types of latent claims. Claims arising from future events can be expected to require the establishment of substantial reserves from time to time. All of the Group's reserves are reported on an undiscounted basis.

Losses and loss adjustment expenses are maintained to cover the Group's estimated liability for both reported and unreported claims. Reserving methodologies that calculate an actuarial best estimate for the ultimate losses, along with a reserve margin, are utilised. This represents the management best estimate of ultimate loss and loss adjustment expenses. The Group's internal actuaries review the reserving assumptions and methodologies on a quarterly basis with loss estimates being subject to a semi-annual independent review by external actuaries. The results of the independent review are presented to the Group's Audit Committee. The Group has also established Reserve Committees at the operating entity level, which have responsibility for the review of large claims and IBNR levels, their development and any changes in reserving methodology and assumptions.

The extent to which the reserving process relies on management's judgement is dependent on a number of factors including whether the business is insurance or reinsurance, whether it is short-tail or long-tail and whether the business is written on an excess of loss or pro-rata basis.

INSURANCE VERSUS REINSURANCE

Loss reserve calculations whether reserving for direct insurance business or for reinsurance classes are not precise in that they deal with the inherent uncertainty of assumptions regarding future reporting and development patterns, frequency and severity trends, claims settlement practices, potential changes in the legal environment and other factors, such as inflation. The estimates and judgements relied on in making loss reserve calculations are based on a number of factors and may be revised as additional experience or other data becomes available.

Loss reserve calculations are also reviewed as new or improved methodologies are developed and as laws or regulations change. Furthermore, as a business operating within a broker market, management must rely on loss information reported to brokers by other insurers and their loss adjusters, who must estimate their own losses at the policy level, often based on incomplete and changing information. The information management receives varies by cedant and may include paid losses, estimated case reserves and an estimated provision for IBNR reserves. Additionally, reserving practices and the quality of data reporting may vary among ceding companies, which adds further uncertainty to management's estimates of the ultimate losses.

SHORT-TAIL VERSUS LONG-TAIL

In general, claims relating to short-tail risks, such as the majority of risks underwritten by the Group, are reported more promptly than those relating to long-tail risks, including the majority of casualty risks. The timeliness of reporting can be affected by such factors as the nature of the event causing the loss, the location of the loss and whether the losses are from policies in force with insureds, primary insurers, reinsurers or vendor binding authorities.

EXCESS OF LOSS VERSUS PROPORTIONAL

For excess of loss contracts, which make up the majority of the Group's business, management is aided by the fact that each policy has a defined limit of liability arising from one event. Once that limit has been reached, there is no further exposure to additional losses from that policy for the same event. For proportional business, an initial estimated loss and loss expense ratio is generally used. This is based upon information provided by the insured or ceding company and/or their broker and management's historical experience of that treaty, if any, and the estimate is adjusted as actual experience becomes known.

TIME LAGS

There is a time lag inherent in reporting from the original claimant to the primary insurer or binding authority holder to the broker and then to the reinsurer. Also, the combination of low claims frequency and high severity across many of our classes makes the available data more volatile and less useful for predicting ultimate losses. In the case of proportional contracts, reliance is placed on an analysis of a contract's historical experience, industry information, and the professional judgement of underwriters in estimating reserves for these contracts. In addition, if available, reliance is placed partially on ultimate loss ratio forecasts as reported by insureds or cedants, which are normally subject to a quarterly or six-month time lag.

UNCERTAINTY

As a result of the time lag described above, an estimate must be made of IBNR reserves, which consists of a provision for additional development in excess of the case reserves reported by insureds or ceding companies, as well as a provision for claims which have occurred but which have not yet been reported by insureds or ceding companies. Due to the degree of reliance that is necessarily placed on insureds or ceding companies for claims reporting, the associated time lag, the low frequency/high severity nature of much of the business that the Group underwrites, and the varying reserving practices among ceding companies, reserve estimates are highly dependent on management judgement and are therefore uncertain. During the loss settlement period, which may be years in duration, additional facts regarding individual claims and trends often will become known, and current laws and case law may change as well as regulatory directives, with a consequent impact on reserving.

For certain catastrophic events there are greater uncertainties underlying the assumptions and associated estimated reserves for losses and loss adjustment expenses. Complexity resulting from problems such as policy coverage issues, multiple events affecting one geographic area and the resulting impact on claims adjusting (including the allocation of claims to the specific event and the effect of demand surge on the cost of building materials and labour) by, and communications from, insureds or ceding companies, can cause delays to the timing with which the Group is notified of changes to loss estimates.

The breakdown of losses and loss adjustment expenses between notified outstanding losses, ACR and IBNR is shown in note 13. The majority of the IBNR estimate relates to catastrophe events from 2017-2021, in addition to potential claims on non-elemental risks where timing delays in insured or cedant reporting may mean losses could have occurred of which the Group was not made aware by the balance sheet date.

B. MARKET RISK

The Group is at risk of loss due to movements in market factors. The main risks include:

- i. Insurance market risk;
- ii. Investment risk;
- iii. Debt risk; and
- iv. Currency risk.

These risks, and the management thereof, are described below.

I. INSURANCE MARKET RISK

The Group is exposed to insurance market risk from several sources, including the following:

- the advent or continuation of a soft market, which may result in a stabilisation or decline in premium rates and/or terms and conditions for certain lines, or across all lines;
- the actions and reactions of key competitors, which may directly result in volatility in premium volumes and rates, fee levels and other input costs;
- market events, including unusual inflation in rates, may result in a limit in the availability of cover, causing political intervention or national remedies;
- failure to maintain broker, binding authority and client relationships, leading to a limited or substandard choice of risks inconsistent with the Group's risk appetite;
- changes in regulation including capital, governance or licensing requirements; and
- changes in the geopolitical environment including the UK's exit from the EU and the implications for the loss of business passporting within the EEA.

The most important method to mitigate insurance market risk is to maintain strict underwriting standards. The Group manages insurance market risk in numerous ways, including the following:

- reviews and amends underwriting plans and outlook as necessary;
- reduces exposure to market sectors where conditions have reached unattractive levels;
- purchases appropriate, cost-effective reinsurance cover to mitigate exposures;
- closely monitors changes in rates and terms and conditions;
- ensures through continuous capital management that it does not allow surplus capital to drive underwriting appetite;
- holds a daily underwriting call for LICL and LUK to discuss, inter alia, market conditions and opportunities;
- reviews all new and renewal business post-underwriting for LSL;
- reviews outputs from the economic capital models to assess up-to-date profitability of classes and sectors;
- holds a fortnightly RRC meeting to discuss risk and reinsurance;
- holds a quarterly UURC meeting to review underwriting strategy; and
- holds regular meetings with regulators.

Insurance contract liabilities are not directly sensitive to the level of market interest rates, as they are undiscounted and contractually non-interest bearing.

II. INVESTMENT RISK

Movements in investments resulting from changes in interest and inflation rates and currency exchange rates, amongst other factors, may lead to an adverse impact on the value of the Group's investment portfolio.

Investment guidelines are established by the Investment Committee of the Board of Directors to manage this risk. Investment guidelines set parameters within which the Group's external investment managers must operate. 93.8% of the Group's externally managed portfolio are managed by signatories of the UNPRI. Important parameters include guidelines on permissible asset classes, duration ranges, credit quality, currency, maturity, sectors, geographical, sovereign and issuer exposures. Compliance with guidelines is monitored on a monthly basis. Any adjustments to the investment guidelines are approved by the Investment Committee and the Board of Directors.

The Group's fixed maturity portfolios are managed by five external investment managers. The Group also has a diversified low volatility multi-strategy portfolio of hedge funds, credit funds, principal protected products and private investment funds. The performance of the managers is monitored on an ongoing basis.

Within the Group's investment guidelines are subsets of guidelines for the portion of funds required to meet near-term obligations and cash flow needs following an extreme event. These guidelines add a further degree of requirements, including fewer allowable asset classes, higher credit quality, shorter duration and higher liquidity. The primary objectives for this portion of assets are capital preservation and providing liquidity to meet insurance and other near-term obligations. In addition to cash managed internally, funds held in the investment portfolio to cover this potential liability are designated as the core and core plus portfolios and the portfolio duration is matched to the duration of the insurance liabilities, within an agreed range. The core and core plus portfolios are invested in fixed maturity securities, fixed maturity funds and cash and cash equivalents. The combined core and core plus portfolios may, at times, contain assets significantly in excess of those required to meet insurance liabilities or other defined funding needs.

Assets in excess of those required to be held in the core and core plus portfolios are typically held in the surplus portfolio. The surplus portfolio is invested in fixed maturity securities, principal protected products, derivative instruments, cash and cash equivalents, private investment funds, hedge funds and index linked securities. In general, the duration of the surplus portfolio is slightly longer than the core or core plus portfolios.

The Group reviews the composition, duration and asset allocation of its investment portfolio on a regular basis in order to respond to changes in interest rates and other market conditions. If certain asset classes are anticipated to produce a higher return within management's risk tolerance, an adjustment in asset allocation may be made. Conversely, if the risk profile is expected to move outside of tolerance levels, adjustments may be made to reduce the risks in the portfolio.

The investment portfolio is currently structured to perform similarly in risk-on and risk-off environments. The Group endeavours to limit losses in risk-on, risk-off and interest rate hike scenarios. The Group models various periods of significant stress in order to better understand the investment portfolio's risks and exposures. The scenarios represent what could, and most likely will, occur (albeit not in the exact form of the scenarios, which are based on historic periods of volatility). The Group also monitors the portfolio impact of more severe disaster scenarios consisting of extreme shocks.

The Investment Committee performs a strategic asset allocation study on a bi-annual basis, which assesses the Group's overall strategy and to determine alternative asset allocations to achieve the best risk-adjusted return within our risk tolerances. The IRRRC meets quarterly to ensure that the Group's strategic and tactical investment actions are consistent with investment risk preferences, appetite, risk and return objectives and tolerances. The IRRRC also helps further develop the risk tolerances to be incorporated into the ERM framework. During the year the Investment Committee approved the use of a climate-related VaR to monitor potential climate related financial impacts on our portfolio. This VaR will be monitored against an industry benchmark.

The investment mix of the fixed maturity portfolios is as follows:

As at 31 December 2021	Core		Core plus		Surplus		Total	
	\$m	%	\$m	%	\$m	%	\$m	%
• Short-term investments	23.3	1.3	21.2	1.2	–	–	44.5	2.5
• Fixed maturity funds	17.6	1.0	–	–	–	–	17.6	1.0
• U.S. treasuries	223.5	12.4	289.0	15.9	51.7	2.9	564.2	31.2
• Other government bonds	11.7	0.6	–	–	47.1	2.6	58.8	3.2
• U.S. municipal bonds	4.1	0.2	14.8	0.8	5.4	0.3	24.3	1.3
• U.S. government agency debt	4.2	0.2	29.9	1.7	21.1	1.2	55.2	3.1
• Asset backed securities	9.3	0.5	19.5	1.1	75.3	4.2	104.1	5.8
• U.S. government agency mortgage backed securities	10.3	0.6	8.6	0.5	66.6	3.7	85.5	4.8
• Non-agency mortgage backed securities	–	–	4.6	0.3	28.6	1.6	33.2	1.9
• Agency commercial mortgage backed securities	–	–	–	–	0.1	–	0.1	–
• Non-agency commercial mortgage backed securities	–	–	–	–	20.1	1.1	20.1	1.1
• Bank loans	–	–	–	–	110.2	6.1	110.2	6.1
• Corporate bonds	244.2	13.5	327.0	18.0	91.2	5.0	662.4	36.5
Total fixed maturity securities – AFS	548.2	30.3	714.6	39.5	517.4	28.7	1,780.2	98.5
Fixed maturity securities – at FVTPL	–	–	–	–	28.9	1.5	28.9	1.5
Total fixed maturity securities	548.2	30.3	714.6	39.5	546.3	30.2	1,809.1	100.0

As at 31 December 2020	Core		Core plus		Surplus		Total	
	\$m	%	\$m	%	\$m	%	\$m	%
• Short-term investments	34.6	2.1	51.3	3.1	1.0	0.1	86.9	5.3
• Fixed maturity funds	16.4	1.0	–	–	–	–	16.4	1.0
• U.S. treasuries	129.6	7.7	146.7	8.7	17.5	1.0	293.8	17.4
• Other government bonds	16.1	1.0	13.4	0.8	36.4	2.2	65.9	4.0
• U.S. municipal bonds	2.2	0.1	7.3	0.4	3.5	0.2	13.0	0.7
• U.S. government agency debt	4.2	0.3	31.4	1.9	66.5	4.0	102.1	6.2
• Asset backed securities	3.0	0.2	62.2	3.7	60.2	3.6	125.4	7.5
• U.S. government agency mortgage backed securities	13.9	0.8	12.6	0.8	105.3	6.2	131.8	7.8
• Non-agency mortgage backed securities	0.3	–	8.3	0.5	10.2	0.6	18.8	1.1
• Agency commercial mortgage backed securities	–	–	–	–	0.3	–	0.3	–
• Non-agency commercial mortgage backed securities	–	–	–	–	5.8	0.3	5.8	0.3
• Bank loans	–	–	–	–	110.5	6.6	110.5	6.6
• Corporate bonds	238.1	14.2	374.6	22.3	65.9	3.9	678.6	40.4
Total fixed maturity securities – AFS	458.4	27.4	707.8	42.2	483.1	28.7	1,649.3	98.3
Fixed maturity securities – at FVTPL	–	–	–	–	29.3	1.7	29.3	1.7
Total fixed maturity securities	458.4	27.4	707.8	42.2	512.4	30.4	1,678.6	100.0

Bank loans, corporate bonds, fixed maturity securities at FVTPL and other government bonds by country are as follows:

As at 31 December 2021	Financials \$m	Other industries \$m	Total ¹ \$m	Other government bonds \$m	Total ² \$m
United States	206.3	387.2	593.5	—	593.5
Canada	15.8	13.1	28.9	20.4	49.3
United Kingdom	29.5	12.0	41.5	—	41.5
Japan	15.5	8.6	24.1	—	24.1
Netherlands	4.7	5.7	10.4	1.1	11.5
France	5.2	4.5	9.7	0.6	10.3
Sweden	9.6	—	9.6	0.6	10.2
Mexico	3.3	4.2	7.5	1.5	9.0
Switzerland	5.5	2.8	8.3	—	8.3
Qatar	1.7	—	1.7	6.2	7.9
Germany	5.9	1.5	7.4	—	7.4
Australia	6.2	0.7	6.9	—	6.9
United Arab Emirates	5.3	0.9	6.2	—	6.2
India	—	4.7	4.7	1.5	6.2
Indonesia	—	0.5	0.5	4.8	5.3
Other	23.4	17.2	40.6	22.1	62.7
Total	337.9	463.6	801.5	58.8	860.3

1. Includes bank loans, corporate bonds and fixed maturity securities at FVTPL.

2. Includes bank loans, corporate bonds, fixed maturity securities at FVTPL and other government bonds.

As at 31 December 2020	Financials \$m	Other industries \$m	Total ¹ \$m	Other government bonds \$m	Total ² \$m
United States	198.8	392.4	591.2	—	591.2
United Kingdom	26.6	20.4	47.0	—	47.0
Canada	18.3	4.7	23.0	18.7	41.7
Japan	14.9	12.3	27.2	—	27.2
France	17.6	5.8	23.4	0.8	24.2
Switzerland	9.7	3.7	13.4	5.1	18.5
Sweden	10.1	—	10.1	4.2	14.3
Netherlands	7.8	5.7	13.5	0.3	13.8
Germany	0.3	10.0	10.3	0.8	11.1
Spain	10.2	—	10.2	—	10.2
Australia	8.5	0.4	8.9	—	8.9
Italy	4.9	4.0	8.9	—	8.9
China	1.0	2.5	3.5	3.9	7.4
United Arab Emirates	2.5	1.5	4.0	1.5	5.5
Qatar	1.6	—	1.6	2.9	4.5
Other	11.2	11.0	22.2	27.7	49.9
Total	344.0	474.4	818.4	65.9	884.3

1. Includes bank loans, corporate bonds and fixed maturity securities at FVTPL.

2. Includes bank loans, corporate bonds, fixed maturity securities at FVTPL and other government bonds.

The sector allocation of bank loans, corporate bonds and fixed maturity securities at FVTPL is as follows:

As at 31 December	2021		2020	
	\$m	%	\$m	%
Industrial	433.2	54.0	437.7	53.5
Financial	337.9	42.2	344.0	42.0
Utility	30.4	3.8	36.7	4.5
Total	801.5	100.0	818.4	100.0

The Group's net asset value is directly impacted by movements in the fair value of investments held. Values can be impacted by movements in interest rates, credit ratings, exchange rates, the current economic environment and outlook.

The Group's investment portfolio is mainly comprised of fixed maturity securities and cash and cash equivalents. Fixed maturity funds are overseas deposits held by the syndicates in trust for the benefit of the policyholders in those overseas jurisdictions. They consist of high quality, short duration fixed maturity securities. The Group also has a hedge fund portfolio as well as principal protected notes and has invested in private investment funds. The estimated fair value of the Group's fixed maturity portfolio is generally inversely correlated to movements in market interest rates. If market interest rates fall, the fair value of the Group's fixed maturity securities would tend to rise and vice versa.

The sensitivity of the price of fixed maturity securities, and certain derivatives, to movements in interest rates is indicated by their duration. The greater a security's duration, the greater its price volatility to movements in interest rates. The sensitivity of the Group's fixed maturity and derivative investment portfolio to interest rate movements is detailed below, assuming linear movements in interest rates:

As at 31 December	2021		2020	
	\$m	%	\$m	%
Immediate shift in yield (basis points)				
100	(36.6)	(2.0)	(33.7)	(2.0)
75	(27.4)	(1.5)	(25.2)	(1.5)
50	(18.3)	(1.0)	(16.8)	(1.0)
25	(9.1)	(0.5)	(8.4)	(0.5)
(25)	9.2	0.5	8.6	0.5
(50)	18.4	1.0	17.2	1.0
(75)	27.7	1.5	25.9	1.5
(100)	36.9	2.0	34.5	2.1

The Group mitigates interest rate risk on the investment portfolio by establishing and monitoring duration ranges in its investment guidelines. The Group may manage duration through the use of interest rate futures and swaptions from time to time. The duration of the core portfolio is matched to the modelled duration of the insurance reserves, within a permitted range. The permitted duration range for the core plus portfolio is between zero and four years and for the surplus portfolio is between one and five years.

The overall duration for fixed maturities, managed cash and cash equivalents and certain derivatives is 1.8 years (31 December 2020 – 2.0 years).

In addition to duration management, the Group monitors VaR to measure potential losses in the estimated fair values of its cash and invested assets and to understand and monitor risk. The VaR calculation is performed using variance/covariance risk modelling to capture the cash flows and embedded optionality of the portfolio. Securities are valued individually using standard market pricing models. These security valuations serve as the input to many risk analytics, including full valuation risk analyses, as well as parametric methods that rely on option-adjusted risk sensitivities to approximate the risk and return profiles of the portfolio.

The principal VaR measure that is produced is an annual VaR at the 99th percentile confidence level. Under normal conditions, the portfolio is not expected to lose more than the VaR metric listed in the table below, 99% of the time over a one-year time horizon. The appropriateness of this measure is considered by the Investment Committee on behalf of the Board of Directors on an annual basis.

The Group's annual VaR calculations are as follows:

As at 31 December	2021		2020	
	\$m	% of shareholders' equity	\$m	% of shareholders' equity
99th percentile confidence level ¹	50.4	3.6	57.6	3.7

1. Including the impact of internal foreign exchange hedges.

DERIVATIVE FINANCIAL INSTRUMENTS

The Group uses derivative financial instruments primarily to mitigate exposure to foreign currency risk, interest rate risk and credit risk. The Group's investment guidelines permit the investment managers to utilise exchange-traded futures and options contracts, OTC instruments including interest rate swaps, credit default swaps, interest rate swaptions and forward foreign currency contracts.

The net (losses) gains on the Group's derivative financial instruments recognised in the consolidated statement of comprehensive (loss) income are as follows:

As at 31 December 2021	Net realised (losses) gains \$m	Net foreign exchange (losses) \$m	Financing (losses) \$m
Interest rate futures	(0.5)	—	—
Forward foreign currency contracts	—	(0.6)	—
Interest rate swaps	0.3	—	(3.4)
Total	(0.2)	(0.6)	(3.4)

As at 31 December 2020	Net realised gains \$m	Net foreign exchange gains \$m	Financing (losses) \$m
Interest rate futures	2.0	—	—
Forward foreign currency contracts	—	0.3	—
Interest rate swaps	—	—	(0.9)
Total	2.0	0.3	(0.9)

The estimated fair values of the Group's derivative instruments are as follows:

As at 31 December	2021			2020		
	Other investments \$m	Other receivables \$m	Other payables \$m	Other investments \$m	Other receivables \$m	Other payables \$m
Forward foreign currency contracts	(0.3)	0.6	(0.6)	(0.7)	1.8	(0.3)
Interest rate swaps	(0.3)	—	—	—	—	—
Credit default swaps	0.5	—	—	—	—	—
Total	(0.1)	0.6	(0.6)	(0.7)	1.8	(0.3)

A. FUTURES

Futures provide the Group with participation in market movements, determined by the underlying instrument on which the futures contract is based, without holding the instrument itself or the individual securities. This allows efficient and less costly access to the exposure than would be available by the exclusive use of individual fixed maturity and money market securities. Exchange-traded futures contracts may also be used as substitutes for ownership of the physical securities.

All futures contracts are held on a non-leveraged basis. An initial margin is provided, which is a deposit of cash and/or securities in an amount equal to a prescribed percentage of the contract value. The fair value of futures contracts is estimated daily and the margin is adjusted accordingly with unrealised gains and/or losses settled daily in cash and/or securities. A realised gain or loss is recognised when the contract is closed.

Futures contracts expose the Group to market risk to the extent that adverse changes occur in the estimated fair values of the underlying securities. Exchange-traded futures are, however, subject to a number of safeguards to ensure that obligations are met. These include the use of clearing houses (thus reducing counterparty credit risk), the posting of margins and the daily settlement of unrealised gains and losses. The amount of credit risk is therefore considered low. The investment guidelines restrict the maximum notional futures position as a percentage of the investment portfolio's estimated fair value.

The Group's exposure to interest rate futures is as follows:

As at 31 December	2021			2020		
	Notional long \$m	Notional short \$m	Net notional long (short) \$m	Notional long \$m	Notional short \$m	Net notional long (short) \$m
Interest rate futures	44.1	36.8	7.3	37.6	11.8	25.8

B. OPTIONS

Exchange-traded options on U.S. treasury futures and Euro dollar futures are used to manage exposure to interest rate risk and also to hedge duration. Exchange-traded options are held on a similar basis to futures and are subject to similar safeguards. Options are contractual arrangements that give the purchaser the right, but not the obligation, to either buy or sell an instrument at a specific set price at a predetermined future date. The Group may enter into option contracts that are secured by holdings in the underlying securities or by other means which permit immediate satisfaction of the Group's obligations. The notional amount of options is \$nil as at 31 December 2021 and 2020.

The investment guidelines also restrict the maximum notional options exposure as a percentage of the investment portfolio's estimated fair value.

C. FORWARD FOREIGN CURRENCY CONTRACTS

A forward foreign currency contract is a commitment to purchase or sell a foreign currency at a future date, at a defined rate. The Group may utilise forward foreign currency contracts to gain exposure to a certain currency or market rate or manage the impact of fluctuations in foreign currencies on the value of its foreign currency denominated investments, debt, insurance related currency exposures and/or expenses.

Forward contracts expose the Group to credit, market and liquidity risks. Credit risk arises from the potential inability of counterparties to perform under the terms of the contract. The Group is exposed to market risk to the extent that adverse changes occur in the exchange rate of the underlying foreign currency. Liquidity risk represents the possibility that the Group may not be able to rapidly adjust the size of its forward positions at a reasonable price in times of high volatility and financial stress. These risks are mitigated by requiring a minimum counterparty credit quality, restricting the maximum notional exposure as a percentage of the investment portfolio's estimated fair value and restricting exposures to foreign currencies, individually and in aggregate, as a percentage of the investment portfolio's estimated fair value.

The notional amount of a derivative contract is the underlying quantity upon which payment obligations are calculated. A long position is equivalent to buying the underlying currency whereas a short position is equivalent to having sold the underlying currency.

The Group has the following open forward foreign currency contracts:

As at 31 December	2021			2020		
	Notional long \$m	Notional short \$m	Net notional long (short) \$m	Notional long \$m	Notional short \$m	Net notional long (short) \$m
Canadian Dollar	—	36.2	(36.2)	—	24.6	(24.6)
Euro	19.2	21.0	(1.8)	18.2	27.9	(9.7)
Australian Dollar	—	9.3	(9.3)	—	11.3	(11.3)
Japanese Yen	—	—	—	6.7	—	6.7
Danish Krone	—	3.9	(3.9)	—	—	—
Sterling	45.2	7.6	37.6	58.9	7.6	51.3
Total	64.4	78.0	(13.6)	83.8	71.4	12.4

D. SWAPS

Interest rate swaps, traded primarily OTC, are used to manage interest rate exposure, portfolio duration or to capitalise on anticipated changes in interest rate volatility without investing directly in the underlying securities. Interest rate swap agreements entail the exchange of commitments to pay or receive interest, such as an exchange of floating rate payments for fixed rate payments, with respect to a notional amount of principal. These agreements involve elements of credit and market risk. Such risks include the possibility that there may not be a liquid market, that the counterparty may default on its obligation to perform, or that there may be unfavourable movements in interest rates. These risks are mitigated through defining a minimum counterparty credit quality and a maximum notional exposure to interest rate swaps as a percentage of the investment portfolio's estimated fair value. The notional amount of interest rate swaps held in the investment portfolio was \$1.3 million as at 31 December 2021 (31 December 2020 – \$nil). The notional amount of interest rate swaps held for hedging purposes was \$nil as at 31 December 2021 and 2020.

The Group may utilise credit default swaps to add or reduce credit risk to an individual issuer, or a basket of issuers, without investing directly in their securities. The Group held credit default swaps of \$13.4 million as at 31 December 2021 (31 December 2020 – \$nil).

The Group entered into an interest rate swap, in the form of a 'Treasury lock', on 8 March 2021. This was in order to hedge the 10-year treasury rate on the issuance of the \$450.0 million fixed-rate reset junior subordinated notes (see note 18), between the date that the Group announced the issuance of the Notes, and the finalisation of the transaction on 11 March 2021. The 10-year treasury reference rate reduced over the relevant period and a net payment was made of \$3.4 million.

III. DEBT RISK

During 2021, the Group issued \$450.0 million in aggregate principal amount of 5.625% fixed-rate reset junior subordinated notes, repayable on 18 September 2041 (see note 18). The fixed interest rate will reset on 18 September 2031 at a rate per annum equal to the prevailing five year treasury rate plus a credit spread of 4.08% and a relevant 100 basis point step up.

The Group is exposed to interest rate risk in the future if prevailing rates at the time of reset are materially different from the existing rates on the debt issue.

During 2021, the existing floating rate loan notes were redeemed in full and the Group is no longer exposed to interest rate risk on these notes or have any LIBOR risk exposure.

IV. CURRENCY RISK

The Group underwrites from multiple locations and risks are assumed on a worldwide basis. Risks assumed are predominantly denominated in U.S. dollars.

The Group is exposed to currency risk to the extent its assets are denominated in different currencies to its liabilities. Exchange gains and losses can impact profit or loss.

The Group hedges monetary non-U.S. dollar liabilities primarily with non-U.S. dollar assets, but may also use derivatives to mitigate foreign currency exposures. The Group's main foreign currency exposure relates to its insurance obligations, cash holdings, investments, premiums receivable and dividends payable. The Group uses forward foreign currency contracts for the purposes of managing currency exposures.

The Group's assets and liabilities, categorised by currency at their translated carrying amount, are as follows:

Assets	U.S.\$ \$m	Sterling \$m	Euro \$m	Japanese Yen \$m	Other \$m	Total \$m
Cash and cash equivalents	419.7	27.7	23.1	4.0	43.2	517.7
Accrued interest receivable	6.9	–	0.1	–	0.1	7.1
Investments	2,015.6	3.6	(0.6)	–	29.5	2,048.1
Inwards premiums receivable from insureds and cedants	377.9	53.2	39.0	7.1	13.4	490.6
Reinsurance assets	480.2	38.2	51.3	2.8	2.3	574.8
Other receivables	8.6	10.2	–	–	–	18.8
Investment in associate	118.7	–	–	–	–	118.7
Property, plant and equipment	0.7	0.1	–	–	–	0.8
Right-of-use assets	1.8	11.6	–	–	–	13.4
Deferred acquisition costs	88.4	7.3	18.4	1.7	5.8	121.6
Intangible assets	153.8	4.1	–	–	–	157.9
Total assets as at 31 December 2021	3,672.3	156.0	131.3	15.6	94.3	4,069.5

Liabilities	U.S.\$ \$m	Sterling \$m	Euro \$m	Japanese Yen \$m	Other \$m	Total \$m
Losses and loss adjustment expenses	1,025.3	77.2	93.1	26.2	69.3	1,291.1
Unearned premiums	448.7	35.1	72.6	15.1	26.4	597.9
Insurance contracts – other payables	15.3	3.5	1.0	–	0.5	20.3
Amounts payable to reinsurers	154.8	27.2	17.3	2.8	3.5	205.6
Deferred acquisition costs ceded	19.7	0.4	6.3	0.4	0.2	27.0
Other payables	16.2	20.8	–	–	0.4	37.4
Corporation tax payable	–	1.6	–	–	–	1.6
Deferred tax liability	12.5	(0.3)	–	–	–	12.2
Lease liabilities	2.0	15.9	–	–	–	17.9
Long-term debt	445.7	–	–	–	–	445.7
Total liabilities as at 31 December 2021	2,140.2	181.4	190.3	44.5	100.3	2,656.7

Assets	U.S.\$ \$m	Sterling \$m	Euro \$m	Japanese Yen \$m	Other \$m	Total \$m
Cash and cash equivalents	376.6	20.7	13.2	3.9	18.0	432.4
Accrued interest receivable	7.8	0.1	0.1	–	–	8.0
Investments	1,770.4	28.4	39.1	–	18.1	1,856.0
Inwards premiums receivable from insureds and cedants	280.6	25.0	48.0	3.2	15.1	371.9
Reinsurance assets	402.9	31.5	27.2	2.4	3.2	467.2
Other receivables	14.3	12.8	–	–	0.2	27.3
Investment in associate	127.2	–	–	–	–	127.2
Property, plant and equipment	0.3	0.4	–	–	–	0.7
Right-of-use assets	2.8	13.3	–	–	–	16.1
Deferred acquisition costs	62.6	5.6	14.6	1.1	5.1	89.0
Intangible assets	153.8	0.7	–	–	–	154.5
Total assets as at 31 December 2020	3,199.3	138.5	142.2	10.6	59.7	3,550.3

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RISK DISCLOSURES CONTINUED

Liabilities	U.S.\$ \$m	Sterling \$m	Euro \$m	Japanese Yen \$m	Other \$m	Total \$m
Losses and loss adjustment expenses	758.1	81.3	56.7	21.7	35.0	952.8
Unearned premiums	340.5	26.0	57.5	9.7	24.2	457.9
Insurance contracts – other payables	19.3	1.8	0.5	–	0.9	22.5
Amounts payable to reinsurers	108.4	8.7	28.8	2.4	3.4	151.7
Deferred acquisition costs ceded	14.3	0.2	4.5	0.2	0.4	19.6
Other payables	16.3	29.7	–	–	0.1	46.1
Corporation tax payable	–	1.5	–	–	–	1.5
Deferred tax liability	9.0	1.9	–	–	–	10.9
Lease liabilities	3.0	17.9	–	–	–	20.9
Long-term debt	284.4	–	43.1	–	–	327.5
Total liabilities as at 31 December 2020	1,553.3	169.0	191.1	34.0	64.0	2,011.4

The impact on net income of a proportional foreign exchange movement of 10.0% up and 10.0% down against the U.S. dollar at the year end spot rates would be an increase or decrease of \$3.9 million (2020 – \$5.5 million).

C. LIQUIDITY RISK

Liquidity risk is the risk that cash may not be available to pay obligations when they are due without incurring an unreasonable cost. The Group's main exposures to liquidity risk are with respect to its insurance and investment activities. The Group is exposed if proceeds from financial assets are not sufficient to fund obligations arising from its insurance contracts. The Group can be exposed to daily calls on its available investment assets, principally to settle insurance claims and to fund trust accounts following a large catastrophe loss.

Exposures in relation to insurance activities are as follows:

- large catastrophic events, or multiple medium-sized events in quick succession, resulting in a requirement to pay a large value of claims within a relatively short time frame or fund trust accounts;
- failure of insureds or cedants to meet their contractual obligations with respect to the payment of premiums in a timely manner; and
- failure of reinsurers to meet their contractual obligations with respect to the payment of claims in a timely manner.

Exposures in relation to investment activities are as follows:

- adverse market movements and/or a duration mismatch to obligations, resulting in investments being disposed of at a significant realised loss; and
- an inability to liquidate investments due to market conditions.

The maturity dates of the Group's fixed maturity portfolio are as follows:

As at 31 December 2021	Core \$m	Core plus \$m	Surplus \$m	Total \$m
Less than one year	119.0	144.7	18.5	282.2
Between one and two years	198.1	255.4	25.4	478.9
Between two and three years	102.3	133.3	38.6	274.2
Between three and four years	61.9	89.6	40.8	192.3
Between four and five years	30.2	33.6	55.1	118.9
Over five years	17.1	25.3	177.2	219.6
Asset backed and mortgage backed securities	19.6	32.7	190.7	243.0
Total fixed maturity securities	548.2	714.6	546.3	1,809.1

As at 31 December 2020	Core \$m	Core plus \$m	Surplus \$m	Total \$m
Less than one year	100.2	164.7	11.1	276.0
Between one and two years	115.0	167.0	12.9	294.9
Between two and three years	115.3	131.5	31.4	278.2
Between three and four years	45.1	74.7	41.4	161.2
Between four and five years	53.7	57.8	95.2	206.7
Over five years	11.9	29.0	138.6	179.5
Asset backed and mortgage backed securities	17.2	83.1	181.8	282.1
Total fixed maturity securities	458.4	707.8	512.4	1,678.6

The maturity profile of the insurance contracts and financial liabilities of the Group is as follows:

As at 31 December 2021	Years until liability becomes due – undiscounted values					Total \$m
	Balance sheet \$m	Less than one \$m	One to three \$m	Three to five \$m	Over five \$m	
Losses and loss adjustment expenses	1,291.1	676.6	425.1	114.3	75.1	1,291.1
Insurance contracts – other payables	20.3	13.7	6.6	–	–	20.3
Amounts payable to reinsurers	205.6	205.6	–	–	–	205.6
Other payables	37.4	37.4	–	–	–	37.4
Lease liabilities	17.9	3.7	6.4	5.1	6.1	21.3
Long-term debt ¹	445.7	25.3	50.6	50.6	576.6	703.1
Total	2,018.0	962.3	488.7	170.0	657.8	2,278.8

1. The maturity profile of long-term debt includes interest.

As at 31 December 2020	Years until liability becomes due – undiscounted values					Total \$m
	Balance sheet \$m	Less than one \$m	One to three \$m	Three to five \$m	Over five \$m	
Losses and loss adjustment expenses	952.8	496.1	326.3	85.1	45.3	952.8
Insurance contracts – other payables	22.5	20.5	2.0	–	–	22.5
Amounts payable to reinsurers	151.7	151.7	–	–	–	151.7
Other payables	46.1	46.1	–	–	–	46.1
Lease liabilities	20.9	3.8	7.5	5.1	8.7	25.1
Long-term debt ¹	327.5	17.0	152.7	15.9	296.1	481.7
Total	1,521.5	735.2	488.5	106.1	350.1	1,679.9

1. The maturity profile of long-term debt includes interest.

Actual maturities of the above may differ from contractual maturities because certain borrowers have the right to call or prepay certain obligations with or without call or prepayment penalties. While the estimation of the ultimate liability for losses and loss adjustment expenses is complex and incorporates a significant amount of judgement, the timing of payment of losses and loss adjustment expenses is also uncertain and cannot be predicted as simply as for other financial liabilities. Actuarial and statistical techniques, past experience and management's judgement have been used to determine a likely settlement pattern.

As at 31 December 2021, cash and cash equivalents were \$517.7 million (31 December 2020 – \$432.4 million). The Group manages its liquidity risks via its investment strategy to hold high-quality, liquid securities, sufficient to meet its insurance liabilities and other near-term liquidity requirements. The creation of the core and core plus portfolios with their subset of guidelines aims to ensure funds are readily available to meet potential insurance liabilities in an extreme event plus other near-term liquidity requirements. In addition, the Group has established asset allocation and maturity parameters within the investment guidelines such that the majority of the investments are in high quality assets which could be converted into cash promptly and at minimal expense. The Group monitors market changes and outlook and reallocates assets as it deems necessary.

As at 31 December 2021, the Group considers that it has more than adequate liquidity to pay its obligations as they fall due.

D. CREDIT RISK

Credit risk is the risk that a counterparty may fail to pay, or repay, a debt or obligation. The Group is exposed to credit risk on its fixed maturity investment portfolio and derivative instruments, its inwards premiums receivable from insureds and cedants, and on any amounts recoverable from reinsurers.

Credit risk on the fixed maturity portfolio is mitigated through the Group's policy to invest in instruments of high-credit-quality issuers and to limit the amounts of credit exposure with respect to particular ratings categories and any one issuer. Securities rated below an S&P or equivalent rating of BBB-/Baa3 may comprise no more than 15.0% of shareholders' equity. In addition, no one issuer, with the exception of U.S. government and agency securities, other G10 government guaranteed securities (excluding Italy) and Australian sovereign debt, should exceed 5.0% of shareholders' equity. The Group is therefore not exposed to any significant credit concentration risk on its investment portfolio, except for fixed maturity securities issued by the U.S. government and government agencies and other highly-rated governments.

Credit risk on exchange-traded derivative instruments is mitigated by the use of clearing houses to reduce counterparty credit risk, requiring the posting of margins and settling of unrealised gains and losses daily. Credit risk on OTC derivatives is mitigated by monitoring the creditworthiness of the counterparties and by requiring collateral amounts exceeding predetermined thresholds to be posted for positions which have accrued gains.

Credit risk on inwards premiums receivable from insureds and cedants is managed by conducting business with reputable broking organisations, with whom the Group has established relationships, and by rigorous cash collection procedures. The Group also has a broker approval process in place. Binding authorities are subject to standard market controls including credit control. Credit risk from reinsurance recoverables is primarily managed by the review and approval of reinsurer security.

The table below presents an analysis of the Group's major exposures to counterparty credit risk, based on their rating. The table includes amounts due from policyholders and unsettled investment trades. The quality of these receivables is not graded but, based on management's historical experience, there is limited default risk associated with these amounts.

As at 31 December 2021	Cash and fixed maturity securities \$m	Inwards premiums receivable and other receivables \$m	Reinsurance recoveries \$m
AAA	355.6	—	—
AA+, AA, AA-	816.0	—	2.8
A+, A, A-	754.4	28.2	369.2
BBB+, BBB, BBB-	280.4	2.1	2.2
Other ¹	120.4	517.3	44.6
Total	2,326.8	547.6	418.8

1. Reinsurance recoveries classified as 'other' include \$38.2 million of reserves that are fully collateralised.

As at 31 December 2020	Cash and fixed maturity securities \$m	Inwards premiums receivable and other receivables \$m	Reinsurance recoveries \$m
AAA	469.6	—	—
AA+, AA, AA-	650.8	0.4	4.4
A+, A, A-	591.7	28.0	229.0
BBB+, BBB, BBB-	291.8	—	3.0
Other ¹	107.1	401.9	102.3
Total	2,111.0	430.3	338.7

1. Reinsurance recoveries classified as 'other' include \$95.8 million of reserves that are fully collateralised.

As at 31 December 2021, the average credit quality of the fixed maturity portfolio was A+ (31 December 2020 – A+).

The following table shows inwards premiums receivable that are past due but not impaired:

	2021 \$m	2020 \$m
Less than 90 days past due	59.1	37.0
Between 91 and 180 days past due	13.7	12.3
Over 180 days past due	8.2	7.9
Total	81.0	57.2

As at 31 December 2021 there has been no change in our counterparty credit risk exposure, however, it is an area we continue to monitor given the ongoing COVID-19 pandemic. Provisions of \$7.0 million (31 December 2020 – \$5.6 million) have been made for impaired or irrecoverable balances and \$1.4 million (2020 – \$1.5 million) was charged to the consolidated statement of comprehensive (loss) income in respect of the provision for bad debts.

E. OPERATIONAL RISK

Operational risk is the risk of loss resulting from inadequate or failed internal processes, personnel, systems or external events. The Group and its subsidiaries have identified and evaluated their key operational risks and these are incorporated in the risk registers and modelled within the subsidiaries' capital models. The Group has also established, and monitors compliance with, internal operational risk tolerances. The RRC reviews operational risk on at least an annual basis and operational risk is covered in the Group CRO's quarterly ORSA report to the LHL Board and entity boards and in the LSL RCCC reporting.

In order to manage operational risks, the Group has implemented a robust governance framework. Policies and procedures are documented and identify the key risks and controls within processes. Key risk indicators have been established and are monitored on a regular basis and a formal loss event and near-miss reporting process has been implemented. The Group's internal audit function provides independent feedback with regard to the accuracy and completeness of key risks and controls, and independently verifies the effective operation of these through substantive testing. All higher risk areas are subject to an annual audit while compliance with tax operating guidelines is reviewed quarterly. Frequency of consideration for audit for all other areas varies from quarterly at the most frequent to a minimum of once every four years, on a rotational basis.

As in 2020, the majority of the Group's employees spent much of 2021 working from home, again with no noticeable adverse impact on the Group's operating effectiveness. The operational cyber risk that comes with employees working from home is managed through enhanced monitoring of network activity, targeted staff training, a quarterly risk and control affirmation process, annual testing of business continuity plans and disaster recovery plans, and our cyber security incident response plan.

F. STRATEGIC RISK

The Group has identified several strategic risks. These include:

- the risks that either the poor execution of the business plan or an inappropriate business plan in itself results in a strategy that fails to adequately reflect the trading environment, resulting in an inability to optimise performance, including reputational risk;
- the risks of failing to maintain adequate capital, accessing capital at an inflated cost or the inability to access capital. This includes unanticipated changes in vendor, regulatory and/or rating agency models that could result in an increase in capital requirements or a change in the type of capital required;
- the risks of succession planning, staff retention and key man risks; and
- the risks of organisational stretch as the Group grows, in terms of volume of business written and number of employees, as well as from transformation programmes to ensure the Group has appropriate systems and infrastructure and data in place to support the business.

I. BUSINESS PLAN RISK

The Group addresses the risks associated with the planning and execution of the business plan through a combination of the following:

- an iterative annual forward-looking business planning process with cross departmental involvement;
- evaluation and approval of the annual business plan by the Board of Directors;
- regular monitoring of actual versus planned results;
- periodic review and re-forecasting as market conditions change; and
- evaluation of climate change and the potential short, medium and long-term implications/considerations for the business.

The forward-looking business planning process covers a three-year period from 2022 to 2024 and applies a number of sensitivity, stress and scenario tests. These tests include consideration of climate change risks. The sensitivity and stress testing identified that even under the more extreme stress scenarios the Group had more than adequate liquidity and solvency headroom.

II. CAPITAL MANAGEMENT RISK

The total capital of the Group is as follows:

As at 31 December	2021 \$m	2020 \$m
Shareholders' equity	1,412.3	1,538.5
Long-term debt	445.7	327.5
Total capital	1,858.0	1,866.0
Intangible assets	(157.9)	(154.5)
Total tangible capital	1,700.1	1,711.5

Risks associated with the effectiveness of the Group's capital management are mitigated as follows:

- regular monitoring of current and prospective regulatory and rating agency capital requirements;
- regular discussion with the LSL management team regarding Lloyd's capital requirements;
- oversight of capital requirements by the Board of Directors;
- ability to purchase sufficient, cost-effective reinsurance;
- maintaining contact with vendors, regulators and rating agencies in order to stay abreast of upcoming developments; and
- participation in industry groups such as the International Underwriters Association, the Association of Bermuda Insurers and Reinsurers and the Lloyd's Market Association.

The Group reviews the level and composition of capital on an ongoing basis with a view to:

- maintaining sufficient capital for underwriting opportunities and to meet obligations to policyholders;
- maximising the risk-adjusted return to shareholders within predetermined risk tolerances;
- maintaining adequate financial strength ratings; and
- meeting internal, rating agency and regulatory capital requirements.

Capital is increased or returned as appropriate. The retention of earnings generated leads to an increase in capital. Capital raising can include debt or equity and returns of capital may be made through dividends, share repurchases, a redemption of debt or any combination thereof. Other capital management tools and products available to the Group may also be utilised. All capital actions require approval by the Board of Directors.

Internal methods have been developed to review the profitability of classes of business and their estimated capital requirements plus the capital requirements of the combination of a wide range of other risk categories. These approaches are used by management in decision making.

During the year, the Group issued \$450.0 million in aggregate principal amount of 5.625% fixed rate reset junior subordinated notes due on 18 September 2041. The long-term debt was issued in two tranches forming part of the same series of notes, with \$400.0 million issued on 18 March 2021 and \$50.0 million issued on 31 March 2021. The majority of the net proceeds from the long-term issuance were used by the Group to redeem its then-existing senior and subordinated indebtedness, with the balance being used for general corporate purposes. The new long-term debt was approved as 'Tier 2 Ancillary Capital' by the Bermuda Monetary Authority.

The Group's aim is to maximise risk-adjusted returns for our shareholders across the cycle through a purposeful and sustainable business culture. The return is measured by management in terms of the Change in FCBVS in the period (see APM on page 189). This aim is a long-term goal, acknowledging that management expects both higher and lower results in the shorter term. The cyclical and volatility of the insurance market is expected to be the largest driver of this pattern. Management monitors these peaks and troughs by adjusting the Group's portfolio to make the most effective use of available capital and seeking to maximise the risk-adjusted return.

The primary source of capital used by the Group is equity shareholders' funds and borrowings (note 18). As a holding company, LHL relies on dividends from its operating entities to provide the cash flow required for debt service and dividends to shareholders. The operating entities' ability to pay dividends and make capital distributions is subject to the legal and regulatory restrictions of the jurisdictions in which they operate.

Both the Group and LICL are regulated by the BMA and are required to monitor their enhanced capital requirement under the BMA's regulatory framework, which has been assessed as equivalent to the Solvency II regime. The Group and LICL's capital requirement are calculated using the BSCR standard formula model. For the years ended 31 December 2021 and 2020, both the Group and LICL were more than adequately capitalised under the BMA's regulatory regime.

The Group's UK regulated insurance companies are required to comply with the Solvency II regime and are regulated by the PRA and FCA. LSL is also regulated by Lloyd's. Under Solvency II, the basis for assessing capital and solvency comprises a market-consistent economic balance sheet and an SCR, determined using either an internal model or the standard formula.

LUK calculates its SCR using the standard formula. LUK's Solvency II own funds are primarily comprised of Tier 1 items for the years ended 31 December 2021 and 2020. Tier 1 capital is the highest-quality capital under Solvency II with the greatest loss-absorbing capacity, comprising share capital and retained earnings. For the years ended 31 December 2021 and 2020, LUK was more than adequately capitalised under the Solvency II regime. The Group is closely monitoring consultations and proposals related to changes to the UK Solvency regime post the UK's departure from the EU on 31 December 2020. The areas under review are not currently expected to have a material impact on the solvency position of any of the Group's UK regulated entities.

The Group's underwriting capacity in its Lloyd's syndicates must be supported by providing a deposit in the form of cash, securities or LOCs, which are referred to as FAL. The capital framework at Lloyd's requires each managing agent to calculate the capital requirement for each syndicate they manage. Solvency II internal models are used to determine capital requirements for Syndicate 2010 and Syndicate 3010 based on the uSCR. Lloyd's has the discretion to take into account other factors at syndicate or member level to uplift the calculated uSCR. This may include perceived deficiencies in the internal model result as well as the need to maintain Lloyd's overall security rating. Currently, as a minimum, Lloyd's applies a 35.0% uplift to each syndicate's uSCR to arrive at the ECA.

Lloyd's then uses each syndicate's ECA as a basis for determining member level capital requirements, which is backed by FAL. For the 2022 calendar year the Group's corporate member's FAL requirement was set at 74.0% (2021 – 80.4%) of underwriting capacity supported. Further solvency adjustments are made to allow for open year profits and losses of the syndicates on which the corporate member participates. The Group has met its FAL requirement of £344.0 million as at 31 December 2021 (31 December 2020 – £302.2 million).

For the years ended 31 December 2021 and 2020 the capital requirements of all the Group's regulatory jurisdictions were met.

III. RETENTION RISK

Risks associated with succession planning, staff retention and key man risks are mitigated through a combination of resource planning processes and controls, including:

- the identification of key personnel with appropriate succession plans;
- the identification of key team profit generators and function holders with targeted retention packages;
- documented recruitment procedures, position descriptions and employment contracts;
- resource monitoring and the provision of appropriate compensation, including equity based compensation which vests over a defined time horizon; and
- training schemes.

Notes to the accounts

1. GENERAL INFORMATION

The Group is a provider of global specialty insurance and reinsurance products with operations in London, Bermuda and Australia. LHL was incorporated under the laws of Bermuda on 12 October 2005. On 16 March 2009, LHL was added to the Official List and its common shares were admitted to trading on the main market of the LSE; previously LHL's shares were listed on AIM, a subsidiary market of the LSE. Since 21 May 2007, LHL's shares have had a secondary listing on the BSX. LHL's head office and registered office is Power House, 7 Par-la-Ville Road, Hamilton HM 11, Bermuda.

The consolidated financial statements for the year ended 31 December 2021 include the Company's subsidiary companies, the Company's investment in associate, and the Group's share of the syndicates' assets and liabilities and income and expenses. A full listing of the Group's related parties can be found in note 23.

2. SEGMENTAL REPORTING

Management and the Board of Directors review the Group's business primarily by its five principal segments: property and casualty reinsurance, property and casualty insurance, aviation, energy, and marine. These segments are therefore deemed to be the Group's operating segments for the purposes of segmental reporting. Operating segment performance is measured by the net underwriting profit or loss and the combined ratio.

All amounts reported are transactions with external parties and associates. There are no significant inter-segmental transactions and there are no significant insurance or reinsurance contracts that insure or reinsure risks in Bermuda, the Group's country of domicile.

The Group's operating segments for the purpose of segmental reporting have been revised in the current year. The revenue and expenses previously reported in the property segment are now reported within the property and casualty reinsurance and the property and casualty insurance segments. The aviation, energy and marine segments remain unchanged. Comparative figures for the year ended 31 December 2020 have been re-presented in conformity with the current year view.

REVENUE AND EXPENSE BY OPERATING SEGMENT

	Property and casualty reinsurance \$m	Property and casualty insurance \$m	Aviation \$m	Energy \$m	Marine \$m	Total \$m
For the year ended 31 December 2021						
Gross premiums written by geographic area						
U.S. and Canada	281.6	106.2	13.0	53.1	11.3	465.2
Worldwide – multi territory	162.3	19.3	80.7	90.6	71.9	424.8
Europe	52.9	42.7	29.1	10.2	3.9	138.8
Rest of world	63.2	42.3	53.6	30.9	6.4	196.4
Total	560.0	210.5	176.4	184.8	93.5	1,225.2
Outwards reinsurance premiums	(177.6)	(75.0)	(85.6)	(53.8)	(17.1)	(409.1)
Change in unearned premiums	(82.2)	(20.4)	(20.8)	(11.4)	(5.2)	(140.0)
Change in unearned premiums on premiums ceded	(3.1)	6.9	13.5	3.2	(0.1)	20.4
Net premiums earned	297.1	122.0	83.5	122.8	71.1	696.5
Insurance losses and loss adjustment expenses	(433.9)	(114.9)	(38.4)	(46.4)	(34.0)	(667.6)
Insurance losses and loss adjustment expenses recoverable	160.8	11.3	19.8	4.2	1.0	197.1
Insurance acquisition expenses	(66.5)	(36.0)	(28.2)	(32.0)	(25.9)	(188.6)
Insurance acquisition expenses ceded	9.0	4.2	16.5	1.6	0.3	31.6
Net underwriting (loss) profit	(33.5)	(13.4)	53.2	50.2	12.5	69.0
Net unallocated income and expenses						(125.8)
Loss before tax						(56.8)
Net loss ratio	91.9%	84.9%	22.3%	34.4%	46.4%	67.6%
Net acquisition cost ratio	19.4%	26.1%	14.0%	24.8%	36.0%	22.5%
Expense ratio	–	–	–	–	–	17.2%
Combined ratio	111.3%	111.0%	36.3%	59.2%	82.4%	107.3%

2. SEGMENTAL REPORTING CONTINUED

REVENUE AND EXPENSE BY OPERATING SEGMENT

For the year ended 31 December 2020	Property and casualty reinsurance \$m	Property and casualty insurance \$m	Aviation \$m	Energy \$m	Marine \$m	Total \$m
Gross premiums written by geographic area						
U.S. and Canada	165.1	85.3	10.9	33.2	6.3	300.8
Worldwide – multi territory	36.8	13.9	80.0	81.0	72.8	284.5
Europe	25.8	20.5	19.4	9.1	6.1	80.9
Rest of world	52.1	27.4	40.7	21.4	6.3	147.9
Total	279.8	147.1	151.0	144.7	91.5	814.1
Outwards reinsurance premiums	(106.4)	(51.5)	(71.3)	(47.7)	(17.8)	(294.7)
Change in unearned premiums	(21.3)	5.6	(18.1)	(6.7)	(11.0)	(51.5)
Change in unearned premiums on premiums ceded	(0.1)	(1.6)	8.8	1.0	(0.2)	7.9
Net premiums earned	152.0	99.6	70.4	91.3	62.5	475.8
Insurance losses and loss adjustment expenses	(91.0)	(68.4)	(79.6)	(85.1)	(39.5)	(363.6)
Insurance losses and loss adjustment expenses recoverable	(9.6)	24.2	47.5	18.3	(0.6)	79.8
Insurance acquisition expenses	(31.8)	(30.5)	(25.8)	(28.0)	(22.9)	(139.0)
Insurance acquisition expenses ceded	6.4	3.7	12.4	1.2	0.3	24.0
Net underwriting profit (loss)	26.0	28.6	24.9	(2.3)	(0.2)	77.0
Net unallocated income and expenses						(71.1)
Profit before tax						5.9
Net loss ratio	66.2%	44.4%	45.6%	73.2%	64.2%	59.6%
Net acquisition cost ratio	16.7%	26.9%	19.0%	29.4%	36.2%	24.2%
Expense ratio	–	–	–	–	–	24.0%
Combined ratio	82.9%	71.3%	64.6%	102.6%	100.4%	107.8%

3. INVESTMENT RETURN

The total investment return for the Group is as follows:

	Net investment income and net other investment income ¹ \$m	Net realised gains (losses) and impairments \$m	Net change in unrealised gains/losses on AFS ² \$m	Total investment return excluding foreign exchange \$m	Net foreign exchange (losses)/gains \$m	Total investment return including foreign exchange \$m
For the year ended 31 December 2021						
Fixed maturity securities – AFS	22.9	2.7	(31.6)	(6.0)	(2.9)	(8.9)
Fixed maturity securities – at FVTPL	1.7	(0.1)	–	1.6	–	1.6
Index linked securities – at FVTPL	0.5	–	–	0.5	–	0.5
Hedge funds – at FVTPL	(0.6)	3.7	–	3.1	–	3.1
Private investment funds – at FVTPL	2.3	–	–	2.3	–	2.3
Other investments	(0.1)	(0.2)	–	(0.3)	0.7	0.4
Cash and cash equivalents	0.1	–	–	0.1	1.7	1.8
Total investment return	26.8	6.1	(31.6)	1.3	(0.5)	0.8

1. Net unrealised gains/(losses) on our FVTPL investments are included within net investment income and net other investment income.

2. In 2023 when we apply IFRS 9, the net change in unrealised gains/(losses) on AFS will be classified within net investment income and net other investment income.

	Net investment income and net other investment income ¹ \$m	Net realised gains (losses) and impairments \$m	Net change in unrealised gains/losses on AFS ² \$m	Total investment return excluding foreign exchange \$m	Net foreign exchange (losses)/gains \$m	Total investment return including foreign exchange \$m
For the year ended 31 December 2020						
Fixed maturity securities – AFS	26.8	2.0	20.8	49.6	7.2	56.8
Fixed maturity securities – at FVTPL	(0.3)	3.2	–	2.9	–	2.9
Hedge funds – at FVTPL	(1.0)	5.7	–	4.7	–	4.7
Private investment funds – at FVTPL	7.3	–	–	7.3	–	7.3
Other investments	0.5	1.9	–	2.4	(0.1)	2.3
Cash and cash equivalents	2.2	–	–	2.2	(2.2)	–
Total investment return	35.5	12.8	20.8	69.1	4.9	74.0

1. Net unrealised gains/(losses) on our FVTPL investments are included within net investment income and net other investment income.

2. In 2023 when we apply IFRS 9, the net change in unrealised gains/(losses) on AFS will be classified within net investment income and net other investment income.

Net investment income includes \$34.1 million (2020 – \$36.9 million) of interest income on our AFS investment portfolio and cash and cash equivalents. Net realised gains (losses) and impairments includes impairment losses of \$nil (2020 – \$0.7 million) recognised on fixed maturity securities.

Refer to pages 147 to 148 in the risk disclosures section for the fair values of the Group's derivative instruments. Realised gains and losses on futures and options contracts are included in net realised gains (losses) and impairments.

Included in net investment income and net other investment income is \$4.8 million (2020 – \$4.3 million) of investment management, accounting and custodian fees.

4. NET INSURANCE ACQUISITION EXPENSES

	2021 \$m	2020 \$m
For the year ended 31 December		
Insurance acquisition expenses	221.2	146.3
Changes in deferred insurance acquisition expenses	(32.6)	(7.3)
Insurance acquisition expenses ceded	(39.0)	(26.0)
Changes in deferred insurance acquisition expenses ceded	7.4	2.0
Total net insurance acquisition expenses	157.0	115.0

5. OTHER INCOME

For the year ended 31 December	2021 \$m	2020 \$m
Lancashire Capital Management		
• underwriting fees	10.6	10.0
• profit commission	5.2	1.8
Lancashire Syndicates		
• managing agency fees	1.1	1.0
• consortium fees	0.6	0.7
• consortium profit commission	0.7	1.8
Total other income	18.2	15.3

As at 31 December 2021, contract assets in relation to other income amounted to \$0.7 million (31 December 2020 – \$1.8 million).

6. RESULTS OF OPERATING ACTIVITIES

Results of operating activities are stated after charging the following amounts:

For the year ended 31 December	2021 \$m	2020 \$m
Depreciation on owned assets	0.6	0.5
Auditor's remuneration		
• Group audit fees	2.1	1.9
• Other services	0.4	0.3
Total	3.1	2.7

During 2021 and 2020, KPMG LLP provided non-audit services in relation to the Group's half-year reporting review, Solvency II reporting, Lloyd's reporting and the long-term debt refinancing. Fees for non-audit services provided in 2021 totalled \$0.4 million (2020 – \$0.3 million).

7. EMPLOYEE BENEFITS

For the year ended 31 December	2021 \$m	2020 \$m
Wages and salaries	49.2	42.7
Pension costs	4.3	3.6
Bonus and other benefits	15.0	28.0
Total cash compensation	68.5	74.3
RSS – performance	3.7	4.9
RSS – ordinary	6.0	6.5
RSS – bonus deferral	1.4	0.9
Total equity based compensation	11.1	12.3
Total employee benefits	79.6	86.6

EQUITY BASED COMPENSATION

The Group's equity based compensation scheme is its RSS. All outstanding and future RSS grants have an exercise period of ten years from the grant date.

The fair value of any TSR component of the nil-cost options is estimated using a stochastic model. For all other components the Black-Scholes model is used to estimate the fair value.

The following table lists the assumptions used in the stochastic model for the RSS awards granted during the years ended 31 December 2021 and 2020:

Assumptions	2021	2020
Dividend yield	–	–
Expected volatility ¹	28.0%	22.4%
Risk-free interest rate ²	0.1%	0.5%
Expected average life of options	3.0 years	3.0 years
Share price	\$8.92	\$10.46

1. The expected volatility of the LHL share price is calculated based on the movement in the share price over a period prior to the grant date, equal in length to the expected life of the award.

2. The risk-free interest rate is consistent with three-year UK government bond yields on the date of grant.

The calculation of the equity based compensation expense assumes forfeitures due to employee turnover of 10.0% per annum prior to vesting, with subsequent adjustments to reflect actual experience.

RSS – PERFORMANCE

The performance RSS options vest three years from the date of grant and are dependent on certain performance criteria. A maximum of 85.0% (2020 – 85.0%) of the performance RSS options will vest only on the achievement of a change in FCBVS in excess of a required amount. A maximum of 15.0% (2020 – 15.0%) of the performance RSS options will vest only on the achievement of an absolute TSR in excess of a required amount. An amount equivalent to the dividends paid between the grant date and the exercise date accrues and is paid at the time of exercise, pro-rata according to the number of RSS options that vest.

	Total number of restricted shares
Outstanding as at 31 December 2019	2,952,192
Granted	859,344
Exercised	(20,910)
Forfeited	(124,977)
Lapsed	(916,253)
Outstanding as at 31 December 2020	2,749,396
Granted	1,386,635
Exercised	(377,522)
Forfeited	(14,615)
Lapsed	(480,182)
Outstanding as at 31 December 2021	3,263,712
Exercisable as at 31 December 2020	80,217
Exercisable as at 31 December 2021	104,346

	2021 Total restricted shares	2020 Total restricted shares
Weighted average remaining contractual life	9.0 years	8.0 years
Weighted average fair value at date of grant during the year	\$7.99	\$9.30
Weighted average share price at date of exercise during the year	\$9.12	\$10.28

RSS – ORDINARY

The ordinary RSS options vest three years from the date of grant and do not have associated performance criteria. An amount equivalent to the dividends paid between the grant date and the exercise date accrues and is paid at the time of exercise.

	Total number of restricted shares
Outstanding as at 31 December 2019	2,483,444
Granted	836,251
Exercised	(628,665)
Forfeited	(71,905)
Outstanding as at 31 December 2020	2,619,125
Granted	1,035,202
Exercised	(561,366)
Forfeited	(208,990)
Outstanding as at 31 December 2021	2,883,971
Exercisable as at 31 December 2020	265,329
Exercisable as at 31 December 2021	520,249

7. EMPLOYEE BENEFITS CONTINUED

	2021 Total restricted shares	2020 Total restricted shares
Weighted average remaining contractual life	8.4 years	7.9 years
Weighted average fair value at date of grant during the year	\$8.92	\$10.35
Weighted average share price at date of exercise during the year	\$9.35	\$10.20

RSS – BONUS DEFERRAL

The vesting periods of the bonus deferral RSS options range from one to three years from the date of grant and do not have associated performance criteria. An amount equivalent to the dividends paid between the grant date and the exercise date accrues and is paid at the time of exercise.

	Total number of restricted shares
Outstanding as at 31 December 2019	196,521
Granted	182,816
Exercised	(102,804)
Forfeited	(25,928)
Outstanding as at 31 December 2020	250,605
Granted	183,185
Exercised	(83,638)
Outstanding as at 31 December 2021	350,152
Exercisable as at 31 December 2020	59,698
Exercisable as at 31 December 2021	59,329

	2021 Total restricted shares	2020 Total restricted shares
Weighted average remaining contractual life	8.9 years	8.1 years
Weighted average fair value at date of grant during the year	\$8.92	\$10.46
Weighted average share price at date of exercise during the year	\$8.84	\$10.19

RSS – LANCASHIRE SYNDICATES LIMITED ACQUISITION

The vesting periods of the LSL acquisition RSS options ranged from three to five years and were dependent on certain performance criteria. These options vested in full on 31 December 2018. An amount equivalent to the dividends paid between the grant date and the exercise date accrues and is paid at the time of exercise, pro-rata according to the number of RSS options that vested.

	Total number of restricted shares
Outstanding as at 31 December 2019	107,242
Exercised	(42,500)
Outstanding as at 31 December 2021 and 2020	64,742
Exercisable as at 31 December 2021 and 2020	64,742

	2021 Total restricted shares	2020 Total restricted shares
Weighted average remaining contractual life	1.9 years	2.9 years
Weighted average fair value at date of grant	\$13.01	\$13.01
Weighted average share price at date of exercise during the year	–	\$10.35

8. FINANCING COSTS

For the year ended 31 December	2021 \$m	2020 \$m
Interest expense on long-term debt	25.8	15.7
Redemption cost on senior and subordinated loan notes	12.8	–
Interest rate swap	3.4	–
Interest expense on lease liabilities	1.1	1.3
Other financing costs	2.7	3.1
Total	45.8	20.1

The increase in financing costs during the year ended 31 December 2021 compared to 2020 was driven by \$18.7 million of one-off costs associated with the refinancing of the long-term debt.

Refer to note 18 for details of long-term debt and financing arrangements.

9. TAX

BERMUDA

LHL, LICL and LCM have received an undertaking from the Bermuda government exempting them from all Bermuda local income, withholding and capital gains taxes until 31 March 2035. At the present time no such taxes are levied in Bermuda.

UNITED KINGDOM

The UK subsidiaries of LHL are subject to normal UK corporation tax on all their taxable profits.

For the year ended 31 December	2021 \$m	2020 \$m
Corporation tax charge for the period	2.9	0.5
Adjustments in respect of prior period corporation tax	0.2	0.1
Deferred tax credit for the period	(2.5)	(0.3)
Adjustment in respect of prior period deferred tax	0.8	(0.3)
Tax rate change adjustment	3.4	1.4
Total tax charge	4.8	1.4

Tax reconciliation ¹	2021 \$m	2020 \$m
(Loss) profit before tax	(56.8)	5.9
Tax calculated at the standard corporation tax rate applicable in Bermuda 0%	–	–
Effect of income taxed at a higher rate	0.8	(0.9)
Adjustments in respect of prior period	1.0	(0.2)
Differences related to equity based compensation	1.0	0.8
Other expense permanent differences	(1.4)	0.3
Tax rate change adjustment	3.4	1.4
Total tax charge	4.8	1.4

1. All tax reconciling balances have been classified as recurring items.

The current tax charge as a percentage of the Group's profit before tax is negative 8.5% (2020 – 23.7%). Non-taxable income relates to profits of companies within the Group that are non-tax resident in the UK and the share of (loss) profit of associate.

Refer to note 11 for details of the tax expense related to the net change in unrealised gains/losses on investments that is included in accumulated other comprehensive income within shareholders' equity.

10. CASH AND CASH EQUIVALENTS

As at 31 December	2021 \$m	2020 \$m
Cash at bank and in hand	275.8	226.9
Cash equivalents	241.9	205.5
Total cash and cash equivalents	517.7	432.4

The carrying amount of cash and cash equivalents approximates fair value. Refer to note 18 for the cash and cash equivalent balances on deposit as collateral. Cash and cash equivalents include managed cash of \$260.7 million (31 December 2020 – \$170.2 million).

11. INVESTMENTS

As at 31 December 2021	Cost or amortised cost \$m	Unrealised gains \$m	Unrealised losses \$m	Fair value ¹ \$m
Fixed maturity securities – AFS				
• Short-term investments	44.5	–	–	44.5
• Fixed maturity funds	17.6	–	–	17.6
• U.S. treasuries	566.9	0.6	(3.3)	564.2
• Other government bonds	59.5	0.3	(1.0)	58.8
• U.S. municipal bonds	24.0	0.4	(0.1)	24.3
• U.S. government agency debt	54.2	1.1	(0.1)	55.2
• Asset backed securities	104.8	0.3	(1.0)	104.1
• U.S. government agency mortgage backed securities	85.5	1.1	(1.1)	85.5
• Non-agency mortgage backed securities	33.1	0.3	(0.2)	33.2
• Agency commercial mortgage backed securities	0.2	–	(0.1)	0.1
• Non-agency commercial mortgage backed securities	20.2	–	(0.1)	20.1
• Bank loans	110.1	0.7	(0.6)	110.2
• Corporate bonds	657.4	8.6	(3.6)	662.4
Total fixed maturity securities – AFS	1,778.0	13.4	(11.2)	1,780.2
Fixed maturity securities – at FVTPL	24.8	5.5	(1.4)	28.9
Private investment funds – at FVTPL	106.0	1.1	(1.4)	105.7
Hedge funds – at FVTPL	93.3	14.8	(5.2)	102.9
Index linked securities – at FVTPL	30.0	0.5	–	30.5
Other investments	0.3	0.1	(0.5)	(0.1)
Total investments	2,032.4	35.4	(19.7)	2,048.1

1. When IFRS 9, Financial Instruments: Classification and Measurement, is implemented, all investments held above will be classified as at FVTPL (mandatory), with no resulting changes in the estimated fair value.

As at 31 December 2020	Cost or amortised cost \$m	Unrealised gains \$m	Unrealised losses \$m	Fair value ¹ \$m
Fixed maturity securities – AFS				
• Short-term investments	86.9	–	–	86.9
• Fixed maturity funds	16.4	–	–	16.4
• U.S. treasuries	291.0	2.9	(0.1)	293.8
• Other government bonds	64.4	1.5	–	65.9
• U.S. municipal bonds	12.3	0.7	–	13.0
• U.S. government agency debt	98.7	3.4	–	102.1
• Asset backed securities	121.9	4.0	(0.5)	125.4
• U.S. government agency mortgage backed securities	128.9	3.0	(0.1)	131.8
• Non-agency mortgage backed securities	18.2	0.6	–	18.8
• Agency commercial mortgage backed securities	0.4	–	(0.1)	0.3
• Non-agency commercial mortgage backed securities	5.6	0.2	–	5.8
• Bank loans	110.6	1.0	(1.1)	110.5
• Corporate bonds	654.1	24.6	(0.1)	678.6
Total fixed maturity securities – AFS	1,609.4	41.9	(2.0)	1,649.3
Fixed maturity securities – at FVTPL	25.7	3.6	–	29.3
Private investment funds – at FVTPL	91.7	5.6	(1.2)	96.1
Hedge funds – at FVTPL	72.7	13.4	(4.1)	82.0
Other investments	–	–	(0.7)	(0.7)
Total investments	1,799.5	64.5	(8.0)	1,856.0

1. When IFRS 9, Financial Instruments: Classification and Measurement, is implemented, all investments held above will be classified as at FVTPL (mandatory), with no resulting changes in the estimated fair value.

Accumulated other comprehensive income in relation to the Group's AFS fixed maturity is as follows:

As at 31 December	2021 \$m	2020 \$m
Unrealised gains	13.4	41.9
Unrealised losses	(11.2)	(2.0)
Net unrealised foreign exchange losses (gains) on fixed maturity securities – AFS	1.1	(5.0)
Tax provision	(0.4)	(1.3)
Accumulated other comprehensive income	2.9	33.6

The Group determines the fair value of each individual security utilising the highest-level inputs available. Prices for the Group's investment portfolio are provided via a third-party investment accounting firm whose pricing processes and the controls thereon are subject to an annual audit on both the operation and the effectiveness of those controls. Various recognised reputable pricing sources are used including pricing vendors and broker-dealers. The pricing sources use bid prices where available, otherwise indicative prices are quoted based on observable market trade data. The prices provided are compared to the investment managers' pricing.

The Group has not made any adjustments to any pricing provided by independent pricing services or its third-party investment managers for either year ending 31 December.

The fair value of securities in the Group's investment portfolio is estimated using the following techniques:

LEVEL (I)

Level (i) investments are securities with quoted prices in active markets. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency and those prices represent actual and regularly occurring market transactions on an arm's length basis.

LEVEL (II)

Level (ii) investments are securities with quoted prices in active markets for similar assets or liabilities or securities valued using other valuation techniques for which all significant inputs are based on observable market data. Instruments included in Level (ii) are valued via independent external sources using directly observable inputs to models or other valuation methods. The valuation methods used are typically industry-accepted standards and include broker-dealer quotes and pricing models including present values and future cash flows with inputs such as yield curves, interest rates, prepayment speeds and default rates.

LEVEL (III)

Level (iii) investments are securities for which valuation techniques are not based on observable market data and require significant management judgement. The Group determines securities classified as Level (iii) to include hedge funds, private investment funds and loans to the Lloyd's central fund.

The fair values of the Group's hedge funds are determined using a combination of the most recent NAVs provided by each fund's independent administrator and the estimated performance provided by each hedge fund manager. Independent administrators provide monthly reported NAVs with up to a one-month delay in valuation. The most recent NAV available for each hedge fund is adjusted for the estimated performance, as provided by the fund manager, between the NAV date and the reporting date. Historically estimated fair values incorporating these performance estimates have not been significantly different from subsequent NAVs. Given the Group's knowledge of the underlying investments and the size of the Group's investment therein, we would not anticipate any material variance between estimated valuations and the final NAVs reported by the administrators.

The fair value of the Group's private investment funds are determined using statements received from each fund's investment managers on either a monthly or quarterly in arrears basis. In addition these valuations will be compared with benchmarks or other indices to assess the reasonableness of the estimated fair value of each fund. Given the Group's knowledge of the underlying investments and the size of the Group's investment therein, we would not anticipate any material variance between statements and the final NAVs reported by the investment managers.

The Group determines whether transfers have occurred between levels of the fair value hierarchy by re-assessing the categorisation at the end of each reporting period. Transfers between Level (i) to (ii) securities amounted to \$133.8 million and transfers from Level (ii) to (i) securities amounted to \$51.0 million during the year ended 31 December 2021.

11. INVESTMENTS CONTINUED

The fair value hierarchy of the Group's investment holdings is as follows:

As at 31 December 2021	Level (i) \$m	Level (ii) \$m	Level (iii) \$m	Total \$m
Fixed maturity securities – AFS				
• Short-term investments	42.2	2.3	–	44.5
• Fixed maturity funds	–	17.6	–	17.6
• U.S. treasuries	564.2	–	–	564.2
• Other government bonds	31.5	27.3	–	58.8
• U.S. municipal bonds	–	24.3	–	24.3
• U.S. government agency debt	33.5	21.7	–	55.2
• Asset backed securities	–	104.1	–	104.1
• U.S. government agency mortgage backed securities	–	85.5	–	85.5
• Non-agency mortgage backed securities	–	33.2	–	33.2
• Agency commercial mortgage backed securities	–	0.1	–	0.1
• Non-agency commercial mortgage backed securities	–	20.1	–	20.1
• Bank loans	5.0	105.2	–	110.2
• Corporate bonds	197.7	464.7	–	662.4
Total fixed maturity securities – AFS	874.1	906.1	–	1,780.2
Fixed maturity securities – at FVTPL	–	25.0	3.9	28.9
Private investment funds – at FVTPL	–	–	105.7	105.7
Hedge funds – at FVTPL	–	–	102.9	102.9
Index linked securities – at FVTPL	–	30.5	–	30.5
Other investments	–	(0.1)	–	(0.1)
Total investments	874.1	961.5	212.5	2,048.1

As at 31 December 2020	Level (i) \$m	Level (ii) \$m	Level (iii) \$m	Total \$m
Fixed maturity securities – AFS				
• Short-term investments	83.7	3.2	–	86.9
• Fixed maturity funds	–	16.4	–	16.4
• U.S. treasuries	293.8	–	–	293.8
• Other government bonds	25.9	40.0	–	65.9
• U.S. municipal bonds	–	13.0	–	13.0
• U.S. government agency debt	91.0	11.1	–	102.1
• Asset backed securities	–	125.4	–	125.4
• U.S. government agency mortgage backed securities	–	131.8	–	131.8
• Non-agency mortgage backed securities	–	18.8	–	18.8
• Agency commercial mortgage backed securities	–	0.3	–	0.3
• Non-agency commercial mortgage backed securities	–	5.8	–	5.8
• Bank loans	8.3	102.2	–	110.5
• Corporate bonds	262.1	416.5	–	678.6
Total fixed maturity securities – AFS	764.8	884.5	–	1,649.3
Fixed maturity securities – at FVTPL	–	29.3	–	29.3
Private investment funds – at FVTPL	–	–	96.1	96.1
Hedge funds – at FVTPL	–	–	82.0	82.0
Other investments	–	(0.7)	–	(0.7)
Total investments	764.8	913.1	178.1	1,856.0

The table below analyses the movements in investments classified as Level (iii) investments:

	Private investment funds \$m	Hedge funds \$m	Fixed maturity securities ¹ \$m	Total \$m
As at 31 December 2019	15.5	150.0	–	165.5
Purchases	82.2	5.8	–	88.0
Sales	(6.0)	(79.4)	–	(85.4)
Net realised gains recognised in profit or loss	–	5.7	–	5.7
Net unrealised gains (losses) in profit or loss	4.4	(0.1)	–	4.3
As at 31 December 2020	96.1	82.0	–	178.1
Purchases	17.1	39.9	5.3	62.3
Sales	(2.8)	(23.0)	–	(25.8)
Net realised gains recognised in profit or loss	–	3.7	–	3.7
Net unrealised (losses) gains in profit or loss	(4.7)	0.3	(1.4)	(5.8)
As at 31 December 2021	105.7	102.9	3.9	212.5

1. Included within fixed maturity securities are central fund loans classified at Level (iii) within the fair value hierarchy.

12. INTERESTS IN STRUCTURED ENTITIES

CONSOLIDATED STRUCTURED ENTITIES

The Group provides capital contributions to the EBT to enable it to meet its obligations to employees under the equity based compensation plans. The Group has a contractual agreement which may require it to provide financial support to the EBT (see note 23).

UNCONSOLIDATED STRUCTURED ENTITIES IN WHICH THE GROUP HAS AN INTEREST

As part of its investment activities, the Group invests in unconsolidated structured entities. The Group does not sponsor any of the unconsolidated structured entities.

12. INTERESTS IN STRUCTURED ENTITIES CONTINUED

A summary of the Group's interest in unconsolidated structured entities is as follows:

As at 31 December 2021	Investments \$m	Interest in associate \$m	Total \$m
Fixed maturity securities			
• Asset backed securities	104.1	–	104.1
• U.S. government agency mortgage backed securities	85.5	–	85.5
• Non-agency mortgage backed securities	33.2	–	33.2
• Agency commercial mortgage backed securities	0.1	–	0.1
• Non-agency commercial mortgage backed securities	20.1	–	20.1
Total fixed maturity securities	243.0	–	243.0
Investment funds			
• Private investment funds	105.7	–	105.7
• Hedge funds	102.9	–	102.9
Total investment funds	208.6	–	208.6
Specialised investment vehicles			
• KHL (note 16)	–	118.7	118.7
Total	451.6	118.7	570.3

As at 31 December 2020	Investments \$m	Interest in associate \$m	Total \$m
Fixed maturity securities			
• Asset backed securities	125.4	–	125.4
• U.S. government agency mortgage backed securities	131.8	–	131.8
• Non-agency mortgage backed securities	18.8	–	18.8
• Agency commercial mortgage backed securities	0.3	–	0.3
• Non-agency commercial mortgage backed securities	5.8	–	5.8
Total fixed maturity securities	282.1	–	282.1
Investment funds			
• Private investment funds	96.1	–	96.1
• Hedge funds	82.0	–	82.0
Total investment funds	178.1	–	178.1
Specialised investment vehicles			
• KHL (note 16)	–	127.2	127.2
Total	460.2	127.2	587.4

The fixed maturity structured entities are created to meet specific investment needs of borrowers and investors which cannot be met from standardised financial instruments available in the capital markets. As such, they provide liquidity to the borrowers in these markets and provide investors with an opportunity to diversify risk away from standard fixed maturity securities. Whilst individual securities may differ in structure, the principles of the instruments are broadly the same and it is appropriate to aggregate the investments into the categories detailed above.

The risk that the Group faces in respect of the investments in structured entities is similar to the risk it faces in respect of other financial investments held on the consolidated balance sheet in that fair value is determined by market supply and demand. This is in turn driven by investor evaluation of the credit risk of the structure and changes in the term structure of interest rates which change investors' expectation of the cash flows associated with the instrument and, therefore, its value in the market. Risk management disclosures for these financial instruments and other investments are provided on pages 143 to 152. The total assets of these structured entities are not considered meaningful for the purpose of understanding the related risks and therefore have not been presented.

The maximum exposure to loss in respect of these structured entities would be the carrying value of the instruments that the Group holds as at 31 December 2021 and 31 December 2020. Generally, default rates would have to increase substantially from their current level before the Group would suffer a loss and this assessment is made prior to investing and regularly through the holding period for the security. The Group has not provided any other financial or other support in addition to that described above as at the reporting date, and there is no intention to provide support in relation to any other unconsolidated structured entities in the foreseeable future.

As at 31 December 2021 the Group has a commitment of \$100.0 million (31 December 2020 – \$100.0 million) in respect of two credit facility funds. The Group, via the funds, provides collateral for revolving credit facilities purchased at a discount from financial institutions and is at risk for its portion of any defaults on those revolving credit facilities. The Group's proportionate share of these revolving credit facilities purchased by the funds as at 31 December 2021 is \$39.7 million (31 December 2020 – \$60.3 million), which currently remains unfunded. The maximum exposure to the credit facility funds is \$100.0 million and as at 31 December 2021 there have been no defaults under these facilities.

13. LOSSES AND LOSS ADJUSTMENT EXPENSES

	Losses and loss adjustment expenses \$m	Reinsurance recoveries \$m	Net losses and loss adjustment expenses \$m
As at 31 December 2019	874.5	(327.5)	547.0
Net incurred losses for:			
Prior years	(64.2)	12.2	(52.0)
Current year	427.8	(92.0)	335.8
Exchange adjustments	11.9	(1.3)	10.6
Incurred losses and loss adjustment expenses	375.5	(81.1)	294.4
Net paid losses for:			
Prior years	221.8	(49.1)	172.7
Current year	75.4	(20.8)	54.6
Paid losses and loss adjustment expenses	297.2	(69.9)	227.3
As at 31 December 2020	952.8	(338.7)	614.1
Net incurred losses for:			
Prior years	(118.8)	32.3	(86.5)
Current year	786.4	(229.4)	557.0
Exchange adjustments	(17.2)	1.5	(15.7)
Incurred losses and loss adjustment expenses	650.4	(195.6)	454.8
Net paid losses for:			
Prior years	192.5	(106.7)	85.8
Current year	119.6	(8.8)	110.8
Paid losses and loss adjustment expenses	312.1	(115.5)	196.6
As at 31 December 2021	1,291.1	(418.8)	872.3

Further information on the calculation of loss reserves and the risks associated with them is provided in the risk disclosures section from page 137. The risks associated with general insurance contracts are complex and do not readily lend themselves to meaningful sensitivity analysis. The impact of an unreported event could lead to a significant increase in the Group's loss reserves. The Group believes that the loss reserves established are adequate, however a 20.0% increase in estimated losses would lead to a \$258.2 million (31 December 2020 – \$190.6 million) increase in gross loss reserves and a \$174.5 million (31 December 2020 – \$122.8 million) increase in net loss reserves. During the year the Group refined its reserving methodology to make our margin more explicit as we transition to IFRS 17.

The breakdown of net losses and loss adjustment expenses between notified outstanding losses, ACR and IBNR is shown below:

	Losses and loss adjustment expenses \$m	Reinsurance recoveries \$m	Net losses and loss adjustment expenses \$m
Outstanding losses	354.0	(95.9)	258.1
Additional case reserves	176.1	(31.2)	144.9
Losses incurred but not reported	422.7	(211.6)	211.1
As at 31 December 2020	952.8	(338.7)	614.1
Outstanding losses	402.6	(86.9)	315.7
Additional case reserves	224.3	(31.8)	192.5
Losses incurred but not reported	664.2	(300.1)	364.1
As at 31 December 2021	1,291.1	(418.8)	872.3

The Group's losses and loss expenses as at 31 December 2021 and 2020 had an estimated duration of approximately two years.

13. LOSSES AND LOSS ADJUSTMENT EXPENSES CONTINUED

CLAIMS DEVELOPMENT

The development of insurance liabilities is indicative of the Group's ability to estimate the ultimate value of its insurance liabilities. The Group began writing insurance and reinsurance business in December 2005. With the acquisition of LSL in 2013, the Group assumed additional loss reserves relating to 2001 and subsequent years.

Accident year	2011 & prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total \$m
Gross Group losses												
Estimate of ultimate liability ¹												
At end of accident year	1,132.5	250.3	280.0	274.8	276.0	298.5	580.1	429.7	332.4	432.1	777.6	
One year later	1,087.9	350.4	259.8	226.7	214.6	310.7	547.1	462.0	328.7	392.6		
Two years later	1,275.7	338.8	224.0	206.0	196.2	274.4	511.3	431.1	294.8			
Three years later	1,258.8	326.9	224.4	196.5	189.6	235.0	493.1	413.1				
Four years later	1,261.0	313.3	222.1	193.4	184.1	232.3	473.1					
Five years later	1,266.2	308.7	218.4	192.4	182.6	223.5						
Six years later	1,265.5	299.5	213.7	190.1	181.5							
Seven years later	1,227.9	292.8	215.7	187.8								
Eight years later	1,226.1	293.4	218.3									
Nine years later	1,226.2	284.8										
Ten years later	1,228.7											
Current estimate of cumulative liability	1,228.7	284.8	218.3	187.8	181.5	223.5	473.1	413.1	294.8	392.6	777.6	4,675.8
Paid	(1,178.2)	(272.9)	(207.5)	(178.1)	(166.8)	(214.7)	(406.8)	(313.3)	(161.5)	(165.3)	(119.6)	(3,384.7)
Total Group gross liability	50.5	11.9	10.8	9.7	14.7	8.8	66.3	99.8	133.3	227.3	658.0	1,291.1

1. Adjusted for revaluation of foreign currencies at the exchange rate as at 31 December 2021.

Accident year	2011 & prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total \$m
Reinsurance												
Estimate of ultimate recovery ¹												
At end of accident year	124.7	48.9	9.9	17.8	15.3	73.1	177.6	139.3	114.6	93.0	228.4	
One year later	118.6	121.8	8.9	14.1	12.2	98.5	185.0	189.9	115.0	90.4		
Two years later	205.7	122.0	8.8	13.1	12.6	96.7	179.7	181.9	97.1			
Three years later	199.3	121.2	8.0	11.5	13.0	76.5	181.2	172.3				
Four years later	209.6	121.2	8.0	11.9	13.0	73.9	178.6					
Five years later	209.7	121.2	8.0	9.6	13.0	73.7						
Six years later	211.2	120.9	7.4	9.6	13.4							
Seven years later	207.2	120.9	7.2	9.0								
Eight years later	206.9	120.8	7.3									
Nine years later	204.0	120.8										
Ten years later	204.3											
Current estimate of cumulative recovery	204.3	120.8	7.3	9.0	13.4	73.7	178.6	172.3	97.1	90.4	228.4	1,195.3
Paid	(191.5)	(118.2)	(7.2)	(8.8)	(13.0)	(72.7)	(166.7)	(117.5)	(30.4)	(41.7)	(8.8)	(776.5)
Total Group gross recovery	12.8	2.6	0.1	0.2	0.4	1.0	11.9	54.8	66.7	48.7	219.6	418.8

1. Adjusted for revaluation of foreign currencies at the exchange rate as at 31 December 2021.

Accident year	2011 & prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total \$m
Net Group losses												
Estimate of ultimate liability ¹												
At end of accident year	1,007.8	201.4	270.1	257.0	260.7	225.4	402.5	290.4	217.8	339.1	549.2	
One year later	969.3	228.6	250.9	212.6	202.4	212.2	362.1	272.1	213.7	302.2		
Two years later	1,070.0	216.8	215.2	192.9	183.6	177.7	331.6	249.2	197.7			
Three years later	1,059.5	205.7	216.4	185.0	176.6	158.5	311.9	240.8				
Four years later	1,051.4	192.1	214.1	181.5	171.1	158.4	294.5					
Five years later	1,056.5	187.5	210.4	182.8	169.6	149.8						
Six years later	1,054.3	178.6	206.3	180.5	168.1							
Seven years later	1,020.7	171.9	208.5	178.8								
Eight years later	1,019.2	172.6	211.0									
Nine years later	1,022.2	164.0										
Ten years later	1,024.4											
Current estimate of cumulative liability	1,024.4	164.0	211.0	178.8	168.1	149.8	294.5	240.8	197.7	302.2	549.2	3,480.5
Paid	(986.7)	(154.7)	(200.3)	(169.3)	(153.8)	(142.0)	(240.1)	(195.8)	(131.1)	(123.6)	(110.8)	(2,608.2)
Total Group net liability	37.7	9.3	10.7	9.5	14.3	7.8	54.4	45.0	66.6	178.6	438.4	872.3

1. Adjusted for revaluation of foreign currencies at the exchange rate as at 31 December 2021.

The inherent uncertainty in reserving gives rise to favourable or adverse development on the established reserves. The total favourable development on net losses and loss adjustment expenses, excluding the impact of foreign exchange revaluations, was as follows:

For the year ended 31 December	2021 \$m	2020 \$m
2016 accident year and prior	17.7	(0.9)
2017 accident year	18.4	20.7
2018 accident year	7.1	25.3
2019 accident year	8.8	6.9
2020 accident year	34.5	–
Total favourable development	86.5	52.0

The favourable development in 2021 was primarily driven by general IBNR releases on the 2020 accident year across most lines of business due to a lack of reported claims. 2021 also included favourable development on the 2017 accident year, mainly from reserve releases on natural catastrophe loss events within the property and casualty reinsurance segment, as well as some beneficial claims settlements from earlier accident years. The Group's COVID-19 related losses remained stable during 2021.

In the prior year, the Group benefited from general IBNR releases across most lines of business due to a lack of reported claims. There was favourable development on the 2017 catastrophe loss events partially offset by a number of late reported losses from the 2019 accident year, reserve deterioration on a couple of marine claims in the 2017 and 2019 accident years, and adverse development on the 2010 New Zealand earthquake.

In February 2021, Winter Storm Uri was a major winter and ice storm that had widespread impacts across the U.S., Northern Mexico and parts of Canada. In July 2021, the European Floods resulted from a series of storms that occurred in several European countries, resulting in widespread flooding in regions of Germany and other neighbouring countries. These events were followed by hurricane Ida, which made landfall on 29 August 2021, in the U.S. state of Louisiana and continued its path across the U.S. mainland into the north-eastern region, causing significant property and flooding damage. Our net losses in relation to these combined natural catastrophe events, excluding the impacts of reinstatement premiums, were \$213.3 million. Large risk losses for the year amounted to \$68.8 million, and were principally related to the unrest in South Africa in July 2021.

The estimation of the ultimate loss and loss adjustment expense liability is a complex process which incorporates a significant amount of judgement. It is reasonably possible that uncertainties inherent in the reserving process, delays in insureds or ceding companies reporting losses to the Group, together with the potential for unforeseen adverse developments, could lead to a material change in estimated losses and loss adjustment expenses.

There were no other individually significant net loss events for the year ended 31 December 2021 and 2020.

14. INSURANCE, REINSURANCE AND OTHER RECEIVABLES

All receivables are considered current other than \$29.2 million (31 December 2020 – \$22.8 million) of inwards premiums receivable related to multi-year contracts. The carrying value approximates fair value due to the short-term nature of the receivables. There are no significant concentrations of credit risk within the Group's receivables.

15. PROVISION FOR DEFERRED TAX

As at 31 December	2021 \$m	2020 \$m
Equity based compensation	(4.2)	(5.1)
Claims equalisation reserves	–	2.1
Syndicate underwriting profits	(0.7)	(0.5)
Syndicate participation rights	18.8	14.4
Other temporary differences	(1.7)	–
Net deferred tax liability	12.2	10.9

Deferred tax assets are recognised to the extent that realising the related tax benefit through future taxable profits is likely. It is anticipated that sufficient taxable profits will be available within the Group in 2021 and subsequent years to utilise the deferred tax assets recognised when the underlying temporary differences reverse.

For the years ended 31 December 2021 and 2020, the Group had no uncertain tax positions.

Changes to the UK main rate of corporation tax have been enacted under the Finance Act 2021 increasing the tax rate to 25% from 19%, effective 1 April 2023. As at 31 December 2021, this has resulted in the recognition of deferred tax assets and liabilities at 25% on items where the tax reversal is expected to take effect on or after 1 April 2023, with a related tax expense of \$3.4 million.

A deferred tax credit of \$0.9 million (31 December 2020 – \$0.7 million charge) was recognised in accumulated other comprehensive income in relation to the Group's AFS fixed maturity securities.

A deferred tax charge of \$0.5 million (31 December 2020 – \$0.4 million credit) was recognised in other reserves which relates primarily to unexercised equity based compensation awards where the estimated market value is in excess of the cumulative expense at the reporting date.

All deferred tax assets and liabilities are classified as non-current.

16. INVESTMENT IN ASSOCIATE

The Group holds an interest in the preference shares of each segregated account of KHL. KHL is a company incorporated in Bermuda and its operating subsidiary, KRL, is authorised by the BMA as a Special Purpose Insurer. KRL commenced writing insurance business on 1 January 2014. As at 31 December 2021, the carrying value of the Group's investment in KHL was \$118.7 million (31 December 2020 – \$127.2 million). The Group's share of comprehensive (loss) income for KHL for the period was a loss of \$3.9 million (2020 – \$10.7 million gain). Key financial information for KHL is as follows:

	2021 \$m	2020 \$m
Assets	887.6	1,200.3
Liabilities	273.6	178.3
Shareholders' equity	613.9	1,022.0
Gross premium earned	137.3	127.5
Comprehensive (loss) income	(57.9)	83.1

The Group has the power to participate in the operational and financial policy decisions of KHL and KRL through the provision of essential technical information by LCM and has therefore classified its investment in KHL as an investment in associate.

When IFRS 9, Financial Instruments: Classification and Measurement, is implemented, KHL will continue to classify all its financial assets at FVTPL. There will therefore be no impact on the estimated fair value of the assets disclosed in the table above.

Refer to note 23 for details of transactions between the Group and its associate.

17. INTANGIBLE ASSETS

	Syndicate participation rights \$m	Goodwill \$m	Internally generated intangible asset \$m	Total \$m
Net book value as at 31 December 2020 and 2019	83.3	71.2	–	154.5
Additions	0.2	–	3.2	3.4
Net book value as at 31 December 2021	83.5	71.2	3.2	157.9

SYNDICATE PARTICIPATION RIGHTS AND GOODWILL

On 20 October 2021, the Group's corporate member acquired additional syndicate participation rights in Syndicate 2010, which takes the Group's share on the 2022 year of account to 62.3%.

Indefinite life intangible assets are tested annually for impairment. For the purpose of impairment testing, the syndicate participation rights and goodwill have been allocated to the LSL's CGU.

The recoverable amount of the LSL's CGU is determined based on its value in use. Value in use is calculated using projected cash flows of the LSL's CGU. These are approved by management and cover a three-year period. The most significant assumptions used to derive the projected cash flows include an assessment of business prospects, expected future market conditions, premium growth rates, outwards reinsurance expenditure, projected loss ratios, investment returns and current events such as climate change and the ongoing COVID-19 pandemic. A pre-tax discount rate of 8.6% (2020 – 7.4%) has been used to discount the projected cash flows, which reflects a combination of factors including the Group's expected weighted average cost of equity and cost of borrowing. This has been calculated using independent measures of the risk-free rate of return and is indicative of the Group's risk profile relative to the market. The higher pre-tax discount rate is primarily due to an overall increase in the equity market risk premium which is an input into the Group's weighted average cost of capital calculation. The growth rate used to extrapolate the cash flows is 3.0% (2020 – 3.0%) based on historical growth rates and management's best estimate of future growth rates.

Sensitivity testing has been performed to model the impact of reasonably possible changes in input assumptions to our base case impairment analysis and headroom. The discount rate has been flexed to 100 basis points above the central assumption (18% reduction in headroom), the growth rate has been flexed to 100 basis points below the central assumption (16% reduction in headroom) and the pre-tax projected cash flows have been flexed 500 basis points below the central assumption (6% reduction in headroom). Within these ranges, the recoverable amount remains supportable.

No impairment loss has been recognised for the years ending 31 December 2021 and 2020.

INTERNALLY GENERATED INTANGIBLE ASSETS

Internally generated intangible assets represent directly attributable costs incurred in the development phase of implementing a cloud-based target operating model. As at 31 December 2021, the internally generated intangible assets are not yet in use. They are carried at cost less any accumulated impairment losses and are tested annually for impairment at the CGU level.

\$5.5 million of project costs have been expensed and no impairment loss has been recognised for the year ending 31 December 2021.

18. LONG-TERM DEBT AND FINANCING ARRANGEMENTS

LONG-TERM DEBT

During the year ended 31 December 2021, the Company issued \$450.0 million in aggregate principal amount of 5.625% fixed-rate reset junior subordinated notes, repayable on 18 September 2041. The long-term debt was issued in two tranches forming part of the same series of notes, with \$400.0 million issued on 18 March 2021 and \$50.0 million issued on 31 March 2021. Interest is payable semi-annually in arrears on 18 March and 18 September of each year, beginning on 18 September 2021. The fixed interest rate will reset on 18 September 2031, and each reset date thereafter, at a rate per annum equal to the prevailing five year treasury rate plus a credit spread of 4.08% and a 100 basis point step up. The net proceeds from the long-term debt issuance were used to redeem in whole, prior to the respective maturity dates, the Group's outstanding senior and subordinated loan notes, with the balance being used for general corporate purposes.

Long-term debt is recognised initially at fair value, net of transaction costs incurred. Thereafter it is held at amortised cost, with the amortisation calculated using the effective interest rate method. Derecognition occurs when the obligation has been extinguished.

The table below outlines the early redemption dates of the prior years' loan notes and also the carrying value of the junior subordinated notes as at 31 December 2021:

As at 31 December	2021 \$m	2020 \$m
Junior subordinated notes		
\$450.0 million 5.625% fixed-rate reset notes issued March 2021, due September 2041	445.7	–
Senior notes		
\$130.0 million 5.7% unsecured notes due October 2022, redeemed 13 May 2021	–	130.0
Subordinated notes, floating rate		
\$97.0 million loan notes due December 2035, redeemed 15 June 2021	–	97.0
€24.0 million loan notes due June 2035, redeemed 15 June 2021	–	29.5
€12.0 million loan notes due August 2034, redeemed 24 May 2021	–	13.6
\$10.0 million loan notes due September 2034, redeemed 15 June 2021	–	10.0
\$25.0 million loan notes due June 2035, redeemed 15 June 2021	–	23.7
\$25.0 million loan notes due December 2035, redeemed 15 June 2021	–	23.7
Carrying value	445.7	327.5

18. LONG-TERM DEBT AND FINANCING ARRANGEMENTS CONTINUED

The following table outlines the cash and non-cash changes in our long-term debt balances arising from financing activities during the year:

	2021 \$m
As at 31 December 2020	327.5
Fair value, net of transaction costs on issuance of \$450.0 million reset junior subordinated notes	445.4
Early redemption costs on senior and subordinated loan notes	12.8
Amortisation of \$450.0 million reset junior subordinated notes	(0.4)
Redemption of senior and subordinated loan notes	(339.6)
As at 31 December 2021	445.7

The fair value of the long-term debt is \$482.1 million (31 December 2020 – \$374.6 million). The fair value measurement is classified within Level (ii) of the fair value hierarchy. The fair value is based on observable data.

The interest accrued on the long-term debt was \$7.2 million (31 December 2020 – \$2.2 million) at the balance sheet date and is included in other payables. Refer to note 8 for details of the interest expense for the year included in financing costs.

The Company has the option to redeem some or all of the junior subordinated notes, in whole or in part, prior to the maturity date. There are no negative or financial covenants attached to the newly issued junior subordinated notes. As at 31 December 2020, the Group was in compliance with all covenants under its previously issued senior and subordinated loan notes.

LETTERS OF CREDIT

As both LICL and LUK are non-admitted insurers or reinsurers throughout the U.S., the terms of certain contracts require them to provide LOCs to policyholders as collateral.

LHL and LICL have a \$250.0 million syndicated collateralised credit facility with a \$50.0 million loan sub-limit that has been in place since 20 March 2020 and will expire on 20 March 2025. There was no outstanding debt under this facility as at 31 December 2021 and 2020.

The facility is available for the issue of LOCs to ceding companies. The facility is also available for LICL to issue LOCs to LUK to collateralise certain insurance balances.

The following LOCs have been issued:

	2021 \$m	2020 \$m
As at 31 December		
Issued to third parties	27.1	27.6

These LOCs are required to be fully collateralised.

The terms of the \$250.0 million syndicated collateralised credit facility include standard default and cross-default provisions, which require certain covenants to be adhered to. These include the following:

- an A.M. Best financial strength rating of at least B++;
- a maximum debt to capital ratio of 30.0%, where the junior subordinated notes are excluded as debt from this calculation;
- a maximum subordinated unsecured indebtedness of \$350.0 million; and
- a maximum aggregated indebtedness (i) under any syndicate arrangement entered into by Lancashire Syndicates in connection with the underwriting business carried on by all such members of the syndicates and (ii) incurred by CCL 1998, LHL or LICL in the ordinary course of business in connection with coming into line requirements, of \$200.0 million.

On 3 March 2021, LHL and LICL obtained a waiver from their lenders in relation to the limits on debt incurrence under the \$250.0 million syndicated collateralised credit facility, which allowed LHL to issue its \$450.0 million 5.625% fixed-rate reset junior subordinated notes due in 2041.

An uncollateralised facility has been in place since 30 July 2019, for an original amount of \$31.0 million. The facility was most recently increased to \$115.5 million on 29 October 2021 (from \$95.0 million effective 2 November 2020). It is available for utilisation by LICL and guaranteed by LHL for FAL purposes. As at 31 December 2021, \$115.5 million of LOCs were issued under this facility and will expire on 31 December 2025.

The terms of the \$115.5 million uncollateralised facility include standard default and cross-default provisions, which require certain covenants to be adhered to. These include the following:

- an A.M. Best financial strength rating of at least B++;
- a maximum debt to capital ratio of 30.0%, where the junior subordinated notes are excluded as debt from this calculation; and
- maintenance of a minimum net worth requirement.

As at all reporting dates the Group was in compliance with all covenants and waivers under these facilities.

SYNDICATE BANK FACILITIES

As at 31 December 2021 and 2020, Syndicate 2010 had in place a \$60.0 million and an \$80.0 million catastrophe facility, respectively. The facility is available to assist in paying claims and the gross funding of catastrophes for Syndicate 2010. Under the terms of the \$80.0 million catastrophe facility that was in place as at 31 December 2020, while up to \$80.0 million in aggregate was available for utilisation by way of an LoC or an RCF to assist Syndicate 2010's gross funding requirements, only \$40.0 million of this amount was available for utilisation by way of an RCF. With effect from 1 January 2021, the RCF element was removed and the facility now solely operates as an LoC facility, available up to a maximum amount of \$60.0 million. A separate uncommitted overdraft facility of \$20.0 million is available to Syndicate 2010.

There are no balances outstanding under the Syndicate catastrophe facility as at 31 December 2021 or 2020. The Syndicate catastrophe facility is not available to the Group other than through its participation on Syndicate 2010.

TRUSTS AND RESTRICTED BALANCES

The Group has several trust arrangements in place in favour of policyholders and ceding companies in order to comply with the security requirements of certain reinsurance contracts and/or the regulatory requirements of certain jurisdictions.

In 2012, LICL established a MBRT to collateralise its reinsurance liabilities associated with U.S. domiciled clients. As at and for the years ended 31 December 2021 and 2020, LICL had been granted accredited or trustee reinsurer status in all U.S. States. The MBRT is subject to the rules and regulations of the aforementioned States and the respective deeds of trust. These rules and regulations include minimum capital funding requirements, investment guidelines, capital distribution restrictions and regulatory reporting requirements.

As at and for the years ended 31 December 2021 and 2020, the Group was in compliance with all covenants under its trust facilities.

The Group is required to hold a portion of its assets as FAL to support the underwriting capacities of Syndicate 2010 and Syndicate 3010. FAL are restricted in their use and are only drawn down to pay cash calls to syndicates supported by the Group. FAL requirements are formally assessed twice a year and any funds surplus to requirements may be released at that time. See page 155 for more information regarding FAL requirements.

In addition to the FAL, certain cash and investments held by Syndicate 2010 and Syndicate 3010 are only available for paying the syndicates' claims and expenses. See page 155 for more information regarding the capital requirements for Syndicate 2010 and Syndicate 3010.

The following cash and cash equivalent and investment balances were held in trust, other collateral accounts in favour of third parties, or are otherwise restricted:

	2021			2020		
	Cash and cash equivalents \$m	Fixed maturity securities \$m	Total \$m	Cash and cash equivalents \$m	Fixed maturity securities \$m	Total \$m
As at 31 December						
FAL	108.1	227.3	335.4	36.4	299.7	336.1
MBRT accounts	0.3	259.9	260.2	0.8	179.3	180.1
Syndicate accounts	90.9	164.3	255.2	59.5	116.3	175.8
In trust accounts for policyholders	16.2	19.3	35.5	14.7	14.8	29.5
In favour of LOCs	2.1	32.3	34.4	4.9	29.8	34.7
Loan to Lloyd's Central Fund	–	3.9	3.9	–	–	–
In favour of derivative contracts	1.4	1.9	3.3	1.8	–	1.8
Total	219.0	708.9	927.9	118.1	639.9	758.0

19. SHARE CAPITAL AND OTHER RESERVES

Authorised common shares of \$0.50 each		Number	\$m
As at 31 December 2021 and 2020		3,000,000,000	1,500.0
Allocated, called up and fully paid		Number	\$m
As at 31 December 2019		202,941,918	101.5
Shares issued		41,068,089	20.5
As at 31 December 2021 and 2020		244,010,007	122.0

During the year ended 31 December 2021 no new shares were issued by the Group. On 10 June 2020 LHL issued 39,568,089 new common shares, raising a total of \$340.3 million, \$19.8 million of which is included in share capital and \$320.5 million of which is included in contributed surplus, net of offering expenses. A further 1,500,000 new common shares at par value of \$0.7 million were issued during 2020 to fund future RSS exercises. Refer to note 23 for further details on the share issuance.

19. SHARE CAPITAL AND OTHER RESERVES CONTINUED

Own shares	Number held in treasury	\$m	Number held in Trust	\$m	Total number of own shares	\$m
As at 31 December 2019	–	–	1,488,303	13.3	1,488,303	13.3
Shares distributed	–	–	(790,204)	(7.1)	(790,204)	(7.1)
Shares purchased by trust	–	–	1,500,000	15.0	1,500,000	15.0
As at 31 December 2020	–	–	2,198,099	21.2	2,198,099	21.2
Shares distributed	–	–	(1,027,201)	(9.9)	(1,027,201)	(9.9)
Shares repurchased	1,000,000	6.9	–	–	1,000,000	6.9
Shares donated to trust	(1,000,000)	(6.9)	1,000,000	6.8	–	(0.1)
As at 31 December 2021	–	–	2,170,898	18.1	2,170,898	18.1

The number of common shares in issue with voting rights (allocated share capital less shares held in treasury) as at 31 December 2021 was 244,010,007 (31 December 2020 – 244,010,007).

SHARE REPURCHASES

At the AGM held on 28 April 2021, LHL's shareholders approved a renewal of the Repurchase Programme authorising the repurchase of a maximum of 24,401,000 common shares, with such authority to expire on the conclusion of the 2022 AGM or, if earlier, 15 months from the date the resolution approving the Repurchase Programme was passed. During the year ended 31 December 2021, 1,000,000 common shares were repurchased by the Company under its Repurchase Programme, at a weighted average share price of £5.11. As at 31 December 2021, the Company's current Repurchase Programme has 23,401,000 common shares remaining. There were no common shares repurchased during 2020.

DIVIDENDS

The Board of Directors has authorised the following dividends:

Type	Per share amount	Record date	Payment date	\$m
Final	\$0.10	11 May 2020	5 June 2020	20.2
Interim	\$0.05	14 Aug 2020	11 Sep 2020	12.1
Final	\$0.10	7 May 2021	4 June 2021	24.3
Interim	\$0.05	6 Aug 2021	3 Sep 2021	12.1

OTHER RESERVES

The Group's other reserves of \$1,221.6 million (31 December 2020 – \$1,221.6 million) comprises contributed surplus and an equity based compensation reserve. The equity based compensation reserve comprises \$34.3 million (31 December 2020 – \$32.5 million) of this balance and relates to the Group's equity compensation plans (see note 7).

20. LEASES

The Group leases three properties and several items of office equipment.

RIGHT-OF-USE ASSETS

The Group had the following right-of-use assets in relation to leases entered into.

	Property \$m	Equipment \$m	Total \$m
As at 31 December 2019	18.0	0.2	18.2
Additions	0.1	0.2	0.3
Change in lease terms	0.4	–	0.4
Depreciation charge	(2.7)	(0.1)	(2.8)
As at 31 December 2020	15.8	0.3	16.1
Depreciation charge	(2.6)	(0.1)	(2.7)
As at 31 December 2021	13.2	0.2	13.4

LEASE LIABILITIES

As at 31 December	2021 \$m	2020 \$m
Due in less than one year	3.7	3.8
Due between one and five years	11.5	12.6
Due in more than five years	6.1	8.7
Total undiscounted lease liabilities	21.3	25.1
Total discounted lease liabilities	17.9	20.9
Current	2.8	2.8
Non-current	15.1	18.1

The Group does not face a significant liquidity risk with regards to its lease liabilities.

AMOUNTS RECOGNISED IN PROFIT OR LOSS

For the year ended 31 December	2021 \$m	2020 \$m
Depreciation of right-of-use assets	2.7	2.8
Interest expense on lease liabilities	1.1	1.3
Expenses relating to short-term leases, low value leases and variable leases	1.0	0.8
Total	4.8	4.9

For the year ended 31 December 2021, the total lease payments included in the consolidated cash flow statement amounted to \$4.0 million (31 December 2020 – \$3.5 million).

21. COMMITMENTS AND CONTINGENCIES

CREDIT FACILITY FUND

As at 31 December 2021 the Group has a commitment of \$100.0 million (31 December 2020 – \$100.0 million) relating to two credit facility funds (refer to note 12).

PRIVATE INVESTMENT FUNDS

On 28 July 2021, the Group entered into an agreement to invest in a private investment fund, with an initial commitment of \$34.0 million. As at 31 December 2021, there was a remaining undrawn commitment in the amount of \$27.9 million.

On 9 December 2020, the Group entered into an agreement to invest in a private investment fund, with an initial commitment of \$25.0 million. As at 31 December 2021, there was a remaining undrawn commitment in the amount of \$8.1 million.

On 5 November 2019, the Group entered into an agreement to invest in a private investment fund, with an initial commitment of \$25.0 million. As at 31 December 2021, there was a remaining undrawn commitment in the amount of \$1.0 million.

LEGAL PROCEEDINGS AND REGULATIONS

The Group operates in the insurance industry and is subject to legal proceedings in the normal course of business. While it is not practicable to estimate or determine the final results of all pending or threatened legal proceedings, management does not believe that such proceedings (including litigation) will have a material effect on its results and financial position.

22. EARNINGS PER SHARE

The following reflects the profit and share data used in the basic and diluted earnings per share computations:

For the year ended 31 December	2021 \$m	2020 \$m
(Loss) profit for the year attributable to equity shareholders of LHL	(62.2)	4.2

	2021 Number of shares	2020 Number of shares
Basic weighted average number of shares	242,447,761	223,611,114
Dilutive effect of RSS	3,151,016	3,232,649
Diluted weighted average number of shares	245,598,777	226,843,763

(Loss) earnings per share	2021	2020
Basic	(\$0.26)	\$0.02
Diluted ¹	(\$0.26)	\$0.02

1. Diluted EPS excludes dilutive effect of RSS when in a loss making position.

22. EARNINGS PER SHARE CONTINUED

Equity based compensation awards are only treated as dilutive when their conversion to common shares would decrease earnings per share or increase loss per share from continuing operations. Unvested restricted shares without performance criteria are therefore included in the number of potentially dilutive shares. Incremental shares from ordinary restricted share options where relevant performance criteria have not been met are not included in the calculation of dilutive shares.

23. RELATED PARTY DISCLOSURES

The consolidated financial statements include LHL and the entities listed below:

Name	Principal Business	Domicile
Subsidiaries¹		
CCHL	Investment company	United Kingdom
CCL	Holding company	United Kingdom
CCL 1998 ²	Lloyd's corporate member	United Kingdom
CCL 1999	Non trading	United Kingdom
CUL	Non trading	United Kingdom
LAPL ⁶	Non trading	Australia
LCM ³	Insurance agent services	Bermuda
LCMMSL	Support services	United Kingdom
LICL	General insurance business	Bermuda
LIHL	Holding company	United Kingdom
LIMSL	Insurance mediation activities	United Kingdom
LISL	Support services	United Kingdom
LHAPL ⁶	Holding company	Australia
LMSCL	Support services	Canada
LSL	Lloyd's managing agent	United Kingdom
LUAPL ⁶	Lloyd's service company	Australia
LUK	General insurance business	United Kingdom
Associate		
KHL ⁴	Holding company	Bermuda
Other controlled entities		
EBT	Trust	Jersey
LHFT ⁵	Trust	United States

1. Unless otherwise stated, the Group owns 100% of the ordinary share capital and voting rights in its subsidiaries listed.

2. 61.8% participation on the 2021 year of account and 62.3% participation on the 2022 year of account for Syndicate 2010.

3. 93.5% owned by the Group.

4. The Group has an 12.4% holding through its interest in the preference shares of each segregated account of KHL.

5. LHFT was dissolved in August 2021.

6. Entities incorporated in April 2021.

During 2021, the Group redeemed in full its subordinated loan notes held via a trust vehicle - LHFT; refer to note 18. Subsequent to the redemption, LHFT was dissolved during August 2021. LHFT was set up by the Group with the sole purpose of issuing the subordinated loan notes.

The EBT was established to assist in the administration of the Group's employee equity based compensation schemes. While the Group does not have legal ownership of the EBT and the ability of the Group to influence the actions of the EBT is limited by the trust deed, the EBT was set up by the Group with the sole purpose of assisting in the administration of these schemes, and is in essence controlled by the Group, and is therefore consolidated.

The Group has a Loan Facility Agreement (the 'Facility') with RBC Cees Trustee Limited, the trustee of the EBT. The Facility is an interest free revolving credit facility under which the trustee can request advances on demand, within the terms of the Facility, up to a maximum aggregate amount of \$80.0 million. The Facility may only be used by the trustee for the purpose of achieving the objectives of the EBT. During the year ended 31 December 2021, the Group had made advances of \$1.0 million (31 December 2020 – \$1.0 million) to the EBT under the terms of the Facility.

During the year ended 31 December 2021, LHL donated 1,000,000 common shares (repurchased under its Repurchase Programme) to the EBT for a total market value of \$6.8 million at the prevailing rate. LHL did not issue any common shares to the EBT during the year ended 31 December 2021. During the year ended 31 December 2020, LHL issued 1,500,000 common shares to the EBT at a par value of \$0.7 million and a total value of \$15.0 million at the prevailing market rate.

LICL holds \$211.8 million (31 December 2020 – \$212.6 million) of cash and cash equivalents, fixed maturity securities and accrued interest in trust for the benefit of LUK relating to intra-group reinsurance agreements. In addition, LICL is required to provide 100% of the required FAL to support the underwriting activities of Syndicate 2010 and 3010 and in relation to intra-group reinsurance agreements. LICL holds \$335.4 million (31 December 2020 – \$268.2 million) of cash and cash equivalents and fixed maturity securities in FAL with the remaining FAL requirement covered by an LOC facility, (refer to note 18).

As at 31 December 2021, the senior management team shareholding in LCM represents a minority interest of 6.5% (31 December 2020 – 6.5%). This investment represents the non-controlling interest listed in the Group's consolidated balance sheet. During the year ended 31 December 2021 dividends of \$0.5 million (31 December 2020 – \$0.5 million) were paid to minority interest holders.

As at 31 December 2021, Mr Alex Maloney, a Director of LHL, had a 1.2% (31 December 2020 – 1.2%) interest in LCM.

Mr Maloney and his spouse acquired 100.0% of the shares in Nameco on 7 November 2016. Nameco provides capacity to a number of Lloyd's syndicates including Syndicate 2010 which is managed by LSL. Nameco has provided \$0.2 million of capacity to Syndicate 2010 for the 2022 year of account (2021 year of account – \$0.2 million). Mr Maloney receives a proportionate share of the underwriting results of Syndicate 2010 to which he is contractually entitled through his participation.

KEY MANAGEMENT COMPENSATION

Remuneration for key management, the Group's Executive and Non-Executive Directors, was as follows:

For the year ended 31 December	2021 \$m	2020 \$m
Short-term compensation	2.0	5.2
Equity based compensation	1.8	3.0
Directors' fees and expenses	2.4	2.2
Total	6.2	10.4

Elaine Whelan, the Group's former CFO, stood down from the Board on 28 February 2020 and retired from the Group on 31 August 2020. The table above includes her retirement package.

Non-Executive Directors do not receive any benefits in addition to their agreed fees and expenses and do not participate in any of the Group's incentive, performance or pension plans.

TRANSACTIONS WITH ASSOCIATE AND ITS SUBSIDIARY

In 2013, LCM entered into an underwriting services agreement with KRL and KHL to provide various services relating to underwriting, actuarial, premium payments and relevant deductions, acquisition expenses and receipt of claims. For the year ended 31 December 2021, the Group recognised \$15.8 million (2020 – \$11.8 million) of service fees and profit commissions in other income (refer to note 5) in relation to this agreement.

During 2021, the Group committed an additional \$60.8 million (31 December 2020 – \$67.3 million) of capital to KHL. During 2021, KHL returned \$65.4 million (31 December 2020 – \$59.1 million) of capital to the Group.

Refer to note 16 for further details on the Group's investment in associate.

23. RELATED PARTY DISCLOSURES CONTINUED

During 2021 and 2020, the Group entered into reinsurance agreements with KRL. The following balances are included in the Group's consolidated financial statements:

Consolidated balance sheet	2021 \$m	2020 \$m
Unearned premiums on premiums ceded	3.1	3.5
Reinsurance recoveries	25.0	–
Amounts payable to reinsurers	2.8	3.1
Deferred acquisition cost ceded	0.4	0.4

Consolidated statement of comprehensive (loss) income	2021 \$m	2020 \$m
Outwards reinsurance premiums	(13.9)	(7.0)
Change in unearned premiums on premiums ceded	(0.3)	(0.3)
Insurance losses and loss adjustment expenses recoverable	25.0	–
Insurance acquisition expenses ceded	0.9	0.9

24. SUBSEQUENT EVENTS**DIVIDEND**

On 10 February 2022, the Board of Directors declared the payment of an ordinary dividend of \$0.10 per common share, subject to a shareholder vote of approval at the AGM on 27 April 2022, which will result in an aggregate payment of approximately \$24.2 million. On the basis that the final dividend is so approved by the shareholders at the AGM, then the dividend will be paid on 10 June 2022 to shareholders of record on 13 May 2022. An amount equivalent to the dividend accrues on all RSS awards and is paid at the time of exercise, pro-rata according to the number of RSS options that vest.