

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 20-F

☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2021

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 001-31909



ASPEN INSURANCE HOLDINGS LIMITED

(Exact name of registrant as specified in its charter)

Bermuda

(Jurisdiction of incorporation or organization)

141 Front Street, Hamilton, HM19, Bermuda
(Address of principal executive offices)

Mark Cloutier

Executive Chairman and Chief Executive Officer

141 Front Street, Hamilton, HM19, Bermuda Telephone: +1 441-295-8201, Email: mark.cloutier@aspen.co

(Name, Telephone, E-mail and/or Facsimile Number and Address of Company Contact Person)

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	<u>Trading Symbol</u>	<u>Name of Each Exchange on Which Registered</u>
5.95% Fixed-to-Floating Rate Perpetual Non-Cumulative Preference Shares	AHL PRC	New York Stock Exchange
5.625% Perpetual Non-Cumulative Preference Shares	AHL PRD	New York Stock Exchange
Depository Shares, each representing a 1/1000th interest in a share of 5.625% Perpetual Non-Cumulative Preference Shares	AHL PRE	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None.

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None.

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: 60,395,839 ordinary shares.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act: Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act of 1934 during the preceding 12 months (or for such shorter periods that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.:

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ Smaller reporting company ☐ Emerging growth company ☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☒ International Financial Reporting Standards as issued by the International Accounting Standards Board ☐ Other ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

ASPEN INSURANCE HOLDINGS LIMITED
FORM 20-F
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EXPLANATORY NOTE

References in this Annual Report on Form 20-F (this “report”) to the “Company,” the “Aspen Group,” “we,” “us” or “our” refer to Aspen Insurance Holdings Limited (“Aspen Holdings”) or Aspen Holdings and its consolidated subsidiaries, as the context requires. References to “Aspen Holdings” mean only Aspen Insurance Holdings Limited. Our principal operating subsidiaries are: Aspen Insurance U.K. Limited (“Aspen U.K.”), Aspen Bermuda Limited (“Aspen Bermuda”), Aspen Specialty Insurance Company (“Aspen Specialty”), Aspen American Insurance Company (“AAIC”) and Aspen Underwriting Limited (“AUL”) (as corporate member of our Lloyd’s operations, which are managed by Aspen Managing Agency Limited “AMAL”), each referred to herein as “Operating Subsidiary” and collectively referred to as the “Operating Subsidiaries”). References to “Aspen Capital Markets” means business conducted by our subsidiaries that participate in alternative reinsurance markets, including Peregrine Reinsurance Ltd (“Peregrine”), Aspen Cat Fund Limited (“ACF”) and related management entities, including Aspen Capital Advisors Inc. (“Aspen Advisors”) and Aspen Capital Management, Ltd (“ACML”).

References in this report to “U.S. Dollars,” “dollars,” “\$” or “€” are to the lawful currency of the United States of America, references to “British Pounds,” “pounds,” “GBP” or “£” are to the lawful currency of the United Kingdom and references to “euros” or “€” are to the lawful currency adopted by certain member states of the European Union (the “E.U.”), unless the context otherwise requires.

On February 15, 2019, the Company completed its merger with Highlands Merger Sub, Ltd. (“Merger Sub”), a wholly owned subsidiary of Highlands Bermuda Holdco, Ltd. (formerly known as Highlands Holdings, Ltd.) (“Parent”). Merger Sub merged with and into the Company (the “Merger”), with the Company continuing as the surviving company and as a wholly owned subsidiary of Parent. Parent, a Bermuda exempted company, is an affiliate of certain investment funds managed by affiliates of Apollo Global Management, Inc., a leading global investment manager (collectively with its subsidiaries, “Apollo”).

As a result of the Merger, all of the Company’s publicly traded ordinary shares were automatically canceled. The ordinary shares of the Company ceased trading on the New York Stock Exchange (“NYSE”) prior to the opening of trading on February 15, 2019. The Company’s preference shares and depositary shares continue to be listed on the NYSE under the following symbols: AHL PRC, AHL PRD and AHL PRE.

PART I

Item 1. Identity of Directors, Senior Management and Advisors

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

A. Selected Financial Data

The following table sets forth our selected historical financial information for the periods ended and as of the dates indicated. You should read the following selected consolidated financial information in conjunction with other information contained in this report, including the audited consolidated financial statements and related notes in Item 18 and “Operating and Financial Review and Prospects” in Item 5 of this report.

	Twelve Months Ended December 31,		
	2021	2020	2019
	(\$ in millions, except per share amounts)		
Summary Income Statement Data			
Gross written premiums	\$ 3,938.4	\$ 3,698.5	\$ 3,442.4
Net premiums written	2,587.7	2,577.8	2,427.9
Net premiums earned	2,410.5	2,527.5	2,293.3
Loss and loss adjustment expenses	(1,693.3)	(1,840.8)	(1,679.7)
Amortization of deferred policy acquisition costs, general, administrative and corporate expenses	(832.1)	(876.6)	(934.3)
Net investment income	147.5	154.6	197.3
Income (loss) from operations before income tax	35.1	(38.0)	(216.6)
Net income/(loss) after income tax ⁽⁵⁾	29.8	(56.4)	(239.5)
Summary Balance Sheet Data			
Total cash and investments ^(2,4)	\$ 7,831.0	\$ 7,502.6	\$ 7,801.9
Premiums receivable ⁽³⁾⁽⁵⁾	1,408.3	1,283.0	1,317.4
Total assets	13,844.1	13,090.6	12,494.5
Loss and loss adjustment expense reserves	7,611.8	7,165.3	6,951.8
Reserves for gross unearned premiums	2,112.3	1,817.4	1,737.7
Long-term debt	299.9	299.9	299.8
Total shareholders' equity ⁽⁵⁾	2,774.8	2,887.2	2,628.0
Summary Data of Other Financial Data			
Underwriting (loss) ⁽¹⁾	(30.0)	(87.0)	(140.6)
Adjusted underwriting profit/(loss) ⁽¹⁾	28.3	(87.0)	(140.6)
Combined ratio ⁽¹⁾	101.2 %	103.4 %	106.1 %
Adjusted combined ratio ⁽¹⁾	98.8 %	103.4 %	106.1 %

⁽¹⁾ Refer to Item 5, “Reconciliation of Non-U.S. GAAP Financial Measures” for the definitions of these captions.

⁽²⁾ Total cash and investments include cash, cash equivalents, fixed income securities, equities, bank loans, other investments, short-term investments and catastrophe bonds.

⁽³⁾ Premiums receivable including funds withheld.

⁽⁴⁾ Including cash within consolidated variable interest entities of \$75.2 million as at December 31, 2021 (2020 — \$69.9 million; 2019 — \$69.1 million).

⁽⁵⁾ Prior period information for the periods ended December 31, 2020 and December 31, 2019 have been corrected downward relating to underwriting premiums receivable by \$94.8 million and \$86.0 million, respectively, retained earnings by \$28.5 million and \$12.2 million, respectively, and accumulated other comprehensive income by \$81.9 million and \$85.3 million, respectively. Refer to Item 18, Note 26, “Correction of Immaterial Errors” of our consolidated financial statements for additional information.

On February 15, 2019, Parent acquired all of the Company’s ordinary shares. As a result, all of the Company’s previously publicly traded ordinary shares were automatically canceled and ceased trading on the NYSE. Accordingly, per share data is no longer required to be presented by the Company. Refer to Item 18, Note 1, “History and Organization” for additional details of the Merger.

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

You should carefully consider the following risk factors and all other information set forth in this report, including our consolidated financial statements and the notes thereto. Any of the risks described below could materially and adversely affect our business, operating results or financial condition. The risk factors described below could also cause our actual results to differ materially from those in the forward-looking and other statements contained in this report and other documents that we file with the SEC. The risks and uncertainties described below are not the only ones we face. However, these are the risks we believe to be material as of the date of this report. Additional risks not presently known to us or that we currently deem immaterial may also impair our future business, financial condition or operating results.

Introduction

As with any publicly traded company, investing in our preference shares and other securities carries risks. Our risk management strategy is designed to identify, measure, monitor and manage material risks which could adversely affect our financial condition and operating results. We have invested significant resources to develop the appropriate risk management policies and procedures to implement this strategy. Nonetheless, the future business environment is intrinsically uncertain and difficult to forecast and, as a result, our risk management methods may not be successful. For more information on our risk management strategy, refer to Item 4, “Business Overview - Risk Management - Risk Management Strategy.”

Risks Relating to Recent Developments

The coronavirus pandemic and the responses thereto have already adversely affected our business and operations, and the ultimate effects thereof on our business, our operations and our financial condition and results of operations remain highly uncertain and impossible to predict.

The ongoing COVID-19 pandemic, and the actions taken by the governments, businesses and individuals in response to the pandemic have resulted in, and are expected to continue to result in, significant and ongoing economic and societal disruption, including significant market volatility. As new variants of the virus emerge, we are seeing a resurgence of the pandemic in certain key markets, which could adversely impact our operations, financial condition, or liquidity.

Our exposures are controlled and limited by our insurance and reinsurance contracts, which include specific terms and conditions defining if and how our policies respond to losses arising from the COVID-19 pandemic. However, legislative, regulatory or judicial actions and social influences which may seek to extend coverage or payment terms beyond intended contractual obligations or result in an increase in the frequency or severity of claims beyond expected levels. There are ongoing lawsuits and other legal actions challenging the promptness of coverage determinations or the coverage determinations themselves on claims under applicable insurance or reinsurance policies, including, among others, business interruption claims, which could result in increased claims, litigation and related expenses. It is not possible to predict when or how litigation related to the COVID-19 pandemic and coverage disputes will be finally resolved, which further impairs our ability to estimate potential insurance or reinsurance exposure.

We set our reserves based on our best interpretation of the current legal position in applicable jurisdictions, but these legislative, regulatory, judicial actions and social influences continue to make it difficult to predict the total amount of losses we could incur as a result of the pandemic.

In addition, financial market volatility could adversely affect our investment results or access to the capital markets and the continuing economic recovery from the COVID-19 pandemic along with persistent elevated inflation, and a tightening of monetary policy, could result in a stronger increase in interest rates. A higher than planned increase in interest rates reduces the value of fixed income investments, and as a result, reduces held capital on a GAAP basis (undiscounted). While our investment portfolio comprises primarily government and other fixed income securities, and we are not significantly exposed to equity markets, our corporate bond portfolio could be subject to default risk in the event of extended disruption to trade, and our strategic asset allocation includes middle market loans (“MML”), commercial mortgage loans (“CML”) and other mortgage loan arrangements that may be adversely affected by the COVID-19 pandemic.

We also face operational risks as a result of the COVID-19 pandemic. As many of our employees continue to work from home, there is an increased risk that business operations will be disrupted due to, cybersecurity attacks or data security incidents, among other things. In addition, illnesses suffered by key employees could prevent or delay the performance of critical business and financial reporting functions; widespread illnesses suffered by our employees may render us unable to perform normal business functions and operate our business on a day-to-day basis. Further, complying with various vaccine,

masking or testing requirements could impact our workforce and adversely impact our ability to operate our business, which could in turn adversely impact our results of operations or financial performance.

We continue to follow guidelines and governmental mandates regarding COVID-19 protocols and vaccinations. While it is not possible to predict the administrative costs, compliance costs or impacts to our available workforce, we continue to develop, and amend as needed, guidelines, testing processes, and vaccination requirements. In addition, we are monitoring legal actions and pending legislation regarding the mandates for further guidance.

We rely on vendors, including some located overseas, for a number of services. As the COVID-19 pandemic has had a global impact, our vendors could also experience disruptions to their operations and while we have contingency plans for some level of disruption, there can be no assurance that issues with the business operations of our vendors would not have a material effect on our own operations.

Further, we cannot predict at this time how the COVID-19 pandemic will impact demand for our insurance and reinsurance products in the future. While we expect demand for (re)insurance may, as a result of the COVID-19 pandemic, increase in some lines of business, and decrease in others, the future impact of the COVID-19 pandemic on our industry and our business will depend on a range of factors, including the duration of mitigation efforts and public acceptance of vaccines and/or other alternative treatments, the severity of the impact of mitigation efforts on businesses and business activity, the scope and efficacy of governmental stimulus and other relief efforts, the extent to which legislative or regulatory efforts or court cases succeed in shifting some of the burden of the pandemic to insurers (particularly for business interruption) on a retroactive basis, and the severity and duration of, and the speed of recovery from, recessionary impacts. Our disclosures should be read in the context of the evolving COVID-19 pandemic and the related uncertainties, whether or not specific reference is made thereto.

In addition, the COVID-19 pandemic may have the effect of triggering or intensifying many of the risks described elsewhere under this Item 3D. Risk Factors.

Our business may be negatively impacted as a result of the Russian invasion of Ukraine.

The Russian invasion of Ukraine has resulted in the imposition of certain sanctions by U.S., E.U., U.K. and other jurisdictions. We cannot predict the impact of the invasion and any heightened military conflict, economic impact or geopolitical instability that may follow, including heightened operating risks in the E.U., additional sanctions or counter-sanctions, heightened inflation, cyber disruptions or attacks, and higher energy costs. Any of the foregoing could have a material adverse effect on our business, financial condition, and results of operations.

In addition, the Russian invasion of Ukraine may have the effect of triggering or intensifying many of the risks described elsewhere under this Item 3D. Risk Factors.

Risks Related to Our Business

(Re)insurance Risks

Our financial condition and operating results may be adversely affected by the occurrence of natural and man-made disasters.

As part of our insurance and reinsurance operations, we assume substantial exposure to losses resulting from natural disasters, man-made catastrophes and other catastrophe events. Catastrophes can be caused by various unpredictable events, including, but not limited to, tropical storms, cyclones, hurricanes, winter storms, tornadoes, hailstorms, floods, wildfires, drought, pandemic disease, volcanic eruptions, earthquakes and tsunamis. Catastrophes can also be man-made such as acts of war, acts of terrorism and other intentionally destructive acts, including those involving nuclear, biological, chemical or radiological events, cyber-attacks, explosions, infrastructure failures and losses resulting from political instability, government action that is hostile to commercial interests and sovereign, sub-sovereign and corporate defaults.

The incidence, severity and magnitude of catastrophes are inherently unpredictable and our losses from such catastrophes have been and can be substantial. In addition, we expect that increases in the values and concentrations of insured property will increase the severity of such occurrences in the future and that global climate change may increase the frequency and severity of severe weather events, wildfires and flooding. Similarly, changes in global political and economic conditions may increase both the frequency and severity of man-made catastrophe events in the future. Although we attempt to manage our exposure to such events through a multitude of approaches (including geographic diversification, geographic limits, individual policy limits, exclusions or limitations from coverage, purchase of reinsurance and expansion of supportive

collateralized capacity), the availability of these management tools may be dependent on market factors and, to the extent available, may not respond in the way that we expect. In addition, a single catastrophic event could affect multiple geographic zones or the frequency or severity of catastrophic events could exceed our estimates. As a result, the occurrence of one or more catastrophic events or an unusual frequency of smaller events may result in substantial volatility in, and may materially adversely affect, our business, financial condition or operating results.

With regard to cyber-attacks, this is an area where the threat landscape is evolving, and there is a risk that increases in the frequency and severity of cyber-attacks on our policyholders could adversely affect our financial condition and operating results. This risk is also dependent on our policyholders' cybersecurity defenses, and our issuance of policy terms which respond to the evolving threat landscape. In addition, our exposure to cyber-attacks includes exposure to silent cyber risks, meaning risks and potential losses associated with policies where cyber risk is not specifically included nor excluded in the policies. Even in cases where we attempt to exclude losses from cyber-related risks, there can be no assurance that a court or arbitration panel will interpret policy language, or otherwise issue a ruling, favorable to us.

Global climate change may have a material adverse effect on our operating results and financial condition if we do not adequately assess and price for any increased frequency and severity of claims and manage risks.

There is widespread consensus in the scientific community that there is a long-term upward trend in global air and sea temperatures which is likely to increase the severity and frequency of severe weather events over the coming decades. Rising sea levels are also expected to add to the risks associated with coastal flooding in many geographical areas. Large scale climate change could also increase both the frequency and severity of natural catastrophes and our loss costs associated with property damage and business interruption due to storms, floods and other weather-related events. In addition, global climate change could impair our ability to predict the costs associated with future weather events.

In 2020, we established a cross-functional climate change working group (the "Climate Change Working Group") to assess and manage the financial risks associated with climate change. However, despite the creation of the Climate Change Working Group, given the scientific uncertainty of predicting the effect of climate cycles and climate change on the frequency and severity of catastrophes and the lack of adequate predictive tools, we may not be able to adequately model the associated exposures and potential losses in connection with such catastrophes which could have a material adverse effect on our business, financial condition or operating results.

Climate change could also give rise to new environmental liability claims in the energy, manufacturing and other industries we serve as those that have suffered losses seek compensation. In addition, the transition to a less polluting, greener economy could impact the value of our investments in impacted sectors, or demand for insurance in our casualty classes or energy exposed lines.

We could face unanticipated losses from war, terrorism and political unrest, government action that is hostile to commercial interests and from sovereign, sub-sovereign and corporate defaults, and these or other unanticipated losses could have a material adverse effect on our financial condition or operating results.

We have substantial exposure to unexpected, large losses resulting from man-made catastrophic events such as, but not limited to, acts of war, acts of terrorism and losses resulting from political instability, government action that is hostile to commercial interests and sovereign, sub-sovereign and corporate defaults. These risks are inherently unpredictable as it is difficult to predict their occurrence with statistical certainty or to estimate the amount of loss such an occurrence may generate. Events around the globe including, but not limited to, those related to the recent Russian invasion of Ukraine and the ongoing unrest in the Middle East and North Korea have highlighted the unpredictable but increasingly present threat of war, terrorism, and political instability.

Terrorist events could generate greater interest in political violence insurance coverage and greater awareness of the risks multinational corporations face in conflict-prone regions. We closely monitor the amount and types of coverage we provide for terrorism risk under insurance policies and reinsurance treaties. Even in cases where we have deliberately sought to exclude such coverage, there can be no assurance that a court or arbitration panel will interpret policy language or issue a ruling favorable to us. Accordingly, we may not be able to eliminate our exposure to terrorist events and there remains a risk that our reserves will not be adequate to cover such losses should they materialize. Notably, the Terrorism Risk Insurance Program Reauthorization Act of 2019 (the "TRIA Reauthorization") does not provide coverage for reinsurance losses. In addition, we have limited terrorism coverage for exposure to catastrophe losses related to acts of terrorism in the reinsurance that we purchase. Although the TRIA Reauthorization provides benefits in the event of certain acts of terrorism occurring in the United States, those benefits are subject to a deductible and other limitations.

Our credit and political risk insurance line of business protects insureds with interests in foreign jurisdictions in the event governmental action prevents them from exercising their contractual rights and may also protect their assets against physical

damage perils. The insurance provided may include cover for loss arising from expropriation, forced abandonment, license cancellation, trade embargo, contract frustration, non-payment, war on land or political violence (including terrorism, revolution, insurrection and civil unrest).

Our credit and political risk line of business also provides non-payment coverage on specific loan obligations. We insure sovereign non-payment and corporate non-payment as a result of commercial as well as political risk events. The vast majority of the corporate non-payment credit insurance provided is for single-named illiquid risks, primarily in the form of senior bank loans that can be individually analyzed and underwritten. We also aim to avoid terms in our credit insurance contracts which introduce liquidity risk, most notably, in the form of a collateralization requirement upon a ratings downgrade. We also attempt to manage our exposure, by among other things, setting credit limits by country, region, industry and individual counterparty and regularly reviewing our aggregate exposures. However, due to globalization, political instability in one region can spread to other regions. Geopolitical uncertainty regarding a variety of domestic and international matters, such as the U.S. political and regulatory environment, the potential for default by one or more European sovereign debt issuers and the impact of the exit of the United Kingdom from the E.U. ("Brexit") could have a material adverse effect on our results of operations or financial condition.

The effects of emerging claim and coverage issues in our business and social inflation are uncertain.

As industry practices and legislative, regulatory, judicial, social, financial, technological and other environmental conditions change, unexpected and unintended issues related to claims and coverage may emerge. These issues may adversely affect our business by either extending coverage beyond our underwriting intent or by increasing the frequency and severity of claims. In some instances, these changes may not become apparent until after we have issued insurance or reinsurance contracts that are affected by the changes. As a result, the full extent of liability under our insurance or reinsurance contracts may not be known for many years after issuance.

Our results may fluctuate as a result of many factors, including cyclical changes in the reinsurance and insurance industries.

Historically, the performance of the property and casualty reinsurance and insurance industries has tended to fluctuate in cyclical periods of price competition and excess underwriting capacity, followed by periods of high premium rates and shortages of underwriting capacity. Although an individual reinsurance and insurance company's performance is dependent on its own specific business characteristics, the profitability of most property and casualty reinsurance and insurance companies tends to follow this market cycle. Further, this cyclical market pattern can be more pronounced in the reinsurance market in which Aspen Re competes and in the excess and surplus market in which Aspen Insurance primarily competes than in the standard insurance market. In addition, compared with historical cyclical periods, a cycle of increased price competition and excess underwriting capacity may continue for a prolonged period of time as new and existing reinsurance and insurance market participants and products continue to enter the reinsurance and insurance markets. Unfavorable market conditions may affect the ability of our reinsurance and insurance subsidiaries to write business at rates they consider appropriate relative to the risk assumed. If we cannot write business at appropriate rates, our business would be significantly and adversely affected.

When premium rates are high and there is a shortage of capacity in the standard insurance market, growth in the excess and surplus market can be significantly more rapid than growth in the standard insurance market. Similarly, when there is price competition and excess underwriting capacity in the standard insurance market, many customers that were previously driven into the excess and surplus market may return to the standard insurance market, exacerbating the effects of price competition.

Demand for reinsurance is influenced significantly by underwriting and investment results in both the standard insurance and the excess and surplus markets and market conditions. The supply of reinsurance is related to prevailing prices, the levels of insured losses and the levels of reinsurance industry surplus, among other factors. These in turn may fluctuate in response to changes in rates of return on investments being earned in the reinsurance industry. In addition, the supply of reinsurance is affected by a reinsurer's confidence in its ability to accurately assess the probability of expected underwriting outcomes, particularly with respect to catastrophe losses.

Since cyclicity is due in large part to the collective actions of insurers, reinsurers and general economic conditions and the occurrence of unpredictable events, we cannot predict the timing or duration of changes in the market cycle. These cyclical patterns cause our revenues and net earnings to fluctuate, which could have a material adverse effect on our financial condition or operating results

A material proportion of our business relies on the assessment and pricing of individual risks by third parties.

We authorize managing general agents, general agents and other producers to write business on our behalf from time to time within underwriting authorities we prescribe. We rely on the underwriting controls of these agents and producers to write business within the underwriting authorities we provide. Although we monitor our underwriting on an ongoing basis, our monitoring efforts may not be adequate and our agents and producers may exceed their underwriting authorities or otherwise breach obligations owed to us. There is also the risk that we may be held responsible for obligations that arise from the acts or omissions of third parties if they are deemed to have acted on our behalf. In addition, our agents, producers, insureds or other third parties may commit fraud or otherwise breach their obligation to us. To the extent that our agents, producers, insureds or other third parties exceed their authorities, commit fraud or otherwise breach obligations owed to us, our operating results and financial condition may be materially adversely affected.

Our reliance on third-party assessment and pricing of individual risk extends to our reinsurance treaty business. Similar to other reinsurers, we do not separately evaluate each of the individual risks assumed under most reinsurance treaties. We are therefore largely dependent on the original underwriting decisions made by ceding companies. We are subject to the risk that the ceding companies may not have adequately evaluated the risks to be reinsured and that the premiums ceded to us may not adequately compensate us for the risks we assume and the losses we may incur. As a result of this reliance on ceding companies, our operating results and financial condition may be materially adversely affected.

The failure of any risk management and loss limitation methods we employ could have a material adverse effect on our financial condition and operating results.

We employ various risk management and loss limitation methods. We seek to manage our loss exposure by maintaining disciplined underwriting processes designed to guide the pricing, terms and acceptance of risk. These processes, which may include the use of pricing models, are intended to ensure that premiums received are sufficient to cover the expected levels of attritional losses and a contribution to the cost of catastrophes and large losses, where necessary. We also seek to mitigate our loss exposure by writing a number of our insurance and reinsurance contracts on an excess of loss basis, such that we only pay losses that exceed a specified retention. We also seek to limit certain risks, such as catastrophes and political risks, by geographic diversification. Geographic zone limitations involve significant underwriting judgments, including the determination of zone boundaries and the allocation of policy limits to zones. In the case of proportional (also known as pro rata) property reinsurance treaties, we often seek per occurrence limitations or loss and loss expense ratio caps to limit the impact of losses from any one event, although we may not be able to obtain such limits in certain markets. Various provisions in our policies intended to limit our risks, such as limitations or exclusions from certain coverage and choice of forum, may not always be enforceable. Purchasing reinsurance is another loss limitation method we employ which may not always respond in the way intended due to disputes relating to coverage terms, exclusions or counterparty credit risk.

There are inherent limitations in all of these actions and it is possible that an event or series of events could result in loss levels that could have an adverse effect on our financial condition and results of operations. It is also possible that our controls and monitoring efforts may be ineffective, permitting one or more underwriters to exceed their underwriting authority and cause us to (re)insure risks outside the agreed upon guidelines or that losses could manifest themselves in ways that we do not anticipate and that our risk mitigation strategies are not designed to address. Additionally, various provisions in our policies, such as limitations or exclusions from coverage or choice of forum negotiated to limit our risk may not be enforceable in the manner we intend. As a result, one or more natural catastrophes and/or terrorism or other events could result in claims that substantially exceed our expectations, which could have a material adverse effect on our financial condition or operating results.

On January 10, 2022, the Company announced an agreement for a ground-up loss portfolio transfer (“LPT”) with a subsidiary of Enstar Group Limited (“Enstar”). See Item 5, Operating and Financial Review and Prospects, for further details. The LPT represents a repositioning of the adverse development cover previously entered into between the Company and Enstar in March 2020. The nature and structure of the LPT present certain risks to the Company, including claims, marketing and reserving risks, that may have an uncertain impact across multiple operational functions and on our business generally.

The reinsurance that we purchase may not always be available on favorable terms or we may choose to retain a higher proportion of particular risks compared to previous years.

From time to time, market conditions have limited, and in some cases prevented, insurers and reinsurers from obtaining the types and amounts of reinsurance that they consider adequate for their business needs. Accordingly, we may not be able to obtain our desired amount of reinsurance or retrocession protection on terms that are acceptable to us from entities with a satisfactory credit rating or which is collateralized. Even if such capacity is available, we may also choose to retain a higher

proportion of particular risks than in previous years due to pricing, terms and conditions or strategic emphasis. We may also seek alternative means of transferring risk, including expanded participation via our Aspen Capital Markets platform in alternative reinsurance structures. These solutions may not provide commensurate levels of protection compared to traditional retrocession. Our inability to obtain adequate reinsurance or other protection for our own account at favorable prices and on acceptable terms could have a material adverse effect on our business, operating results and financial condition.

Our financial condition and operating results may be adversely affected if actual claims exceed our loss reserves.

Our operating results and financial condition depend on our ability to accurately assess the potential losses associated with the risks that we (re)insure. While we believe that our loss reserves as of December 31, 2021 are adequate, establishing an appropriate level of loss reserves is an inherently uncertain process and requires a considerable amount of judgment. There are many factors that would cause our reserves to increase or decrease, which include, but are not limited to, changes in claim severity, changes in the expected level of reported claims, judicial action changing the scope and/or liability of coverage, changes in the legislative, regulatory, social and economic environment and unexpected changes in loss inflation. In addition, changes in the level of inflation also result in an increased level of uncertainty in our estimation of loss reserves, particularly for those lines of business that are considered “long-tail,” such as casualty, as they require a relatively long period of time to finalize and settle claims for a given accident year. To the extent actual claims exceed our expectations, we will be required to recognize the less favorable experience immediately which could cause a material increase in our provisions for liabilities and a reduction in our profitability, including operating losses and reduction of capital.

We cannot estimate losses from widespread catastrophic events, such as hurricanes and earthquakes, using traditional actuarial methods. The magnitude and complexity of losses associated with certain of these events inherently increase the level of uncertainty and, therefore, the level of management judgment involved in arriving at loss reserve estimates. Similarly, our estimate of ultimate losses related to the COVID-19 pandemic continues to be subject to significant uncertainty. This uncertainty is driven by the inherent difficulty in making assumptions around the impact of the COVID-19 pandemic due to the lack of comparable events, the ongoing nature of the event, and its far-reaching impacts to world-wide economies and the health of the global population. As a result, actual losses for these events may ultimately differ materially from current estimates.

While we believe that our earliest accident years are capable of providing us with meaningful actuarial indications, estimates and judgments for new (re)insurance lines of business are more difficult to make than those made for more mature lines of business because we have more limited historical information through December 31, 2021. A significant portion of our current loss reserves is in respect of incurred but not reported (“IBNR”) reserves. This IBNR reserve is based almost entirely on estimates involving actuarial and statistical projections of our expectations of the ultimate settlement and administration costs. In addition to limited historical information for certain lines of business, we utilize actuarial models as well as historical insurance industry loss development patterns to establish loss reserves. Accordingly, actual claims and claim expenses paid may deviate, perhaps substantially, from our reserve estimates, which could materially adversely affect our financial results.

Only reserves applicable to losses incurred up to the reporting date may be set aside in our financial statements, with no allowance for future losses. Our estimates of reserves for losses and loss expenses also include assumptions about future payments for settlement of claims and claims-handling expenses, such as medical treatment and litigation costs. We write casualty business in the United States, the United Kingdom, Australia and certain other territories where claims inflation has in many years run at higher rates than general inflation. To the extent economic or social inflation causes these costs to increase above reserves established for these claims, we will be required to increase our loss reserves with a corresponding reduction in our net income in the period in which the deficiency is identified, which could materially adversely affect our financial results.

Market and Liquidity Risks

Our investments are subject to interest rate, credit, and real estate related risks, which may adversely affect our net income and may adversely affect the adequacy of our capital.

We invest the net premiums we receive until such time as, we pay out losses and/or until they are made available for distribution to ordinary and preferred shareholders, to pay interest on or redemption of debt and preferred shares, or otherwise used for general corporate purposes. Investment income comprises a substantial portion of our group income. We, subsequently are exposed to significant financial and capital market risks, including changes in interest rates, credit spreads, credit defaults, foreign exchange rates, market volatility impacting the valuation of our investments, the performance of the economy in general, and other factors outside our control. The impact of geopolitical tension, such as a deterioration in the bilateral relationship between the U.S. and China or an escalation in conflict between Russia and Ukraine, including any resulting sanctions, export controls or other restrictive actions that may be imposed by the U.S. and/or other countries against governmental or other entities in, for example, Russia, also could lead to disruption, instability and volatility in the global markets, which may have an impact on our investments across negatively impacted sectors or geographies.

A significant portion of our investments could be influenced by changes in interest rates across a number of geographies. Interest rates are highly sensitive to many factors, including fiscal and monetary policies of major economies, inflation, economic and political conditions and other factors outside our control. Changes in interest rates can negatively affect net investment income in that, in a declining interest rate environment, investments in fixed maturities and short-term investments (fixed maturity portfolio) would earn interest income at lower rates. In a declining interest rate environment, the market value of our fixed income portfolio would increase; however, in a rising interest rate environment, the market value of our fixed income portfolio will decline. Furthermore, depending on our liquidity needs and investment strategy, we may liquidate investments prior to maturity at a loss in order to cover liabilities as they become due or to invest in other investment opportunities that have better expected longer term profitability.

Our fixed maturity portfolio is primarily invested in high quality, investment grade securities, including collateralized loan obligations (“CLOs”). However, we invest a portion of the portfolio in securities that are below investment grade. We also invest a portion of our portfolio in other investments such as unrated private fixed and floating rate investments, and other specialty asset classes. These securities generally pay a higher rate of interest or return and may have a higher degree of credit or default risk. These securities may also be less liquid in times of economic weakness or market disruptions.

In addition, we invest directly and indirectly in private loans and real estate assets, which, as described more fully below, are subject to additional risks.

We may be adversely impacted by inflation.

Our operations, like those of other (re)insurers, are susceptible to the effects of inflation because premiums are established before the ultimate amounts of losses and loss expenses are known. Although we consider the potential effects of inflation when setting premium rates, premiums may not fully offset the effects of inflation and thereby essentially result in underpricing the risks we insure and reinsure. Loss reserves include assumptions about future payments for settlement of claims and claims-handling expenses, such as the value of replacing property, associated labor costs for the property business we write and litigation costs. To the extent inflation causes costs to increase above loss reserves established for claims, we will be required to increase loss reserves with a corresponding reduction in net income in the period in which the deficiency is identified, which may have a material adverse effect on our results of operations or financial condition. Unanticipated higher inflation could also lead to higher interest rates, which would negatively impact the value of our fixed income securities and potentially other investments.

LIBOR has been or will be discontinued as a floating rate benchmark; SOFR is expected to replace U.S. dollar LIBOR as the principal floating rate benchmark for U.S. dollars; the LIBOR discontinuation has affected and will continue to affect financial markets generally and may also affect our business, financial condition, results of operations and cash flows.

LIBOR has been the principal floating rate benchmark in the financial markets. However, as of December 31, 2021, all currencies and tenors of LIBOR, except the principal tenors of U.S. dollar LIBOR, were discontinued or ceased to be representative. The remaining tenors of U.S. dollar LIBOR are expected to be discontinued, or to become non-representative, as of June 30, 2023. For some existing LIBOR-based obligations, including certain of our assets and liabilities, the contractual consequences of the discontinuation of LIBOR are not clear. In addition, there is no assurance that the remaining tenors of U.S. dollar LIBOR will continue to be published until June 30, 2023 or in any particular form, and there is no assurance regarding the consequences of the LIBOR discontinuation generally.

In the United States, there have been efforts to identify alternative reference interest rates for U.S. dollar LIBOR. It is expected that U.S. dollar LIBOR will be replaced principally by rates based on the Secured Overnight Financing Rate

(“SOFR”). For purposes of the following discussion, the term “LIBOR” refers solely to U.S. dollar LIBOR. SOFR has a limited history, having been first published in April 2018. The future performance of SOFR, and SOFR-based reference rates, cannot be predicted based on SOFR’s history or otherwise. Future levels of SOFR may bear little or no relation to historical levels of SOFR, LIBOR or other rates. SOFR has been more volatile than other benchmark or market rates, such as three-month LIBOR, during certain periods. Moreover, SOFR-based rates will differ from LIBOR, and the differences may be material. SOFR is intended to be a broad measure of the cost of borrowing funds overnight in transactions that are collateralized by U.S. Treasury securities. In contrast, LIBOR has been intended to be sensitive to bank credit risk and to short-term interest rate risk. It is expected that more than one SOFR-based rate will be used in the financial markets. Like LIBOR, some SOFR-based rates will be forward-looking term rates; other SOFR-based rates will be intended to resemble rates for term structures through their use of averaging mechanisms applied to rates from overnight transactions, as in the case of “simple average” or “compounded average” SOFR. Different kinds of SOFR-based rates will result in different interest rates. Mismatches between SOFR-based rates, and between SOFR-based rates and other rates, may cause economic inefficiencies, particularly if market participants seek to hedge one kind of SOFR-based rate by entering into hedge transactions based on another SOFR-based rate or another rate. Non-LIBOR floating rate obligations, including SOFR-based obligations, may have returns and values that fluctuate more than those of floating rate obligations that are based on LIBOR or other rates. Also, because SOFR and some alternative floating rates are relatively new market indexes, markets for certain non-LIBOR obligations may never develop or may not be liquid. Market terms for non-LIBOR floating rate obligations, such as the spread over the index reflected in interest rate provisions, may evolve over time, and prices of non-LIBOR floating rate obligations may be different depending on when they are issued and changing views about correct spread levels. Resulting changes in the financial markets may adversely affect financial markets generally and may also adversely affect our business, financial condition, results of operations and cash flows specifically.

As of December 31, 2021, certain of our assets, liabilities and securities had LIBOR-based rates. We are taking, or expect to take, steps intended to result in LIBOR being replaced, in connection with such assets, liabilities and securities, with SOFR-based rates or other appropriate floating rates. However, there can be no assurance regarding how LIBOR will be replaced or, when it is replaced, whether the replacement will have an adverse effect on our business, financial condition, results of operations and cash flows, material or otherwise.

Our investments in private, secured CMLs and private, secured MMLs are subject to credit risk, market risk, servicing risk, loss from catastrophic events and other risks, which could diminish the value that we obtain from such investments.

As of December 31, 2021, a small portion of our total invested assets were invested in private, secured CMLs and in private, secured MMLs. Defaults by borrowers in the payment or performance of their obligations underlying these assets could reduce our investment income and realized investment gains or result in the recognition of investment losses. For example, the value of our real estate-related assets depends in part on the financial condition of the borrowers, the value of the real properties underlying the mortgages and, for commercial properties, the financial condition of the tenants of the properties underlying those mortgages, as well as general and specific economic trends affecting the overall default rate. An unexpectedly high rate of default on commercial mortgages and/or middle market loans may limit substantially the ability of the issuer of such securities to make payments to the loan holders, reducing the value of those securities.

The CML and MML portfolios that we hold, face both default and delinquency risk. An increase in the delinquency or default rate of our CML/MML portfolios or geographic or sector concentration within our CML/MML portfolios could materially and adversely impact our financial condition and results of operations. Any failure to manage these risks effectively could materially and adversely affect our financial condition and results of operations. In general, any significant weakness in the broader macro economy or significant problems in a particular real estate market or corporate market may cause a decline in the value of the real estate market and corporate assets securing the loans in that market, thereby increasing the risk of delinquency, default and foreclosure. This could, in turn, have a material adverse effect on our credit loss experience.

For more information on our CML and MML investments, which we also refer to as “privately-held investments,” refer to Item 18, Note 4 of our consolidated financial statements, “Investments.”

A portion of our invested assets are relatively illiquid and we may fail to realize profits from these assets for a considerable period of time, or lose some or all of the principal amount we invest in these assets if we are required to sell our invested assets at a loss to meet our insurance, reinsurance or other obligations.

We seek to configure our investment portfolio to provide and maintain sufficient liquidity to support our insurance, reinsurance and other obligations. However, in order to provide necessary long-term returns and to achieve our strategic goals, at times a portion of our assets may be relatively illiquid. A portion of our investments are in securities that are not

publicly traded or that otherwise lack liquidity, such as our privately-held fixed maturity and floating rate securities, below investment grade securities, and alternative investments.

We record our relatively illiquid types of investments at fair value. If we were forced to sell some or all of these assets, there can be no assurance that we would be able to sell them for the values at which such assets are recorded and we might consequently sell these assets at significantly lower values to the recorded value. When we hold a security or position, it is vulnerable to price and value fluctuations and may experience losses if we are unable to sell or hedge the position. Thus, it may be impossible or costly for us to liquidate positions rapidly in order to meet unexpected obligations. This potential mismatch between the liquidity of our assets and liabilities could have a material and adverse effect on our business, financial condition, results of operations and cash flows.

We also invest in CLOs and control over the CLOs in which we invest is exercised through collateral managers, who may take actions that could adversely affect our interests, and we may not have the right to direct collateral management. There may also be less information available to us regarding the underlying debt instruments held by CLOs than if we had invested directly in the debt of the underlying companies. Our investments in CLOs are also subject to liquidity risk as there is a less liquid market for CLOs. Accordingly, we may suffer unrealized depreciation and could incur realized losses in connection with the sale of our CLO investments.

Volatility and uncertainty in general economic conditions and in financial and mortgage markets could adversely impact our business prospects, operating results, financial position and liquidity.

In recent months due to inflation, the emergence of new COVID-19 variants, and the recent Russian invasion of Ukraine, global financial markets have been characterized by volatility and uncertainty. Unfavorable economic conditions could increase our funding costs, limit our access to the capital markets or make credit harder to obtain. Uncertainties in the financial and mortgage markets may also affect our counterparties which could adversely affect their ability to meet their obligations to us.

Deterioration or volatility in the financial markets or general economic and political conditions could result in a prolonged economic downturn or trigger another recession and our operating results, financial position and liquidity could be materially and adversely affected. Further, unfavorable economic conditions could have a material adverse effect on certain of the lines of business we write, including, but not limited to, credit and political risks, professional liability and surety risks.

We provide credit reinsurance to mortgage guaranty insurers and commercial credit insurers. We are exposed to the risk that losses from mortgage insurance materially exceed the net premiums that are received to cover such risks, which may, subject to liability caps, result in operating and economic losses to us. Mortgage insurance underwriting losses that have the potential to exceed our risk appetite are associated with the systemic impacts of severe mortgage defaults, driven by large scale economic downturns and high unemployment.

The determination of the amount of allowances and impairments taken on our investments is highly subjective and could materially impact our operating results or financial position.

We perform a detailed analysis each reporting period end to assess declines in the fair values of available for sale debt securities in accordance with applicable accounting guidance regarding the recognition and presentation of current expected losses. The process of determining an allowance for available for sale securities requires judgment and involves analyzing many factors. For additional information regarding this process, and the changes to the applicable accounting policies, refer to Item 18, Note 2(c) of our consolidated financial statements, "Basis of Preparation and Significant Accounting Policies —Accounting for Investments, Cash and Cash Equivalents", and Item 18, Note 2(c) of our consolidated financial statements, "Basis of Preparation and Significant Accounting Policies —Accounting Pronouncements." Assessing the accuracy of the allowances reflected, in our financial statements is inherently uncertain given the subjective nature of the process. Furthermore, additional impairments may need to be taken or allowances provided in the future with respect to events that may impact specific investments. While our current allowance is not material, the current allowance may not be indicative of future impairments or allowances. Thus, future material impairments themselves or any error in accurately accounting for them may have a material adverse effect on our financial condition or results of operations.

Our financial condition or operating results may be adversely affected by currency fluctuations that we may not be effective at mitigating.

Our reporting currency is the U.S. dollar. However, a significant portion of our operations is conducted outside the United States in a variety of foreign (non-U.S.) currencies. Accordingly, we are subject to legal, economic and market risks

associated with devaluations and fluctuations in currency exchange rates. Our assets and liabilities denominated in foreign currencies are therefore exposed to changes in currency exchange rates, which may be material. The principal currencies creating foreign exchange risk are the British Pound, the Euro, the Swiss Franc, the Australian Dollar, the Canadian Dollar and the Singapore Dollar. At December 31, 2021, approximately 14.7% of gross written premiums were denominated in non-U.S. currencies. We employ various strategies, including the use of foreign exchange forward contracts and other derivative financial instruments, to manage our exposure to foreign currency exchange risk. To the extent that these exposures are not fully offset or hedged, or the hedges are ineffective at mitigating adverse effects, our financial results and condition may be negatively impacted by fluctuations in foreign currency exchange rates.

Credit Risks

Our operating results may be adversely affected by the failure of policyholders, brokers or other intermediaries or reinsurers to honor their payment obligations.

In accordance with industry practice, we generally pay amounts owed on claims under our insurance and reinsurance contracts to brokers and these brokers, in turn, pay these amounts to the policyholders that purchased insurance and reinsurance from us. In some jurisdictions where we write a significant amount of business, if a broker fails to make such a payment it is highly likely that we will be liable to the policyholder for the deficiency because of local laws or contractual obligations. Likewise, when the policyholder pays premiums for policies to brokers for payment to us, these premiums are generally considered to have been paid and, in most cases, the policyholder will no longer be liable to us for those amounts whether or not we have actually received the premiums. Consequently, we assume a degree of credit risk associated with brokers with respect to most of our (re)insurance business.

In addition, bankruptcy, liquidity problems, distressed financial conditions or the general effects of economic recession may increase the risk that policyholders may not pay a part of, or the full amount of, premiums owed to us despite an obligation to do so. The terms of our contracts or local law may not permit us to cancel our insurance even if we have not received payment. If non-payment becomes widespread, whether as a result of bankruptcy, lack of liquidity, adverse economic conditions, operational failure, delay due to litigation, bad faith and fraud or other events, it could have a material adverse impact on our business and operating results.

We purchase reinsurance for our own account in order to mitigate the effect of certain large and multiple losses upon our financial condition. Our reinsurers or capital market counterparts are dependent on their ratings in order to continue to write business and some have suffered downgrades in ratings in the past as a result of their exposures. Our reinsurers or capital market counterparts may also be affected by adverse developments in the financial markets, which could adversely affect their ability to meet their obligations to us. Insolvency of these counterparties, their inability to continue to write business or reluctance to make timely payments under the terms of their agreements with us could have a material adverse effect on us because we remain liable to our insureds or cedants in respect of the reinsured risks.

During periods of economic uncertainty, such as the current environment, our consolidated credit risk to these parties may materially increase.

Strategic Risks

Our business may be adversely affected if third-party outsourced service providers fail to satisfactorily perform certain technology and business process functions.

We outsource certain technology and business process functions to third parties including offshore and cloud service providers and may increasingly do so in the future. If we do not effectively develop, implement and monitor our outsourcing strategy, third-party providers do not perform as anticipated or we experience technological or other problems with a transition, we may not realize productivity improvements or cost efficiencies and may experience operational difficulties, increased costs and loss of business. Our outsourcing of certain technology and business processes and functions to third parties may expose us to enhanced risks related to data security, which could result in monetary and reputational damages. In addition, our ability to receive services from third-party providers may be impacted by cultural differences, political instability, unanticipated regulatory requirements or policies. As a result, our ability to conduct our business may be adversely affected.

Competition and consolidation in the (re)insurance industry could reduce our growth and profitability.

Insurance and reinsurance markets are highly competitive. We compete on an international and regional basis with major U.S., Bermuda, European and other international (re)insurers and underwriting syndicates, including Lloyd's, some of which

have greater financial, marketing and management resources than we do. We also compete with new companies that continue to be formed to enter the (re)insurance markets. In addition, capital market participants have created alternative products that are intended to compete with reinsurance products. Until recently, new and alternative capital inflows in the (re)insurance market and the retention by cedants of more business had caused an excess supply of (re)insurance capital and may again in the future. We have sought to address this risk by developing our own capital markets capability.

There has also been a large volume of merger and acquisition activity in the (re)insurance sector in recent years which may continue and we may experience increased competition as a result of that consolidation with consolidated entities having enhanced market power. As the (re)insurance industry consolidates, competition for customers will become more intense and the importance of acquiring and properly servicing each customer will become greater.

Increased competition could result in fewer submissions, lower premium rates, less favorable policy terms and conditions and greater expenses relating to customer acquisition and retention, which could have a material adverse impact on our operating results or financial condition.

Our Operating Subsidiaries are rated and our Lloyd's business benefits from a rating by one or more of A.M. Best and S&P and a decline in any of these ratings could adversely affect our standing among brokers and customers and cause our premiums and earnings to decrease.

Ratings have become an increasingly important factor in establishing the competitive position of insurance and reinsurance companies. Rating agencies represent independent opinions of the financial strength of insurers and reinsurers and their ability to meet policyholder obligations. The ratings of our Operating Subsidiaries are subject to periodic review by, and may be placed on credit watch, revised downward or revoked at the sole discretion of, A.M. Best or S&P. Refer to Item 4, "Business Overview - Ratings." These ratings are intended to measure a company's ability to repay its obligations and are based upon criteria established by the rating agencies. Ratings may be solicited or unsolicited.

The rating agencies with whom we maintain an interactive rating relationship for the purposes of the solicited ratings, currently A.M. Best and S&P, continuously evaluate us to confirm that we continue to meet the criteria of the rating assigned to us. Our ratings may be revised downward or revoked at the sole discretion of the rating agencies. The financial strength ratings assigned by rating agencies to insurance or reinsurance companies are based upon factors relevant to cedants, which include factors not entirely within our control, including factors impacting the financial services, insurance and reinsurance industries generally. Financial strength ratings by rating agencies are not ratings of securities or recommendations to buy, hold or sell any security.

If our Operating Subsidiaries' or if Lloyd's ratings are reduced from their current levels by either A.M. Best or S&P, our competitive position in the (re)insurance industry might suffer and it may be more difficult for us to market our products, expand our (re)insurance portfolio and renew our existing (re)insurance policies and agreements. A rating downgrade may also require us to establish trusts or post letters of credit for ceding company clients and could trigger provisions allowing some clients to terminate their (re)insurance contracts with us. Some contracts also provide for the return of premium to the ceding client in the event of a rating downgrade. It is increasingly common for our reinsurance contracts to contain such terms. Whether a cedant would exercise any of these rights could depend on various factors, such as the reason for and the extent of such downgrade, the prevailing market conditions and the pricing and availability of replacement reinsurance coverage. A downgrade could result in a substantial loss of business as ceding companies and brokers that place such business move to other reinsurers with higher ratings and therefore such downgrade may materially and adversely impact our business, operating results, liquidity and financial flexibility.

In addition, a downgrade of the financial strength rating of Aspen U.K., Aspen Bermuda, AAIC or Aspen Specialty by A.M. Best below "B++" would constitute an event of default under our revolving credit facility. Additionally, the cost and availability of unsecured financing are generally dependent on the borrower's long-term and short-term debt ratings. A lower rating may lead to higher borrowing costs, thereby adversely impacting our liquidity and financial flexibility and by extension our business, financial condition and results of operations.

There can be no assurance that we and our subsidiaries will not experience downgrades, which may result in an adverse effect on our business, financial condition and operating results.

As noted above, ratings with respect to claims paying ability and financial strength have become increasingly important factors in establishing the competitive position of insurance and reinsurance companies and will also impact the cost and availability of capital to an insurance company. Our existing ratings by A.M. Best and S&P represent an important consideration in maintaining customer confidence in us and in our ability to market insurance products. Rating organizations regularly analyze the financial performance and condition of insurers.

The S&P financial strength and issuer credit ratings of Aspen Bermuda, AAIC and Aspen U.K. are “A-” (Strong), while the long-term issuer credit rating of Aspen Holdings is “BBB”. The outlook assigned to all these ratings is stable. Aspen Specialty, is not currently rated by S&P and has a financial strength rating of “A” (Excellent) by A.M. Best with a stable outlook. On April 30, 2021, A.M. Best affirmed the financial strength rating of “A” (Excellent) for Aspen Bermuda, Aspen U.K. Aspen Specialty and AAIC and upgraded its outlook to stable from negative. Our Lloyd’s operations benefit from the Lloyd’s market financial strength rating of “A” (Excellent) with a stable outlook by A.M. Best and “A+” (Strong) with a stable outlook by S&P.

In addition, as a result of their rating of Highlands Holdings Bond Issuer, Ltd. and Highlands Holdings Bond Co-Issuer, Inc. (the “Issuers”) and the \$500 million aggregate principal amount of their 7.625% / 8.375% Senior Secured PIK Toggle Notes due 2025 (the “Notes”), S&P takes into consideration the Issuers in their view of the wider Aspen Group when evaluating the adequacy of our capital reserves for purposes of determining financial strength and issuer credit ratings accorded to our Operating Subsidiaries. In addition, S&P expects us to maintain capital adequacy above the “AAA” level to maintain our “A-” rating. Should we experience weaker than-expected underwriting performance, should our capital adequacy position decline and remain below the “AAA” level for a prolonged period, should our financial leverage materially increase or liquidity materially decrease, among other factors, we may be required to maintain a greater amount of capital in order to maintain our existing ratings or become subject to a ratings downgrade.

Both A.M. Best and S&P are widely recognized insurance company rating agencies and some policyholders are required to obtain insurance coverage from insurance companies that have an “A-” (Strong) rating or higher. Because A.M. Best and S&P continually monitor companies with regard to their ratings, our ratings could change at any time. Any downgrade in our ratings may impair our ability to sell insurance policies and could materially and adversely affect our competitive position in the insurance industry, future financial condition and operating results. In December 2021, S&P announced proposed changes to its rating methodologies. The proposed changes have not been finalized, so the impact, if any, these changes may have on our ratings is unknown.

Any future acquisitions, growth of our operations through the addition of new lines of (re)insurance business, expansion into new geographic regions and/or joint ventures or partnerships may expose us to risks.

As part of our long-term strategy, we have pursued, and may continue to pursue, growth through acquisitions and/or strategic investments in new businesses or entering into strategic ventures with third parties. The negotiation of these transactions as well as the integration of an acquired business or new personnel could result in a substantial diversion of management resources. Successful integration depends, among other things, on our ability to effectively integrate acquired businesses or new personnel into our existing risk management and financial and operational reporting systems, establish satisfactory budgetary and other financial controls, manage any regulatory issues created by our entry into new markets and geographic locations, retain key personnel and obtain personnel required for expanded operations. The failure to integrate successfully or to manage the challenges presented by the integration process may have an adverse effect on our business, financial condition or results of operations.

There can be no assurance that the integration of acquired businesses or new personnel will be successful, that we will realize anticipated synergies, cost savings and operational efficiencies, or that the business acquired will prove to be profitable or sustainable. The failure to integrate acquired businesses successfully or to manage the challenges presented by the integration process may adversely impact our financial results. Acquisitions could involve numerous additional risks such as potential losses from unanticipated litigation or levels of claims and inability to generate sufficient revenue to offset acquisition costs. In addition, the value of assets acquired may be lower than expected or may diminish due to credit defaults or changes in interest rates or the liabilities assumed may be greater than expected. Our ability to grow through acquisitions will depend, in part, on our success in addressing these risks. Our failure to manage successfully any of the foregoing challenges and risks may adversely impact our results of operations.

We depend on a few brokers for a large portion of our insurance and reinsurance revenues and the loss of business provided by any one of those brokers could adversely affect us.

We market our (re)insurance worldwide primarily through (re)insurance brokers and derive a significant portion of our business from a limited number of brokers. Refer to Item 4, “Business Overview - Business Distribution” below for our principal brokers by segment. Our relationships with our brokers and agents are based on the quality of our underwriting and claim services, as well as our financial strength ratings. Any deterioration in these factors could result in the brokers advising our clients to place their business with other (re)insurers. In addition, these brokers and agents also have, or may in the future acquire, ownership interests in insurance and reinsurance companies that may compete with us and these brokers

may favor their own (re)insurers over other companies. Loss of all or a substantial portion of the business provided by one or more of these brokers could have a material adverse impact on our business and results of operations.

In addition, there has been a trend of increased consolidation of agents and brokers and of agents and brokers reducing the numbers of insurers with which they do business to gain efficiency for their placement efforts. As we distribute most of our products through agents and brokers, consolidation could impact our ability to access business and our relationships with, and fees paid to, agents and brokers. In the Lloyds's market, independent London wholesalers continue to be acquired by larger global brokers, which may result in enhanced market power for these larger brokers in placing (re)insurance. Consolidation of distributors may also increase the likelihood that distributors will try to renegotiate the terms of existing selling agreements to terms less favorable to us. As brokers merge with or acquire each other, any resulting failure or inability of brokers to market our products successfully, or the loss of a substantial portion of the business sourced by one or more of our key brokers, could have a material adverse effect on our business and results of operations.

We are exposed to risks in connection with our management of alternative reinsurance platforms on behalf of investors in any entities Aspen Capital Markets manages or could manage in the future.

Those of our subsidiaries that are engaged in the management of alternative reinsurance platforms as part of our Aspen Capital Markets ("ACM") division may owe certain legal duties and obligations to third-party investors (including reporting obligations) and are subject to a variety of often complex laws and regulations relating to the management of those structures. Although we continually monitor our policies and procedures to ensure compliance, faulty judgments, simple errors or mistakes, or the failure of our personnel to adhere to established policies and procedures could result in our failure to comply with applicable laws or regulations which could result in significant liabilities, penalties or other losses and significantly harm our business and results of operations.

In addition, our third-party investors may decide not to renew their interests in the entities we manage, which could materially impact the financial condition of such entities. Certain of our third-party capital investors provide significant capital investment in respect of the entities we manage. The loss or alteration of this capital support could be detrimental to our financial condition and results of operations. Moreover, we can provide no assurance that we may be able to attract and raise additional third-party capital for our existing managed entities or for potential new managed entities and therefore we may forego existing and/or potential attractive fee income and other income-generating opportunities.

Furthermore, notwithstanding any capital holdback, we may decide to return to our investors all or a portion of the third-party capital held by entities we manage as collateral prior to the maturity specified in the terms of the particular underlying transactional documents. A return of capital to our investors is final. As a result, if we release collateral early and capital is returned to our investors, we may not have sufficient collateral to pay the claims associated with such losses in the event losses are significantly larger than we anticipated.

We may require additional capital in the future, which may not be available or may only be available on unfavorable terms.

Our future capital requirements depend on many factors, including our ability to write new business successfully, deploy capital into more profitable business lines, identify acquisition opportunities, manage investments and preserve capital in volatile markets, and establish premium rates and reserves at levels sufficient to cover losses. To the extent our funds are insufficient to fund future operating requirements or cover claims losses, we may need to raise additional funds through corporate finance transactions or curtail our growth and reduce our liabilities. Any such financing, if available at all, may be on terms that are not favorable to us. Our ability to raise such capital successfully would depend upon the facts and circumstances at the time, including our financial position and operating results, market conditions and applicable regulatory filings and legal issues. If we cannot obtain adequate capital on favorable terms, or obtain it at all, our business, financial condition and operating results could be adversely affected.

Our debt, credit and International Swaps and Derivatives Association ("ISDA") agreements may limit our financial and operational flexibility, which may affect our financial condition, liquidity and ability to conduct our business.

We have incurred indebtedness and may incur additional indebtedness in the future. Additionally, we have entered into credit facilities with various institutions which provide revolving lines of credit to us and our Operating Subsidiaries and issue letters of credit to our clients in the ordinary course of business. We have also entered into ISDA agreements relating to derivative transactions. During 2020, we unwound the remaining \$1,250.0 million of our interest rate swaps which we executed in 2019. Refer to Item 18, Note 8 of our consolidated financial statements, "Derivative Contracts" for information on the interest rate swaps. We may replace these swaps in the future as we remain vigilant to interest rate developments.

The agreements relating to our debt, credit facilities and our ISDA agreements contain covenants that may limit our ability, among other things, to borrow money, make particular types of investments or other restricted payments, sell assets, merge or consolidate. Such agreements also typically contain reporting and disclosure affirmative covenants. Some of these agreements also require us to maintain specified ratings and financial ratios, including a minimum net worth covenant. If we fail to comply with these covenants or meet required financial ratios, the lenders or counterparties under these agreements could declare a default and demand immediate repayment of all amounts owed to them and require collateralization of any current or future obligations of the Company. Additionally, a default under our debt, credit facilities or ISDA agreements could limit our ability to obtain credit or enter into such transactions on favorable terms, or at all. As a result, our business, financial condition and operating results could be adversely affected.

If we are in default under the terms of these agreements, we may also be restricted in our ability to declare or pay any dividends, redeem, purchase or acquire any shares or make a liquidation payment and are at risk of cross-default on other arrangements. In addition, the cost and availability of these arrangements vary and any adverse change in the cost or availability of such arrangements could adversely impact our business, financial condition and operating results.

Regulatory Risks

Political, regulatory, governmental and industry initiatives may have a material adverse effect on our business, financial condition, results of operations, liquidity, cash flows and prospects.

Certain of the laws and regulations to which our Operating Subsidiaries are subject are summarized in Item 4, “Business Overview - Regulatory Matters.” Changes in the laws and regulations relevant to our business may have a material adverse effect on our business, financial condition, results of operations, liquidity, cash flows and prospects. The laws and regulations of the jurisdictions in which our insurance and reinsurance subsidiaries are domiciled require, among other things, maintenance of minimum levels of statutory capital, surplus, and liquidity; various solvency standards; and periodic examinations of subsidiaries’ financial condition. In some jurisdictions, laws and regulations also restrict payments of dividends and reductions of capital. Applicable statutes, regulations, and policies may also restrict the ability of these subsidiaries to write insurance and reinsurance policies, to make certain investments, and to distribute funds.

Some of these authorities regularly consider enhanced or new regulatory requirements intended to prevent future crises or otherwise assure the stability of institutions under their supervision. These authorities may also seek to exercise their supervisory authority in new and more robust ways, and new regulators could become authorized to oversee parts of our business. The purpose of insurance laws and regulations generally is to protect policyholders and ceding insurance companies, not our shareholders or noteholders. Failure to comply with or obtain appropriate authorizations and/or exemptions under any applicable laws and regulations could result in restrictions on our ability to do business or undertake activities that are regulated in one or more of the jurisdictions in which we conduct business and could subject us to fines, other sanctions and reputational injury. In 2020, we identified that APJ Asset Protection Jersey Limited (“APJ Jersey”), our Jersey registered insurance company subsidiary, in connection with an intra-group outsourcing arrangement with Aspen U.K. Syndicate Services Limited (“AUKSSL”) (previously APJ Services Limited), had potentially carried out the regulated activities of effecting and carrying out contracts of insurance as principal in contravention of U.K. law as it did not have the necessary licenses and/or authorizations to undertake these activities in the U.K. We have since stopped writing new business via APJ Jersey, and existing contracts that are in run-off are being handled by an outsourced provider who is authorized to do so. Our regulators and Lloyd’s have been notified and, in February 2022, the FCA and JFSC were provided with a full review of the APJ Jersey operating model and AUKSSL’s U.K. permissions undertaken by a third-party U.K. law firm. The FCA has indicated that it has no further questions in relation to the review and has confirmed that it will not be pursuing APJ Jersey or AUKSSL for retroactive fees, and the JFSC has confirmed that it will be taking no further action regarding the review.

It is not possible to predict all future impacts of political, regulatory, governmental or industry changes but they could affect the way we conduct our business and manage our capital, and may require us to satisfy increased capital requirements or to incur additional expenses, any of which, in turn, could affect our results of operations, financial condition and liquidity.

The foreign and U.S. federal and state laws and regulations that are applicable to our operations are complex and may increase the costs of regulatory compliance or subject our business to the possibility of regulatory actions or proceedings. In addition to insurance and financial industry regulations, our activities are also subject to relevant economic and trade sanctions, money laundering regulations, and anti-corruption laws including the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act 2010, which may increase the costs of regulatory compliance, limit or restrict our ability to do business or engage in certain regulated activities, or subject us to the possibility of regulatory actions, proceedings and fines. We maintain policies and procedures designed to comply with these laws and regulations. As part of our business, we may, from time to time, engage in limited sales and transactions involving certain countries that are targets of economic sanctions,

provided that such sales and transactions are authorized pursuant to applicable economic sanctions laws and regulations. However, we cannot predict the nature, scope or effect of future regulatory requirements, including changes that may affect existing regulatory authorizations, and we cannot predict the manner in which existing laws and regulations might be administered or interpreted. Further, there can be no guarantee that our policies and procedures will be effective in preventing violations, which could adversely affect our reputation, business, financial condition or results of operations. If in the future we are found to be in violation of U.S. sanctions or export control laws, it could result in substantial fines and penalties for us. The insurance industry is also affected by political, judicial, and legal developments that may create new and expanded regulations and theories of liability. The current economic and financial climates present additional uncertainties and risks relating to increased regulation and the potential for increased involvement of the U.S. and other governments in the financial services industry.

In the event or absence of changes in applicable laws and regulations in particular jurisdictions, we may from time to time face challenges, or changes in approach to oversight of our business from insurance or other regulators, including challenges resulting from implementing new or additional processes or procedures that cannot be quickly adapted to address new regulatory requirements. Moreover, we could be, or our employees acting on our behalf, could be found to have violated existing laws, rules or regulations. Our regulators have the ability to make regulatory interventions using their powers, including through investigations, requests for data and analysis, interviews or reviews (including skilled persons reports under section 166 of FSMA), which regulatory intervention may require specific remediation, including via guidance on a confidential basis, in respect of historical practices, changes to our existing practices, public censure, the loss or restriction of regulatory permissions necessary to carry out our business in the same manner as before, and/or additional regulatory capital to be held.

We are involved in periodic meetings with, and reviews by, regulators, pursuant to which they review our business and provide challenges in order to test and validate the supervisory and work plan adopted by their supervisory teams. Through such processes, our regulators may validate and/or challenge, among other things, our strategy, business plans, internal governance, risk and capital management and compliance frameworks. Our regulators have required us, and we are under continuing obligations, to remediate failures, weaknesses and other issues that they have identified, including, but not limited to, with respect to our underwriting performance, reserving risk and capital management, and governance, which, if we are unsuccessful in remediating could result in greater regulatory intrusion, enforcement action and/or the exercise of our regulators' own initiative powers (including imposing restrictions on our underwriting and/or a requirement to maintain additional capital, which would reduce our underwriting capacity). We are currently in the process of implementing initiatives to improve our business, including our underwriting performance, risk and capital management and governance, which, if we are unable to successfully implement could result in greater regulatory intrusion and/or enforcement action or the exercise of our regulators' own initiative powers, which could have a material adverse effect on our business, results of operations and financial condition.

We believe it is likely there will continue to be increased regulation of, and other forms of government participation in, our industry in the future, which could materially adversely affect our business by, among other things: providing reinsurance capacity in markets and to policyholders that we target or requiring our participation in industry pools and guaranty associations; further restricting our operational or capital flexibility; expanding the scope of coverage under existing policies; regulating the terms of our (re)insurance policies; adopting further or changing compliance requirements which may result in additional costs which may adversely impact our results of operation; or disproportionately benefiting the companies domiciled in one country over those domiciled in another.

Changes in regulations that adversely affect the U.S. mortgage insurance and reinsurance market could affect our operations significantly and could reduce the demand for mortgage insurance.

In addition to the general regulatory risks to which we are subject, the reinsurance we write could also be indirectly affected by various additional regulations relating particularly to our U.S. mortgage reinsurance operations. U.S. federal and state regulations affect the scope of operations of mortgage guaranty insurers and commercial credit insurers, to whom we provide credit reinsurance. Legislative and regulatory changes could cause demand for private mortgage insurance to decrease, which could have an adverse impact on our U.S. mortgage reinsurance operations. Increases in the maximum loan amount that the U.S. Federal Housing Administration can insure, and reductions in the mortgage insurance premiums it charges, can reduce the demand for private mortgage insurance. Decreases in the maximum loan amounts government-sponsored enterprises, such as the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) (the "GSEs"), will purchase or guarantee, increases in GSE fees, or decreases in the maximum loan-to-value ratio for loans the GSEs will purchase, can also reduce demand for private mortgage insurance. Changes in these laws or regulations could have an indirect adverse impact on the profitability of our U.S. mortgage reinsurance business.

The United Kingdom's withdrawal from the E.U. and its potential adverse impact on our business, results of operations and financial condition.

The Company faces new regulatory costs and challenges as a result of Brexit. The U.K. left the E.U. as of January 31, 2020 and economic relations between the U.K. and the E.U. are now governed by a Trade and Cooperation Agreement which is limited in scope and contains very few specific provisions relating to insurance and financial services. As a result, Aspen U.K. has lost its financial services passports which provided it the license to operate across borders within the European Economic Area ("EEA") without obtaining local regulatory approval where insurers and cedants are located. The Company's EEA Lloyd's operations are able to continue through Lloyd's Insurance Company, S.A. ("Lloyd's Brussels"), however, operational and capital requirements relating thereto might result in increased costs or Funds at Lloyd's (as defined below in **Lloyd's Regulation**) and might not provide the same access to markets that the Company currently requires to conduct business in the EEA. In addition, the ability to access the E.U. market through our Lloyd's Syndicate depends on Lloyd's being able to comply with E.U. regulations through its Belgium subsidiary. Specifically, Lloyd's is still in discussion with the Belgium Financial Services Markets Authority ("FSMA") and the National Bank of Belgium ("NBB") regarding the Lloyd's Brussels operating model and the activities performed for it by managing agents (through the Outsourcing Agreement) and the question of whether it was possible that they could be construed as constituting insurance distribution under the Insurance Distribution Directive, which would therefore require them to be authorized within the EEA. In January 2021, Lloyd's released a communication stating that its discussions with supervisors had focused on certain risk placement services for open market business which was being performed by managing agents on behalf of Lloyd's Brussels. Lloyd's Brussels is in an ongoing dialogue with the FSMA in its effort to overhaul its initial underwriting structures and is deploying significant efforts and investment to adjust its operating model to satisfy the Belgian authority in the post-Brexit environment. This may have an impact on the way managing agents and syndicates access and operate on the Lloyd's platform. Lloyd's Brussels is seeking to ensure that the claims it pays and complaints it processes preserve the objectives of policyholder protection and market discipline under the Insurance Distribution Directive. According to a statement by Lloyd's Brussels chief executive, Amelie Breitburd, Lloyd's Brussels is now well-positioned with a refreshed operating model to ensure that the needs of E.U. businesses are properly addressed under a new regime that is due to be enforced.

Changes in current accounting practices and future pronouncements may materially impact our reported financial results.

Unanticipated developments in accounting practices may require us to incur considerable additional expenses to comply with such developments, particularly if we are required to prepare information relating to prior periods for comparative purposes or to apply the new requirements retroactively. Such developments may also significantly impact the presentation of such financial statements and may require restatements. The impact of changes in current accounting practices and future pronouncements cannot be predicted but they may affect the calculation of net income, net equity and other relevant financial statement line items.

Other Operational Risks**We could be adversely affected by the loss of one or more of our senior underwriters or other key employees or by an inability to attract and retain senior staff.**

Our success has depended and will continue to depend, in substantial part, on our ability to attract and retain our teams of underwriters in various business lines and other key employees. The loss of one or more of our senior underwriters could adversely impact our business by, for example, making it more difficult to retain clients or other business contacts whose relationship depends in part on the service of the departing personnel. In general, the loss of key services of any members of our current underwriting teams may adversely affect our business and operating results. We may also experience difficulty replacing key employees due to labor shortages presented by the ongoing COVID-19 pandemic.

We also rely substantially upon the services of our senior management team. Although we have employment agreements with all members of our senior management team, if we were to unexpectedly lose the services of one or more of our senior management team or other key personnel, our business or ratings could be adversely affected. For example, an unplanned change in our senior management team could cause a risk of disruption to our business including, but not limited to, our underwriting, claims handling, reserving and financial reporting functions. We do not currently maintain key-man life insurance policies with respect to any of our employees.

With a few exceptions generally under Bermuda law only Bermudians, spouses of Bermudians or Permanent Resident Certificate holders (collectively "Residents") may engage in any gainful occupation in Bermuda without an appropriate governmental work permit. Work permits may be granted or extended by the Bermuda government only upon showing that,

after proper public advertisement (in most cases), no Residents who meet the minimum standard requirements for the advertised position have applied for the position. Work permits are generally granted for one, three or five-year durations. Expatriate workers can, subject to the above, continue to be employed in Bermuda indefinitely by reapplying for work permits. All executive officers who work in our Bermuda office who require work permits have obtained them.

We have recently experienced management turnover, which creates uncertainties and could harm our business.

We rely heavily on our executive officers to manage our operations for the success of our business. Management must have a thorough understanding of our various business lines, as well as the skills and experience necessary to manage our organization. We have experienced significant changes in management in the past twelve months. Often, the appointment of new executives leads to changes in strategic or operating goals, which can create uncertainty and negatively impact our ability to execute quickly and effectively, and may ultimately be unsuccessful. In addition, executive leadership transition periods are often difficult as the new executives gain detailed knowledge of our operations, and friction can result from changes in strategy and management style. Management turnover inherently causes some loss of institutional knowledge, which can negatively affect strategy and execution. If we do not integrate new executives successfully, we may be unable to manage and grow our business, and our financial condition and profitability may suffer as a result. In addition, to the extent we experience additional management turnover, competition for top management is high and it may take months to find a candidate that meets our requirements. If we are unable to attract and retain qualified management personnel, our business could suffer. We are unable to predict with certainty the impact that these recent leadership changes may have on our business operations, prospects, financial results, retention of key professionals and other employees or morale.

We rely on the execution of internal processes to maintain our operations and the operational risks that are inherent to our business, including those resulting from fraud or employee errors or omissions, may result in financial losses.

We rely on the accurate execution of internal processes to maintain our operations. We seek to monitor and control our exposure to risks arising from these processes through a risk control framework encompassing a variety of reporting systems, internal controls, management review processes and other mechanisms. We cannot provide absolute assurance that these processes and procedures will effectively control all known risks or effectively identify unforeseen risks, or that our employees and third-party agents will effectively implement them. Loss may result from, among other things, fraud, errors, failure to document transactions properly, failure to obtain proper internal authorization, failure to comply with underwriting or other internal guidelines or failure to comply with regulatory requirements. Loss from these risks could adversely affect our business, results of operations and financial condition. In addition, insurance policies that we have in place with third parties may not protect us in the event that we experience a significant loss from these risks.

The execution, progression to closing and operational implementation of the LPT offers certain risks that may have an uncertain impact on our business. Certain terms of the LPT, including, but not limited to, the transfer of claims handling responsibility and the outsourcing of certain administrative processes in connection with the subject business, present certain risks and complications to the go-forward operations of the business, including in relation to people, systems and functional processes. See Item 5, Operating and Financial Review and Prospects, for further details in relation to the LPT.

A failure in our data security and/or technology systems or infrastructure or those of third parties, including those caused by security breaches or cyber-attacks could disrupt our business, damage our reputation and cause losses.

Our operations rely on the secure processing, storage, and transmission of confidential and other information and assets, including in our computer systems and networks. Our business, including our ability to adequately price products and services, establish reserves, provide an effective and secure service to our customers, value our investments and report our financial results in a timely and accurate manner, depends significantly on the integrity, availability and timeliness of the data we maintain, as well as the data and assets held through third-party outsourcers, service providers and systems. Cybersecurity and technology threats can include phishing scams, account takeovers, introductions of malware, (including ransomware), attempts at electronic break-ins, and the computerized submission of fraudulent and/or duplicative payment requests. Any such breaches or interference (including attempted breaches or interference) by third parties or by insiders that may occur in the future could have a material adverse impact on our business, reputation, financial condition or results of operations.

In an effort to ensure the integrity of such data, we implement new security measures and systems and improve or upgrade our existing security measures and systems on a continuing basis. Although we have implemented administrative and technical controls and take protective actions to reduce the risk of cyber incidents and to protect our information technology and assets, and we endeavor to modify such procedures as circumstances warrant and negotiate agreements with third-party providers to protect our assets, such measures may be insufficient to prevent, among other things, unauthorized

access, computer viruses, malware or other malicious code or cyber-attack, catastrophic events, system failures and disruptions (including in relation to new security measures and systems), employee errors or malfeasance, third-party (including outsourced service providers) errors or malfeasance, loss of assets and other security events (each, a “Security Event”). Like other global companies, we have from time to time experienced, and are likely to continue to be subject to, Security Events, none of which to date have had a material adverse impact on our business, results of operations or financial condition. As the complexity of our security infrastructure continues to grow, the potential risk of a Security Event increases. If additional Security Events occur, these events may jeopardize our or our policyholders’ or counterparties’ confidential and other information processed and stored with us, and transmitted through our computer systems and networks potentially resulting in a violation of applicable privacy, data protection or other laws, or otherwise cause interruptions, delays, or malfunctions in our, our policyholders’, counterparties’ or third parties’ operations, or result in data loss or loss of assets which could result in significant losses and/or fines, reputational damage or a material adverse effect on our business, financial condition or operating results. We may be required to expend significant additional resources to modify our protective measures or to investigate and remediate vulnerabilities or other exposures and to pursue recovery of lost data or assets and we may be subject to litigation and financial losses. We currently maintain cyber liability insurance that provides third-party or first party liability coverages to protect us, subject to policy limits and coverages, against certain events that could be a Security Event. However, a Security Event could nonetheless have a material adverse effect on our operating results or financial condition.

Despite the contingency plans and facilities we have in place and our efforts to observe the regulatory requirements surrounding information security, our ability to conduct business may be adversely affected by a disruption of the infrastructure that supports our business in the communities in which we are located, or of outsourced services or functions, including a disruption involving electrical, communications, transportation, or other services we use. If a disruption occurs in one location and our employees in that location are unable to occupy our offices and conduct business or communicate with or travel to other locations, our ability to service and interact with policyholders may suffer and we may not be able to successfully implement contingency plans that depend on communication or travel. If sustained or repeated, such business interruption, system failure, service denial or data loss and/or damage could result in a deterioration of our ability to write and process business, provide customer service, pay claims in a timely fashion or perform other necessary business functions.

Evolving privacy and data security regulations could expose our business to reputational harm and cause losses.

Regulatory authorities around the world have implemented or are considering a number of legislative changes or regulations concerning data protection and cybersecurity which have required or may require us to incur additional expenses. We are subject to numerous U.S. federal and state laws and non-U.S. regulations governing the protection of personal and confidential information of our clients or employees, including in relation to medical records and financial information. Existing cybersecurity regulations vary by region or country in which we operate and cover different aspects of business operations.

Our business is subject to the E.U. General Data Protection Regulation (“E.U. GDPR”) which went into effect on May 25, 2018. The U.K. has implemented a similar law: the U.K. GDPR (and together with the E.U. GDPR, the “GDPR”). The GDPR has direct effect where an entity is established in the EEA or the U.K. and has extraterritorial effect where an entity established outside of the EEA or the U.K. processes personal data in relation to the offering of goods or services to individuals in the EEA and/or the U.K. The GDPR imposes a number of obligations on controllers, including, among others: (i) accountability and transparency requirements, which require controllers to demonstrate and record compliance with the GDPR and to provide more detailed information to data subjects regarding processing; (ii) enhanced requirements for obtaining valid consent; (iii) obligations to consider data protection as any new products or services are developed and to limit the amount of personal data processed; (iv) obligations to comply with data protection rights of data subjects including a right of access to and rectification of personal data, a right to obtain restriction of processing or to object to processing of personal data and a right to ask for a copy of personal data to be provided to a third party in a useable format and erasing personal data in certain circumstances; (v) obligations to implement appropriate technical and organizational security measures to safeguard personal data; and (vi) obligations to report certain personal data breaches to the relevant supervisory authority without undue delay (and no later than 72 hours where feasible).

In addition, the E.U. GDPR also prohibits the international transfer of personal data from the EEA/U.K. to countries outside of the EEA/U.K. unless made to a country deemed to have adequate data privacy laws by the European Commission or U.K. Government or a data transfer mechanism has been put in place. In July 2020, the Court of Justice of the European Union (“CJEU”) in its Schrems II ruling invalidated the E.U.-U.S. Privacy Shield framework, a self-certification mechanism that facilitated the lawful transfer of personal data from the EEA/U.K. to the United States, with immediate effect. The CJEU upheld the validity of standard contractual clauses (“SCCs”) as a legal mechanism to transfer personal data but companies relying on SCCs will need to carry out a transfer privacy impact assessment, which among other things, assesses

laws governing access to personal data in the recipient country and considers whether supplementary measures that provide privacy protections additional to those provided under SCCs will need to be implemented to ensure an essentially equivalent level of data protection to that afforded in the EEA. This may have implications for our cross-border data flows and may result in compliance costs.

The GDPR also introduces fines of up to 20 million Euros (under the E.U. GDPR) or 17.5 million GBP (under the U.K. GDPR) or up to 4% of the annual global revenue of the noncompliant company, whichever is greater, for serious violations of certain of the GDPR's requirements. The GDPR identifies a list of points to consider when determining the level of fines to impose (including the nature, gravity and duration of the infringement). Data subjects also have a right to compensation for financial or non-financial losses (e.g., distress). Complying with the GDPR may cause us to incur substantial operational and compliance costs or require us to change our business practices. Despite our efforts to bring practices into compliance with the GDPR, we may not be successful either due to internal or external factors such as resource allocation limitations or a lack of vendor cooperation. Non-compliance could result in proceedings against us by governmental entities, regulators, customers, data subjects, suppliers, vendors or other parties. Further, there is a risk that the measures will not be implemented correctly or that individuals within the business will not be fully compliant with the new procedures. If there are breaches of these measures, we could face significant administrative and monetary sanctions as well as reputational damage which may have a material adverse effect on our operations, financial condition and prospects.

Our internal controls over financial reporting have gaps or other deficiencies.

Operational risk and losses can result from, among other things, fraud, errors, failure to document transactions properly or to obtain proper internal authorization, failure to comply with regulatory requirements, information technology failures and failure to appropriately transition new hires or external events. We continue to enhance our operating procedures and internal controls (including information technology initiatives and controls over financial reporting) to effectively support our business and our regulatory and reporting requirements. Refer to Item 15 "Changes in Internal Controls over Financial Reporting." Our management does not expect that our disclosure controls or our internal controls will prevent all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. As a result of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the company have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons or by collusion of two or more people. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. As a result of the inherent limitations in a cost-effective control system, misstatement due to error or fraud may occur and not be detected.

Our internal control system is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. However, our internal controls over financial reporting have gaps or other deficiencies. During 2021, we identified material weaknesses in internal control over financial reporting, including: deficiencies relating to our foreign-exchange re-evaluation process and translation controls within Aspen U.K. whereby we failed to match foreign-exchange gains and losses against underwriting premium receivables, which failure to match resulted in an overstatement in our financial reporting of our underwriting premium receivables and an understatement of our foreign-exchange losses, together with general foreign exchange revaluation and translation controls within Aspen U.K.; the completeness and accuracy of the information used in recognizing both current and deferred income tax on Aspen U.K.'s branches and the associated application thereof in respect of local tax rules in the various jurisdictions, resulting in an underreporting of tax charge; a control gap in the misapplication of committed par value measurement prices when valuing privately-held investments when we should have instead applied funded par value marks, resulting in the incorrect valuation of a single investment; and insufficient resources with appropriate level of knowledge within the outwards reinsurance operations and accounting team to effectively design and execute our process level controls around reinsurance premiums payable, ceded written premiums as well as our disclosure controls around outwards reinsurance related balances. For details of the remediation measures, refer to Item 15 "Changes in Internal Controls over Financial Reporting."

The implementation of the remediation measures may not fully address the material weaknesses in our internal controls over financial reporting, and therefore we might not be able to conclude that they have been fully remediated in the future. Any such gaps or deficiencies may require significant resources to remediate and may also expose us to litigation, regulatory

fines or penalties, or other losses. Inadequate process design or a failure in operating effectiveness could result in a material misstatement of our financial statements due to, but not limited to, poorly designed systems, changes in end-user computing, poorly designed IT reports, ineffective oversight of outsourced processes, failure to perform relevant management reviews, accounting errors or duplicate payments, any of which could result in a restatement of financial accounts.

We use analytical models to assist our decision making in key areas such as underwriting, claims, reserving, and catastrophe risks but actual results could differ materially from the model outputs and related analyses.

We have made substantial investments to develop proprietary analytic and modeling capabilities to facilitate our underwriting, risk management, capital modeling and allocation, and risk assessments relating to the risks we assume. We also use vendor models where available and, where appropriate, we use our proprietary model in combination with vendor models. These models and other tools help us to manage our risks, understand our capital utilization and risk aggregation, inform management and other stakeholders of capital requirements and seek to improve the risk/return profile or optimize the efficiency of the amount of capital we apply to cover the risks in the individual contracts we sell and in our portfolio as a whole. However, given the inherent uncertainty of modeling techniques and the application of such techniques, the possibility of human or systems error, the challenges inherent in consistent application of complex methodologies in a fluid business environment and other factors, our models, tools and databases may not accurately address the risks we currently cover or the emergence of new matters which might be deemed to impact certain of our coverages.

Furthermore, there are risks associated with catastrophic events, which are either poorly represented or not represented at all by analytical models. Each modeling assumption or un-modeled risk introduces uncertainty into the estimates that management must consider. These uncertainties can include, but are not limited to, the following:

- The models do not address all the possible hazard characteristics of a catastrophe peril (e.g., the precise path and wind speed of a hurricane);
- The models may not accurately reflect the true frequency of events;
- The models may not accurately reflect a risk's vulnerability or susceptibility to damage for a given event characteristic;
- The models may not accurately represent loss potential to reinsurance contract coverage limits, terms and conditions; and
- The models may not accurately reflect the impact on the economy of the area affected or the financial, judicial, political, or regulatory impact on insurance claim payments during or following a catastrophe event.

Accordingly, our models may understate the exposures we are assuming. Conversely, our models may prove too conservative and contribute to factors which may impede our ability to grow in respect of new markets or perils or in connection with our current portfolio of coverages or the loss environment otherwise may prove more benign than our capital loading for catastrophes or other modeled losses. In such case of excess capital, we would make a judgment about redeploying the capital in lines of businesses or pursuing other capital management activities, such as dividends or share repurchases, which judgment will also depend on modeling techniques and results. If capital models prove inadequate, our result of operations and financial condition may be materially adversely impacted.

Risks Related to Our Preference Shares

Our controlling shareholder owns all of our ordinary shares and has the power to determine the affairs of the Company, including in ways not favorable to the interests of holders of the preference shares.

Parent owns 100% of the ordinary shares of the Company. As a result, Parent has power to elect our directors and to determine the outcome of any action requiring shareholder approval. Parent's interests may differ from the interests of the holders of the preference shares and, given Parent's controlling interest in the Company, circumstances may arise under which it may exercise its control in a manner that is not favorable to the interests of the holders of the preference shares.

Our ability to pay dividends or to meet ongoing cash requirements may be constrained by our holding company structure.

Aspen Holdings is a holding company and, as such, we do not expect it to have any significant operations. Its assets primarily consist of ownership of the shares of our subsidiaries, including our Operating Subsidiaries, a portfolio of fixed income securities, and cash and cash equivalents. Dividends and other permitted distributions and loans from our Operating Subsidiaries are expected to be our sole source of funds to meet ongoing cash requirements, including our debt service payments and other expenses, and dividend payments, to our preference shareholders and our Parent, as appropriate. Our Operating Subsidiaries are subject to capital, regulatory and other requirements that inform their ability to declare and pay dividends and make loans to other Aspen Group companies. Refer to Item 4, "Business Overview—Regulatory Matters—

Bermuda Regulation — Restrictions on Dividends, Distributions and Reduction of Capital,” “Business Overview — Regulatory Matters — U.K. and E.U. Regulation — Restrictions on Dividend Payments,” and “Business Overview — Regulatory Matters — U.S. Regulation — State Dividend Limitations” below and “Operating and Financial Review and Prospects — Liquidity and Capital Resources” in Item 5 below for more information on our ability to pay dividends. These and other requirements may mean that our Operating Subsidiaries are unable to pay sufficient dividends to enable us to meet our ongoing cash requirements, which could materially adversely affect our liquidity or financial condition. As we are a holding company, our right, and hence the right of our creditors and shareholders, to participate in any distribution of assets by any of our subsidiaries, upon our liquidation or reorganization or otherwise, is subject to the prior claims of policyholders and creditors of these subsidiaries

Certain regulatory and other constraints may limit our ability to pay dividends on our securities.

We are subject to Bermuda regulatory constraints that affect our ability to pay dividends and make other distributions on our preference shares or other securities. Under the Bermuda Companies Act 1981, as amended (the “Companies Act”), we may declare or pay a dividend or distribution out of contributed surplus only if we have reasonable grounds to believe that we are, and would after the payment be, able to meet our liabilities as they become due or if the realizable value of our assets would thereby not be less than our liabilities. Refer to Item 4, “Business Overview — Regulatory Matters”, Item 5, “Operating and Financial Review and Prospects — Liquidity and Capital Resources” and Item 18, Note 13 of our consolidated financial statements, “Statutory Requirements and Dividends Restrictions” for more information on our ability to pay dividends.

U.S. persons who own our securities may have more difficulty in protecting their interests than U.S. persons who are shareholders of a U.S. corporation.

The Companies Act, which applies to us, differs in some material respects from laws generally applicable to U.S. corporations and their shareholders. These differences include, but are not limited to, the manner in which directors must disclose transactions in which they have an interest, the rights of shareholders to bring class action and derivative lawsuits, the scope of indemnification available to directors and officers and provisions relating to the amalgamations, mergers and acquisitions and takeovers. Holders of our preference shares may therefore have more difficulty protecting their interests than would shareholders of a corporation incorporated in a jurisdiction within the U.S.

Generally, the duties of directors and officers of a Bermuda company are owed to the company only. Shareholders of Bermuda companies typically do not have rights to take action against directors or officers of the company and may only do so in limited circumstances. Class actions and derivative actions are typically not available to shareholders under Bermuda law. The Bermuda courts, however, would ordinarily be expected to permit a shareholder to commence an action in the name of a company to remedy a wrong to the company where the act complained of is alleged to be beyond the corporate power of the company or illegal, or would result in the violation of the company’s memorandum of association or bye-laws. Furthermore, consideration would be given by a Bermuda court to acts that are alleged to constitute a fraud against the minority shareholders or, for instance, where an act requires the approval of a greater percentage of the company’s shareholders than that which actually approved it. When the affairs of a company are being conducted in a manner that is oppressive or prejudicial to the interests of some shareholders, one or more shareholders may apply to the Supreme Court of Bermuda, which may make such order as it sees fit, including an order regulating the conduct of the company’s affairs in the future or ordering the purchase of the shares of any shareholders by other shareholders or by the company. Additionally, under our bye-laws and as permitted by Bermuda law, each shareholder has waived any claim or right of action against our directors or officers for any action taken by directors or officers in the performance of their duties, except for actions involving fraud or dishonesty. In addition, the rights of holders of our securities and the fiduciary responsibilities of our directors under Bermuda law are not as clearly established as under statutes or judicial precedent in U.S. jurisdictions, particularly the State of Delaware.

We are a Bermuda company and it may be difficult to effect service of process on us or enforce judgments against us or our directors and executive officers in the United States.

We are incorporated under the laws of Bermuda and our business is based in Bermuda. In addition, certain of our directors and officers reside outside the United States, and a substantial portion of our assets and the assets of such persons are located in jurisdictions outside the United States. As such, it may be difficult or impossible to effect service of process upon us or those persons in the United States or to recover against us or them on judgments of U.S. courts, including judgments predicated upon civil liability provisions of the U.S. federal securities laws.

We have been advised by Bermuda counsel that there is no treaty in force between the U.S. and Bermuda providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. As a result, whether a U.S. judgment would be enforceable in Bermuda against us or our directors and officers depends on whether the U.S. court that entered the judgment is recognized by the Bermuda court as having jurisdiction over us or our directors and officers, as determined by reference to Bermuda conflict of law rules. A judgment debt from a U.S. court that is final and for a sum certain based on U.S. federal securities laws will not be enforceable in Bermuda unless the judgment debtor had submitted to the jurisdiction of the U.S. court, and the issue of submission and jurisdiction is a matter of Bermuda (not U.S.) law.

In addition to and irrespective of jurisdictional issues, the Bermuda courts will not enforce a U.S. federal securities law that is either penal or contrary to public policy in Bermuda. It is the advice of our Bermuda counsel that an action brought pursuant to a public or penal law, the purpose of which is the enforcement of a sanction, power or right at the instance of the state in its sovereign capacity, will not be entertained by a Bermuda court. Certain remedies available under the laws of U.S. jurisdictions, including certain remedies under U.S. federal securities laws, would not be available under Bermuda law or enforceable in a Bermuda court, as they would be contrary to Bermuda public policy. Further, no claim may be brought in Bermuda against us or our directors and officers in the first instance for violation of U.S. federal securities laws because these laws have no extraterritorial jurisdiction under Bermuda law and do not have force of law in Bermuda. A Bermuda court may, however, impose civil liability on us or our directors and officers if the facts alleged in a complaint constitute or give rise to a cause of action under Bermuda law.

Risks Related to Taxation

Our non-U.S. companies may be subject to U.S. federal income tax on their net income, which may have a material adverse effect on our operating results and your investment.

Aspen Holdings and its non-U.S. subsidiaries (other than AUL and Aspen U.K.) intend to manage their business so that they are not treated as engaged in a trade or business within the United States and thus not subject to U.S. federal income tax on their net income. However, because there is considerable uncertainty as to the activities which constitute being engaged in a trade or business within the United States, we cannot be certain that the U.S. Internal Revenue Service (“IRS”) will not contend successfully that one or more of these companies is engaged in a trade or business in the United States. If any of these companies is considered to be engaged in a trade or business in the United States during a taxable year, it generally will be subject to U.S. federal income tax (including an additional branch profits tax) on its net income that is treated as effectively connected with the conduct of a U.S. trade or business for such year (except to the extent an applicable income tax treaty provides otherwise), in which case its operating results could be materially adversely affected.

Our non-U.K. companies may be subject to U.K. tax, which may have a material adverse effect on our operating results and your investment.

None of us, other than our subsidiaries that are incorporated in the U.K. (the “U.K. Subsidiaries”), should be treated as being resident in the U.K. for corporation tax purposes except for APJ Jersey which, although not incorporated in the U.K., is treated as tax resident in the U.K. Each of us, other than the U.K. Subsidiaries and APJ Jersey, currently intends to manage our affairs so that none of us, other than the U.K. Subsidiaries and APJ Jersey, is resident in the U.K. for tax purposes.

A company that is not resident in the U.K. for corporation tax purposes can nevertheless be subject to U.K. corporation tax if it carries on a trade through a permanent establishment in the U.K. but, in that case, the charge to U.K. corporation tax is limited to profits (both revenue profits and capital gains) attributable directly or indirectly to such permanent establishment.

Each of us, other than the U.K. Subsidiaries and APJ Jersey, currently intends to operate in such a manner that none of us (other than the U.K. Subsidiaries and APJ Jersey) carries on a trade through a permanent establishment in the U.K. Nevertheless, because neither case law nor U.K. statute completely defines the activities that constitute trading in the U.K. through a permanent establishment, Her Majesty’s Revenue and Customs (“HMRC”) might contend successfully that any of us (other than the U.K. Subsidiaries and APJ Jersey) are trading in the U.K. through a permanent establishment.

The U.K. has no income tax treaty with Bermuda. There are circumstances in which companies that are neither resident in the U.K. nor entitled to the protection afforded by a double tax treaty between the U.K. and the jurisdiction in which they are a resident may be exposed to income tax in the U.K. (other than by deduction or withholding) on the profits of a trade carried on there, even if that trade is not carried on through a permanent establishment. However, each of us intends to operate in such a manner that none of us falls within the charge to income tax in the U.K. (other than by deduction or withholding).

If any of us, other than the U.K. Subsidiaries and APJ Jersey, were treated as being resident in the U.K. for U.K. corporation tax purposes, or as carrying on a trade in the U.K., whether or not through a permanent establishment, our operating results could be materially adversely affected.

Our U.K. operations may be affected by recent changes in U.K. and Australian tax law.

The U.K. Subsidiaries and APJ Jersey should be treated as resident in the U.K. and accordingly be subject to U.K. tax in respect of their worldwide income and gains. Any change in the basis or rate of U.K. corporation tax or HMRC's practice and interpretation of U.K. tax law could materially adversely affect the operations of the U.K. resident companies. The U.K. corporation tax rate is currently 19%. The main U.K. corporation tax rate will change from 19% to 25% from April 1, 2023.

In addition, employee and employer national insurance contributions ("NICs"), which are taxes on earnings and are a liability of employees and employers, are set to temporarily increase by 1.25% from April 1, 2022 until April 1, 2023. Employer NICs will, as a result, increase from 13.8% to 15.05%. On April 1, 2023, NICs rates will decrease back to the 2021 to 2022 tax year rates and a new 1.25% Health and Social Care Levy will be payable.

The Organization for Economic Co-operation and Development ("OECD") published its final reports on Base Erosion and Profit Shifting ("BEPS Reports") in October 2015, containing recommendations on measures to coordinate multilateral action on international tax rules.

The implementation of recommendations arising from the action points comprising BEPS has resulted in significant changes to local tax legislation and international double tax treaties over recent years. For example, BEPS has resulted in jurisdictions implementing laws which (among other things): limit deductibility of interest payments; expand the scope of permanent establishments (thereby extending the scope of jurisdictions' taxing rights); counteract hybrid mismatch arrangements and strengthen 'Controlled Foreign Company' rules. Legislation introduced in relation to hybrid mismatches came into effect on January 1, 2017, and legislation to restrict tax deductions for interest expenses of large groups was brought into effect from April 1, 2017.

In addition, domestic law implementation of BEPS has resulted in taxpayers and/or their advisers and intermediaries being required to engage in discussions and disclose information to tax authorities regarding their tax affairs and transactions. Accordingly, Aspen Group may be required to enter into discussions with and provide information to tax authorities which may require the disclosure of transactions and operations of the Aspen Group, in addition to obligations under the related information reporting measures (including E.U. and other mandatory disclosure regimes, such as Council Directive 2014/107/EU of 9 December 2014 and Council Directive 2018/822 EU of 25 May 2018) (commonly known as "DAC 6").

The impact of these changes to U.K. tax law in response to the BEPS Reports is still playing out, and it is expected that further reforms will be made in response to the proposed extensions of BEPS (i.e. BEPS: Pillar One and Two, commonly known as "BEPS 2.0" (referred to in further detail below)), BEPS and BEPS 2.0 (if implemented) may have a material adverse effect on our intra-group arrangements, our operations, and our results.

At the end of the Brexit transition period on December 31, 2020, obligations requiring the U.K. to implement DAC 6 fell away and temporary legislation (effective December 31, 2020) was published, narrowing the scope of the U.K.'s DAC 6 regulations. On November 30, 2021, HMRC published draft regulations (to replace the U.K.'s DAC 6) in line with the OECD's mandatory disclosure rules ("MDR"). The draft regulations (which are expected to take effect in 2022) require taxpayers and intermediaries to disclose information regarding certain types of common reporting standard ("CRS") avoidant arrangements and opaque offshore structures to HMRC. Under the draft regulations, the Company or its advisors or intermediaries may be required to make certain disclosures to HMRC regarding its arrangements and structure. The regulations are currently in draft form and are therefore subject to change.

Legislation restricting the amount of U.K. profit in any particular accounting period that can be offset by historical tax losses was brought into effect from April 1, 2017. Should utilization of any tax losses be delayed or restricted as a result of this legislation, this could have a material adverse effect on our results.

The U.K. diverted profits tax ("DPT") is separate from U.K. corporation tax and is charged at a higher rate of 25%. The rate of DPT will increase from 25% to 31% from April 1, 2023. The DPT is an anti-avoidance measure aimed at protecting the U.K. tax base against the artificial diversion of profits that are being earned by activities carried out in the U.K. but which are not otherwise being taxed in the U.K., in particular as a result of arrangements amongst companies in the same multinational group. The U.K.'s network of double tax treaties does not offer protection from a DPT charge. In the event that the rules apply to certain arrangements, then upfront payment of HMRC's estimate of the deemed tax liability may be

required. If any of our U.K. or non-U.K. companies is liable for DPT as a result of intra-group arrangements, this could have a material adverse effect on our results.

The Australian Government announced a new diverted profits tax which applies to tax years beginning on or after July 1, 2017. The diverted profits tax is set at 40% and is modeled on the U.K.'s DPT. If Aspen U.K.'s Australian branch is deemed liable for Australian DPT as a result of intra-group arrangements, this could have a material adverse effect on our results in future years.

Our U.K. and U.S. operations may be adversely affected by a transfer pricing adjustment in computing U.K. or U.S. taxable profits.

Any arrangements between U.K.-resident entities of the Aspen Group and other members of the Aspen Group are subject to the U.K. transfer pricing regime. Consequently, if any agreement (including any reinsurance agreements) between a U.K.-resident entity of the Aspen Group and any other Aspen Group entity (whether that entity is resident in or outside the U.K.) is found not to be on arm's length terms and as a result a U.K. tax advantage is being or has been obtained, an adjustment will be required to compute U.K. taxable profits as if such an agreement were or had been on arm's length terms. Similar rules apply in the U.S. and would have a similar impact on our U.S. resident entities if transfer pricing adjustments were required. Any transfer pricing adjustment could adversely impact the tax charge suffered by the relevant U.K. or U.S. resident entities of the Aspen Group.

The BEPS Reports included a recommendation that groups should be required to report details of their operations and intra-group transactions in each jurisdiction, known as country by country reporting ("CBCR"). The U.K. has implemented these recommendations with effect from January 1, 2016. It is possible that our approach to transfer pricing may become subject to greater scrutiny from the tax authorities in the jurisdictions in which we operate, which may lead to transfer pricing audits in the future. Any transfer pricing adjustment could adversely impact the tax charge suffered by the relevant entities of the Aspen Group.

Recent and future changes in U.S. federal income tax law or the manner in which it is interpreted could materially adversely affect our results of operations.

The Tax Cuts and Jobs Act of 2017 (the "2017 Act") includes certain provisions intended to eliminate certain perceived tax advantages of companies (including insurance companies) that have legal domiciles outside the United States but have certain U.S. connections, and U.S. persons investing in such companies. For example, the 2017 Act introduced the base erosion and anti-abuse tax (the "BEAT"), which could make affiliate reinsurance between U.S. and non-U.S. members of the Aspen Group economically unfeasible. As discussed in more detail below, the 2017 Act also revised certain rules applicable to passive foreign investment companies ("PFICs") and controlled foreign corporations ("CFCs"). The U.S. Treasury Department and the IRS continue to issue guidance under the 2017 Act, and any such guidance may have an adverse impact on our business, shareholders and results of operations. In addition, it is possible that over time the BEAT, and the 2017 Act generally, may result in increased prices for certain reinsurance or insurance products and services, which could cause a decrease in demand for them. Further, it is possible that other legislation could be introduced and enacted by the current Congress or future Congresses, possibly with retroactive effect, that could have an adverse impact on us or our shareholders. These recent and potential future changes in law could materially adversely affect our business, access to capital, financial condition and results of operations.

U.S. persons who hold 10% or more of the total voting power or value of our shares may be subject to U.S. federal income taxation on our undistributed earnings.

In general, a "10% U.S. Shareholder" (as defined below) of a non-U.S. corporation that is a CFC at any time during a taxable year must include in its gross income for U.S. federal income tax purposes its pro rata share of the CFC's "subpart F income" and "tested income" (with various adjustments) with respect to any shares that such 10% U.S. Shareholder owns in such non-U.S. corporation (directly or indirectly through certain entities) on the last day in the non-U.S. corporation's taxable year on which it is a CFC, even if the subpart F income or tested income is not distributed. A "10% U.S. Shareholder" generally is a U.S. person that owns (directly, indirectly through non-U.S. entities or by attribution by application of the constructive ownership rules of section 958(b) of the U.S. Internal Revenue Code of 1986, as amended (the "Code") (i.e., "constructively")) at least 10% of the total combined voting power or value of all classes of stock of a non-U.S. corporation. "Subpart F income" of a CFC generally includes "foreign personal holding company income" (such as interest, dividends and other types of passive income), as well as insurance and reinsurance income (including underwriting and investment income), and tested income is generally any income of the CFC other than subpart F income and certain other categories of income. An entity treated as a foreign corporation for U.S. federal income tax purposes

generally is considered a CFC if 10% U.S. Shareholders own (directly, indirectly through non-U.S. entities or constructively), in the aggregate, more than 50% of the total combined voting power of all classes of voting stock of that non-U.S. corporation or more than 50% of the total value of all stock of that non-U.S. corporation. However, for the purposes of taking into account insurance income, these 50% thresholds are generally reduced to 25%.

Whether Aspen Holdings is a CFC for a taxable year will depend upon facts regarding our direct and indirect shareholders, about which we have limited information. Accordingly, no assurance can be provided that Aspen Holdings will not be a CFC. Further, regardless of whether Aspen Holdings is a CFC, most or all of our non-U.S. subsidiaries are generally treated as CFCs by reason of certain changes in the constructive ownership rules under the 2017 Act that resulted in our U.S. subsidiaries generally being treated as constructively owning the stock of our non-U.S. subsidiaries. Accordingly, any 10% U.S. Shareholders of Aspen Holdings may be required to include in gross income for U.S. federal income tax purposes for each taxable year their pro rata shares of all or a portion of the subpart F income and tested income generated by our non-U.S. companies (with various adjustments), regardless of whether any distributions are made to them. Any such 10% U.S. Shareholders should consult their own tax advisors regarding the application of these rules to them.

U.S. persons who hold our shares may be subject to U.S. federal income taxation at ordinary income rates on their proportionate share of our related person insurance income.

In general, if a non-U.S. corporation is a “RPII CFC” (as defined below) at any time during a taxable year, a U.S. person who owns (directly or indirectly through certain entities) any shares of the non-U.S. corporation (a “U.S. RPII Shareholder”) must include in its gross income for U.S. federal income tax purposes its pro rata share of the non-U.S. corporation’s related person insurance income (“RPII”) with respect to any shares that such U.S. RPII Shareholder owns (directly or indirectly through certain entities) on the last day in the non-U.S. corporation’s taxable year, even if the RPII is not distributed. Further, a U.S. RPII Shareholder’s pro rata share of any RPII is determined as if all RPII for the taxable year were distributed proportionately only to U.S. RPII Shareholders on that date. In addition, a U.S. RPII Shareholder is required to comply with certain reporting requirements, regardless of the number of shares owned by the U.S. RPII Shareholder.

For these purposes, a “RPII CFC” generally is any non-U.S. corporation if U.S. RPII Shareholders collectively own (directly, indirectly through non-U.S. entities or constructively) 25% or more of the total combined voting power of all classes of stock of such corporation entitled to vote or 25% or more of the total value of the stock of such corporation. However, the RPII rules generally do not apply with respect to a non-U.S. corporation if either (i) at all times during its taxable year less than 20% of the total combined voting power of all classes of stock of the corporation entitled to vote and less than 20% of the total value of the corporation is owned (directly or indirectly) by persons who are (directly or indirectly) insured under any policy of insurance or reinsurance issued by the corporation or who are related persons to any such person (the “ownership exception”), or (ii) the RPII (determined on a gross basis) of the corporation for the taxable year is less than 20% of its gross insurance income for the taxable year (the “de minimis exception”).

We believe that each our non-U.S. Operating Subsidiaries and each of Peregrine and APJ Jersey is a RPII CFC. Nonetheless, we expect that each such company will qualify for one or both of the ownership exception and the de minimis exception in the current taxable year and for the foreseeable future. However, the RPII provisions have never been interpreted by the courts, and regulations interpreting the RPII provisions exist only in proposed form. Certain recently issued proposed regulations would also expand the scope of RPII to potentially include all the insurance income any of our non-U.S. Operating Subsidiaries, Peregrine, or APJ Jersey earn from reinsuring affiliates if it is majority owned (directly, indirectly or by application of certain constructive ownership rules) by U.S. persons. It is not certain whether any of these regulations will be adopted in their proposed form or what changes or clarifications might ultimately be made thereto or whether any such changes, as well as any interpretation or application of the RPII rules by the IRS, the courts, or otherwise, might have retroactive effect. The U.S. Treasury Department has authority to impose, among other things, additional reporting requirements with respect to RPII. Accordingly, the meaning of the RPII provisions and the application thereof to us is uncertain. Further, the applicability of the ownership and de minimis exceptions and the RPII rules more generally depends upon facts regarding our direct and indirect shareholders and insureds, about which we have limited information. Accordingly, no assurances can be provided that any of our companies will satisfy either exception. Moreover, to the extent the exceptions do not apply, we may be unable to correctly determine the amount of RPII that any U.S. RPII Shareholder is required to take into account.

U.S. persons who dispose of our shares may be subject to U.S. federal income taxation at the rates applicable to dividends on a portion of such disposition.

Section 1248 of the Code, in conjunction with the RPII rules, generally provides that if a U.S. person disposes of shares in a RPII CFC (determined without regard to the ownership or de minimis exceptions) that would be taxable as an insurance company under the Code if it were a U.S. corporation, any gain from the disposition will generally be treated as a dividend

to the extent of the holder's share of the corporation's undistributed earnings and profits that were accumulated during the period that the holder owned the shares (whether or not such earnings and profits are attributable to RPII). In addition, such a holder will be required to comply with certain reporting requirements, regardless of the number of shares owned by the holder. These RPII rules should not apply to dispositions of our shares because Aspen Holdings will not itself be directly engaged in the insurance business. However, as discussed above, there is uncertainty in the interpretation of the RPII provisions and thus no assurances can be provided.

U.S. persons who hold our shares may be subject to adverse tax consequences if we are considered to be a PFIC.

If Aspen Holdings is characterized as a PFIC, a U.S. person holding shares of Aspen Holdings generally would be subject to an increased tax liability at the time of the sale at a gain of, or receipt of an "excess distribution" with respect to, their shares. In addition, if Aspen Holdings is considered a PFIC, upon the death of any U.S. individual owning shares, such individual's heirs or estate would not be entitled to a "step-up" in the basis of the shares that might otherwise be available under U.S. federal income tax laws. Further, a distribution paid by Aspen Holdings to U.S. shareholders that is characterized as a dividend and is not characterized as an excess distribution will not be eligible for reduced rates of tax as qualified dividend income if Aspen Holdings is considered a PFIC in the taxable year in which such dividend is paid or was a PFIC in the preceding taxable year. A U.S. shareholder may also be subject to additional information reporting requirements, including the filing of an IRS Form 8621, if Aspen Holdings is a PFIC. These rules generally will apply to a U.S. person if Aspen Holdings was a PFIC at any time during the U.S. person's holding period with respect to our shares. Different consequences may apply if the U.S. person has elected to treat Aspen Holdings as a "qualified electing fund" or if the U.S. person is a 10% U.S. Shareholder of Aspen Holdings and Aspen Holdings is a CFC.

In general, a non-U.S. corporation will be a PFIC during a given year if (i) 75% or more of its gross income constitutes "passive income" (the "75% test") or (ii) 50% or more of its assets produce (or are held for the production of) passive income (the "50% test"). For these purposes, passive income generally includes interest, dividends, annuities and other investment income. However, the PFIC provisions contain a look-through rule under which a non-U.S. corporation that directly or indirectly owns at least 25% of the value of the stock of another corporation generally is treated, for purposes of determining whether it is a PFIC, as if it received directly its proportionate share of the income, and held its proportionate share of the assets, of the other corporation (the "look-through rule"). In addition, pursuant to an insurance exception that was amended by the 2017 Act, (a) passive income does not include income that a qualifying insurance corporation ("QIC") derives in the active conduct of an insurance business or income of a qualifying domestic insurance corporation ("QDIC") (generally, a U.S. corporation with respect to which the look-through rule applies that is taxable as an insurance company and is subject to U.S. federal income tax on its net income), and (b) passive assets do not include assets of a QIC available to satisfy liabilities of the QIC related to its insurance business, if the QIC is engaged in the active conduct of an insurance business, or assets of a QDIC.

Generally, a non-U.S. corporation will be a QIC for a taxable year if it would be taxable as an insurance company if it were a U.S. corporation and its applicable insurance liabilities constitute more than 25% of its total assets for a taxable year. Further, under recently proposed regulations (the "2021 Proposed Regulations"), a QIC is engaged in the "active conduct" of an insurance business only if it satisfies either a "factual requirements test" or an "active conduct percentage test." The factual requirements test requires that the officers and employees of the QIC carry out substantial managerial and operational activities on a regular and continuous basis with respect to its core functions and that they perform virtually all of the active decision-making functions relevant to underwriting functions. The active conduct percentage test generally requires that (i) the total costs incurred by the QIC with respect to its officers and employees for services rendered with respect to its core functions (other than investment activities) equal or exceed 50% of the total costs incurred by the QIC with respect to its officers and employees and any other person or entities for services rendered with respect to its core functions (other than investment activities) and (ii) to the extent the QIC outsources any part of its core functions to unrelated entities, officers and employees of the QIC with experience and relevant expertise must select and supervise the person that performs the outsourced functions, establish objectives for performance of the outsourced functions and prescribe rigorous guidelines relating to the outsourced functions which are routinely evaluated and updated. Under certain exceptions, however, a QIC that has no or only a nominal number of employees or that is a vehicle that has the effect of securitizing or collateralizing insurance risks underwritten by other insurance or reinsurance companies or is an insurance linked securities fund that invests in securitization vehicles generally is deemed not engaged in the active conduct of an insurance business. The officers and employees of certain related entities generally may be taken into account for these purposes, provided that the QIC exercises regular oversight and supervision over the services performed by the related entity's officers and employees. The 2021 Proposed Regulations will not be effective unless and until adopted in final form, but taxpayers may rely on them for taxable years beginning after December 31, 2017 if they are consistently followed.

We believe that, based on the implementation of our current business plan and the application of the insurance exception, our non-U.S. insurance subsidiaries should be considered QICs engaged in the active conduct of an insurance business under

one or both of the “factual requirements test” or the “active conduct percentage test,” our U.S. insurance subsidiaries should be considered QDICs and none of the income or assets of such insurance subsidiaries should be treated as passive. As a result, based on the application of the look-through rule, we believe that Aspen Holdings should not be characterized as a PFIC for the current year or the foreseeable future. However, because of legal uncertainties with respect to the interpretation of the PFIC rules and whether the 2021 Proposed Regulations will be adopted as final regulations in their current form, and factual uncertainties with respect to our planned operations, there is a risk that Aspen Holdings will be characterized as a PFIC in one or more years. If Aspen Holdings is considered a PFIC, it could have material adverse tax consequences for an investor that is subject to U.S. federal income taxation. Prospective investors should consult their tax advisors as to the effects of the PFIC rules on an investment in our shares.

U.S. tax-exempt organizations who own our shares may recognize unrelated business taxable income.

A U.S. tax-exempt organization generally will recognize unrelated business taxable income if the organization is required to include in gross income any of our insurance income under the CFC rules described above (including the RPII provisions). U.S. tax-exempt organizations are advised to consult their own tax advisors regarding the applicability of these rules to their ownership of our shares.

The impact of Bermuda’s letter of commitment to the OECD to eliminate harmful tax practices is uncertain and could adversely affect our tax status in Bermuda.

The OECD has published reports and launched a global dialogue among member and non-member countries on measures to limit harmful tax competition. These measures are largely directed at counteracting the effects of tax havens and preferential tax regimes in countries around the world. In the OECD’s progress report dated April 2, 2009, Bermuda was designated as an OECD “White List” jurisdiction that has substantially implemented the internationally agreed tax standards. The standards for the OECD compliance are to have at least 12 signed Tax Information Exchange Agreements (“TIEAs”) with other OECD members or non-OECD members. Bermuda has signed approximately 41 TIEAs, which exceeds the requisite amount and demonstrates Bermuda’s commitment to preserve the standards. In April 2016, Bermuda agreed to participate in the Tax Sharing requirements for CBCR.

Bermuda remains committed to tax transparency, which is evidenced by adopting economic substance legislation, which has been deemed compliant by the E.U. and was designed to implement the work of the Forum on Harmful Tax Practices under Action 5 of the OECD’s BEPS Reports. Any changes in the tax law of an OECD member state or in response to a change in E.U. policies could subject us to additional taxes, and we are unable to predict at this time whether it would have a material adverse impact on our operations and results.

The OECD’s initiative to limit harmful tax competition may result in higher taxation and increased complexity, burden and cost of compliance.

On June 21, 2016, the E.U.’s ministers of Finance and Economic Affairs unanimously approved the Anti-Tax Avoidance Directive to harmonize potential BEPS changes in the E.U. These measures are largely directed at counteracting the effects of tax havens and preferential tax regimes in countries around the world. We expect that countries may change their tax laws in response to this project, and several countries have already changed or proposed changes to their tax laws. Council Directive (EU) 2017/952 of 29 May 2017 amending Council Directive (EU) 2016/1164 (commonly known as “ATAD II”) was introduced (with effect from 1 January 2022) to prevent hybrid mismatches giving rise to a double deduction or to a deduction without taxation in different tax jurisdictions. In certain cases, taxpayers may be denied the right to recognize tax deductible costs on payments subject to a double deduction. On December 22, 2021, the E.U. published the draft Anti-Tax Avoidance Directive III (“ATAD III”) designed to impose new minimum substance rules to prevent the misuse of shell entities for improper tax purposes. ATAD III proposes to introduce reporting requirements for certain E.U. tax resident companies with mobile and/or passive income (such as interest, dividends and royalty income) that have inadequate economic substance (as prescribed under ATAD III). If an entity fails to meet these substance requirements, it will be denied benefits under double tax treaties and various E.U. directives. As currently drafted, E.U. member states will need to implement the proposed measures, once adopted, by June 30, 2023. ATAD III is currently in draft form and is subject to public consultation. The details of these rules are therefore subject to change.

On May 31, 2019, the OECD published a “Programme of Work” designed to address the tax challenges created by an increasingly digitalized economy. The Programme was divided into two pillars. Pillar One addresses the broader challenge of a digitalized economy and focuses on the allocation of group profits among taxing jurisdictions based on a market based concept rather than historical “permanent establishment” concepts. Pillar Two addresses the remaining BEPS risk of profit

shifting to entities in low tax jurisdictions by introducing a global minimum tax and a tax on potentially base eroding payments.

The OECD published detailed blueprints of its proposals on October 14, 2020 and public consultations were held virtually in January 2021. A meeting of the Inclusive Framework was held on January 27-28, 2021. On October 8, 2021, the OECD announced that a global deal to ensure a minimum tax rate of 15% for large multinational companies, and measures to prevent tax avoidance, has been agreed by 136 countries. The effect of the minimum tax rate will be to allow home governments to 'top up' the taxes paid in a particular country to the extent those taxes are below 15%, eliminating the advantage of shifting profits. Additionally, it is proposed that countries where revenues are earned will be able to tax 25% of the largest multinationals' so-called excess profit - defined as profit in excess of 10% of revenue. These changes are currently scheduled to take effect by 2023, and the extent to which these changes are enacted into the laws of the various countries will become evident in the interim. Changes to tax laws and additional reporting requirements could increase the complexity, burden and cost of doing business with our Bermuda companies and/or subject our Bermuda companies to increased tax and compliance burdens.

Changes to Bermuda tax policies may impact our financial position.

Under current Bermuda law, we are not subject to tax on income, profits, withholding, capital gains or capital transfers. Furthermore, we obtained from the Minister of Finance of Bermuda under the Exempted Undertakings Tax Protection Act 1966 (as amended) an assurance that, in the event Bermuda enacts legislation imposing tax computed on profits, income, any capital asset, gain or appreciation, or any tax in the nature of estate duty or inheritance tax, then the imposition of the tax will not be applicable to us or our operations until March 31, 2035. Tax policy and legislation in Bermuda could change in the future (as is the case in other jurisdictions) and as such no guarantee can be given as to whether the current tax treatment afforded to us will continue after March 31, 2035.

Item 4. Information on the Company

A. History and Development of the Company

Aspen Insurance Holdings Limited was incorporated on May 23, 2002 as a holding company headquartered in Bermuda. We underwrite specialty insurance and reinsurance on a global basis through our Operating Subsidiaries based in Bermuda, the United States and the United Kingdom. We also have branches in Australia, Canada, Singapore and Switzerland. The principal office is located at 141 Front Street, Hamilton, HM19, Bermuda (telephone number: +1 441-295-8201).

On February 15, 2019, following receipt of regulatory approvals, the Company's publicly traded ordinary shares were acquired by Highlands Bermuda Holdco, Ltd. (formerly known as Highlands Holdings, Ltd.) ("Parent"), a Bermuda exempted company, and an affiliate of certain investment funds managed by affiliates of Apollo Global Management, Inc., a leading global investment manager (collectively with its subsidiaries, "Apollo"). As a result of the acquisition, the Company's ordinary shares are no longer traded on the New York Stock Exchange ("NYSE"). The Company's preference shares and depositary shares continue to be listed on the NYSE under the following symbols: AHL PRC, AHL PRD and AHL PRE. For information on the preference shares and the depositary shares, refer to Item 18, Note 12 of our consolidated financial statements, "Capital Structure."

The Company maintains a website at www.aspen.co. The information on our website is not incorporated by reference in this report. We make available, free of charge through our website, our Annual Reports on Form 20-F and other reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the U.S. Securities and Exchange Commission ("SEC").

The SEC maintains an internet site that contains reports and other information regarding issuers, including the Company, that file electronically with the SEC. The address of the SEC's website is www.sec.gov.

B. Business Overview

We are a Bermuda-based holding company, whose principal business is marketing and underwriting specialty insurance and reinsurance on a global basis. Our business is comprised of: (i) underwriting operations, which includes our risk-bearing insurance and reinsurance operations; (ii) investing activities, which are primarily related to and support our underwriting operations; and (iii) our ACM operations, which earn management and performance fees from the Company and other third-party investors primarily through the management of insurance linked securities ("ILS") funds and other offerings. We manage our underwriting operations as two distinct business segments, Aspen Insurance and Aspen Reinsurance ("Aspen Re"), to enhance and better serve our global customer base. Financial data relating to our two business segments is included in Item 5, "Operating and Financial Review and Prospects" and in Item 18, Note 3 of our consolidated financial statements, "Segment Reporting."

Aspen Reinsurance.

Aspen Re provides reinsurance to ceding companies, also referred to as cedants or reinsureds. Aspen Re's offerings include, but are not limited to (i) property catastrophe reinsurance, (ii) other property reinsurance, (iii) casualty reinsurance, and (iv) specialty reinsurance. We offer reinsurance on both a treaty and facultative basis, and on both a proportional (or quota share) and non-proportional (or excess of loss) basis.

Our reinsurance business is sourced principally through brokers and reinsurance intermediaries, with whom we aim to maintain strong relationships, having become a valued risk management partner to the leading insurers with whom we do business. We write various excess of loss contracts and proportional treaties through Aspen Bermuda, a Class 4 insurer incorporated under the laws of Bermuda, and licensed under the Insurance Act of 1978 of Bermuda, as amended (the "Insurance Act"). Aspen Bermuda maintains branch offices in Switzerland and Singapore. The excess of loss contracts are principally property catastrophe policies reinsuring non-affiliated insurers located mainly in the United States, Europe, and Asia Pacific. The proportional treaties principally cover property risks reinsuring non-affiliated insurers located in the United States, Europe, and Asia Pacific. We write property catastrophe, property, casualty and specialty reinsurance business through Aspen U.K. and its branches in Canada, Singapore, and Australia, as well as through Aspen Bermuda and its branches in Singapore and Switzerland. Syndicate 4711 is managed by AMAL and AUL is the corporate member. We also access Lloyd's Brussels through Lloyd's Insurance Company, S.A. stamp 5383. Since 2017, AAIC also underwrote crop reinsurance business in the United States through a strategic partnership with CGB Diversified Services, Inc. ("CGB DS"). On December 14, 2020, we

sold our ownership interest in the strategic partnership. The sale has resulted in a material diminution of our U.S. agricultural business in 2021.

Aspen Insurance

Our insurance segment offers a variety of insurance products consisting of (i) first party and specialty insurance, (ii) casualty and liability insurance, and (iii) and financial and professional lines insurance. In our insurance segment, these products are written in the London Market primarily by Aspen U.K. and via the Lloyd's platform and, in the United States, by AAIC and Aspen Specialty (on an admitted and excess and surplus lines basis, respectively). We also write casualty and financial and professional lines business through Aspen Bermuda and financial and professional lines business in the Asia Pacific region through Aspen Singapore Pte. Ltd. ("Aspen Singapore"), which binds business for Syndicate 4711.

Investments

Our investment operations seek to deliver stable investment income and total return through all market cycles while maintaining appropriate portfolio liquidity and credit quality to meet the requirements of our customers, rating agencies and regulators. Income from our investment operations is included in corporate and other income and expense.

Aspen Capital Markets

We participate in the alternative reinsurance market through ACM, which focuses on developing alternative reinsurance structures and products to leverage the Company's existing underwriting franchise and increase its operational flexibility in the capital markets. ACM provides investors direct access to the Company's underwriting and analytical expertise and earns management and performance fees from the Company and other third-party investors primarily through the management of ILS funds and other offerings. It operates two distinct strategies, namely, building insurance risk portfolios tailored to investor objectives through managed funds such as Aspen Cat Fund Limited, and structuring and placing a defined Aspen portfolio aligned with capital markets investors through the use of sidecars, including Peregrine Reinsurance Ltd. ("Peregrine"), a special purpose insurer. For more information on Peregrine, see "Regulatory Matters - Bermuda - Peregrine" below.

Aspen recognized the synergies between ACM and its Outwards Reinsurance teams – combining the two into Aspen Capital Partners. This move allows us to further enable our trading partners to access the full breadth of Aspen's capabilities, including risk sourcing, underwriting, modelling, actuarial and claims.

Income from ACM's activities is primarily allocated to the line of business being ceded within Aspen's current two segments, Aspen Re and Aspen Insurance, and serves to reduce acquisition expenses for that business. While ACM has historically focused on property catastrophe business, in recent years, it has expanded to provide capacity for property insurance and reinsurance, specialty reinsurance and casualty insurance and reinsurance.

Business Segments

We have determined our reportable segments, Aspen Re ("Reinsurance") and Aspen Insurance ("Insurance"), by taking into account the manner in which management makes operating decisions and assesses operating performance. Profit or loss for each of the business segments is measured by underwriting income or loss. Underwriting profit is the excess of net earned premiums over the sum of losses and loss expenses, amortization of deferred policy acquisition costs and general and administrative expenses. Underwriting income or loss provides a basis for management to evaluate the segment's underwriting performance.

Management measures segment results on the basis of the combined ratio, which is obtained by dividing the sum of the losses and loss expenses, amortization of deferred policy acquisition costs and operating and administrative expenses by net earned premiums. Other than corporate expenses, indirect operating and administrative expenses are allocated to business segments predominantly based on each segment's proportional share of gross earned premiums.

We provide additional disclosures for corporate and other (non-operating) income and expenses. Corporate and other income and expenses include net investment income, net realized and unrealized investment gains or losses, expenses associated with managing the Aspen Group, certain strategic and other costs, changes in fair value of derivatives or loan notes issued by variable interest entities, interest expenses, net realized and unrealized foreign exchange gains or losses, and income taxes, which are not allocated to the business segments. Corporate expenses are not allocated to our business segments as they typically do not fluctuate with the levels of premiums written and are not directly related to our segment operations. We do not allocate our assets by business segment as we evaluate underwriting results of each business segment separately from the results of our investment portfolio. Segment profit or loss for each of our business segments is measured by underwriting income or

loss. We identified immaterial errors which resulted in the revision of the 2020 values in the tables below. Refer to Item 18, Note 26 of our consolidated financial statements, “Correction of Immaterial Errors” for more information.

The table below sets forth the gross written premiums by business segment for the twelve months ended December 31, 2021, 2020 and 2019:

Business Segment	Twelve Months Ended December 31, 2021		Twelve Months Ended December 31, 2020		Twelve Months Ended December 31, 2019	
	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total
(\$ in millions, except for percentages)						
Reinsurance	\$ 1,597.0	40.5 %	\$ 1,656.4	44.8 %	\$ 1,485.5	43.2 %
Insurance	2,341.4	59.5	2,042.1	55.2	1,956.9	56.8
Total	\$ 3,938.4	100.0 %	\$ 3,698.5	100.0 %	\$ 3,442.4	100.0 %

For a review of our results by business segment, refer to Item 5, “Operating and Financial Review and Prospects” and Item 18, Note 3 of our consolidated financial statements, “Segment Reporting”.

Reinsurance

The reinsurance business we write can be analyzed by geographic region, reflecting the location of the reinsured risks, as set forth in the table below for the twelve months ended December 31, 2021, 2020 and 2019:

Reinsurance	Twelve Months Ended December 31, 2021		Twelve Months Ended December 31, 2020		Twelve Months Ended December 31, 2019	
	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total
(\$ in millions, except for percentages)						
Australia/Asia	\$ 185.8	11.6 %	\$ 180.0	10.9 %	\$ 139.5	9.4 %
Caribbean	4.6	0.3	3.4	0.2	5.2	0.4
Europe (excluding U.K.)	79.0	4.9	73.5	4.4	69.2	4.7
United Kingdom	18.6	1.2	4.9	0.3	15.1	1.0
United States & Canada ⁽¹⁾	724.0	45.3	871.0	52.6	770.3	51.8
Worldwide excluding United States ⁽²⁾	28.8	1.8	21.7	1.3	21.0	1.4
Worldwide including United States ⁽³⁾	499.0	31.3	425.0	25.7	371.8	25.0
Others	57.2	3.6	76.9	4.6	93.4	6.3
Total	\$ 1,597.0	100.0 %	\$ 1,656.4	100.0 %	\$ 1,485.5	100.0 %

(1) “United States and Canada” consists of individual policies that insure risks specifically in the United States and/or Canada, but not elsewhere. In December 2020 we sold our interest in the strategic partnership with CGB Diversified Services, Inc. (“CGB DS”). 2020 includes gross written premium of \$334.8 million related to CGB DS; (2019 —\$312.5 million. For more information on CGB DS, refer to “— Specialty Reinsurance” below.

(2) “Worldwide excluding the United States” consists of individual policies that insure risks wherever they may be across the world but specifically excludes the United States.

(3) “Worldwide including the United States” consists of individual policies that insure risks wherever they may be across the world but specifically includes the United States.

Aspen Re's gross written premiums by principal line of business were as follows for the twelve months ended December 31, 2021, 2020 and 2019:

Reinsurance	Twelve Months Ended December 31, 2021		Twelve Months Ended December 31, 2020		Twelve Months Ended December 31, 2019	
	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total
(\$ in millions, except for percentages)						
Property catastrophe reinsurance	\$ 376.5	23.6 %	\$ 311.8	18.8 %	\$ 249.6	16.8 %
Other property reinsurance	473.6	29.6	399.6	24.1	356.9	24.0
Casualty reinsurance	445.5	27.9	390.5	23.6	294.7	19.8
Specialty reinsurance ⁽¹⁾	301.4	18.9	554.5	33.5	584.3	39.4
Total	\$ 1,597.0	100.0 %	\$ 1,656.4	100.0 %	\$ 1,485.5	100.0 %

(1) 2020 includes gross written premium of \$334.8 million related to CGB DS; (2019 —\$312.5 million).

Property Catastrophe Reinsurance: Property catastrophe reinsurance is generally written on a treaty excess of loss basis where we provide protection to an insurer for an agreed portion of the total losses from a single event in excess of a specified loss amount. In the event of a loss, most contracts provide for coverage of a second occurrence following the payment of a premium to reinstate the coverage under the contract, which is referred to as a reinstatement premium. The coverage provided under excess of loss reinsurance contracts may be on a worldwide basis or limited in scope to selected regions or geographical areas.

Other Property Reinsurance: Other property reinsurance includes property risks written on excess of loss and proportional treaties, facultative or single risk reinsurance. Risk excess of loss reinsurance provides coverage to a reinsured where it experiences a loss in excess of its retention level on a single "risk" basis. A "risk" in this context might mean the insurance coverage on one building or a group of buildings for fire or explosion or the insurance coverage under a single policy which the reinsured treats as a single risk. This line of business is generally less exposed to accumulations of exposures and losses but can still be impacted by catastrophes, such as earthquakes and hurricanes. Proportional treaty reinsurance provides proportional coverage to the reinsured, meaning that, subject to event limits where applicable and ceding commissions, we pay the same share of the covered original losses as we receive in premiums charged for the covered risks. Proportional contracts typically involve close client relationships which often include regular audits of the cedants' data.

Casualty Reinsurance: Casualty reinsurance is written on an excess of loss, proportional and facultative basis and consists of U.S. treaty, international treaty and casualty facultative reinsurance. Our U.S. treaty and facultative business comprises exposures to workers' compensation (including catastrophe), medical malpractice, general liability, auto liability, professional liability and excess liability including umbrella liability. Our international treaty business reinsures exposures mainly with respect to general liability, auto liability, professional liability, workers' compensation and excess liability.

Specialty Reinsurance: Specialty reinsurance is written on an excess of loss and proportional basis and consisted of credit and surety reinsurance, agriculture reinsurance, mortgage reinsurance and insurance, marine, aviation, terrorism, engineering, cyber and other specialty lines. Our credit and surety reinsurance business consists of trade credit, surety (mainly European, Japanese and Latin American risks) and mortgage reinsurance and insurance and political risks. In 2019, we ceased writing credit and surety reinsurance and sold our renewal rights to that book of business to a third party. The mortgage reinsurance and insurance on political risks was not included in the transaction and we continue to underwrite this coverage. Our specialty agricultural reinsurance business covered crop and multi-peril business. Other specialty lines include reinsurance treaties and some insurance policies covering policyholders' interests in marine, energy, aviation liability, space, contingency, terrorism, engineering, nuclear and personal accident.

In 2020 and prior, specialty reinsurance included U.S. crop insurance business written on a reinsurance basis through our strategic partnership with CGB DS via Crop Re Services LLC ("Crop Re"), a Delaware limited liability company responsible for directing the placement of reinsurance on behalf of CGB DS and CGB Insurance Company ("CGBIC"), an Indiana insurance company affiliate of CGB DS and an RMA licensed crop insurer. In September 2020, we received notice from CGB DS that its controlling parent entered into a definitive agreement for the sale of CGB DS to a third party. The sale of CGB DS triggered an option for CGB DS to purchase Aspen's 23.2% ownership interest in Crop Re. CGB DS exercised this right and purchased Aspen's interest in Crop Re on December 14, 2020 (the "CGB Sale"). The CGB Sale resulted in a material diminution of our U.S. agricultural business in 2021, although we continue to write a small amount of admitted primary U.S. crop insurance through AAIC. For more information on the CGB Sale, refer to Item 5 "Operating and Financial Review — Recent Developments — Sale of Ownership Interest in Crop Re."

A high percentage of the property catastrophe reinsurance contracts we write exclude or limit coverage for losses arising from the peril of terrorism. Within the U.S., our other property reinsurance contracts generally include limited coverage for acts that are certified as “acts of terrorism” by the U.S. Treasury Department under the Terrorism Risk Insurance Act (including its various extensions, “TRIA”). We have written a limited number of property reinsurance contracts, both on a pro rata and excess of loss basis, specifically covering the peril of terrorism. These contracts typically exclude coverage for nuclear, biological, chemical or radiological attack, though we have written a small number of contracts that do not exclude coverage for such attacks, the coverage of which may be applicable to non-terrorism events.

Insurance

The insurance business we write can be analyzed by geographic region, reflecting the location of the insured risk, as set forth in the table below for the twelve months ended December 31, 2021, 2020 and 2019:

Insurance	Twelve Months Ended December 31, 2021		Twelve Months Ended December 31, 2020		Twelve Months Ended December 31, 2019	
	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total
	(\$ in millions, except for percentages)					
Australia/Asia	\$ 90.0	3.8 %	\$ 71.2	3.5 %	\$ 76.4	3.9 %
Caribbean	8.3	0.4	2.5	0.1	4.1	0.2
Europe (excluding U.K.)	61.6	2.6	59.5	2.9	13.6	0.7
United Kingdom	374.6	16.0	233.1	11.4	280.6	14.3
United States & Canada ⁽¹⁾	1,577.9	67.4	1,371.9	67.2	1,233.6	63.1
Worldwide excluding United States ⁽²⁾	2.7	0.1	1.4	0.1	42.0	2.1
Worldwide including United States ⁽³⁾	93.1	4.0	208.4	10.2	243.1	12.4
Others	133.2	5.7	94.1	4.6	63.5	3.3
Total	\$ 2,341.4	100.0 %	\$ 2,042.1	100.0 %	\$ 1,956.9	100.0 %

- (1) “United States and Canada” consists of individual policies that insure risks specifically in the United States and/or Canada, but not elsewhere.
- (2) “Worldwide excluding the United States” consists of individual policies that insure risks wherever they may be across the world but specifically excludes the United States.
- (3) “Worldwide including the United States” consists of individual policies that insure risks wherever they may be across the world but specifically includes the United States.

Our gross written premiums by our principal line of business within our insurance segment were as follows for the twelve months ended December 31, 2021, 2020 and 2019:

Insurance ⁽¹⁾	Twelve Months Ended December 31, 2021		Twelve Months Ended December 31, 2020		Twelve Months Ended December 31, 2019	
	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total
	(\$ in millions, except for percentages)					
Casualty and liability insurance	\$ 615.4	26.3 %	\$ 513.1	25.1 %	\$ 475.6	24.3 %
First party and specialty insurance	807.9	34.5	846.0	41.4	874.1	44.7
Financial and professional lines insurance	907.6	38.8	683.0	33.5	607.2	31.0
Carbon Syndicate ⁽²⁾	10.5	0.4	—	—	—	—
Total	\$ 2,341.4	100.0 %	\$ 2,042.1	100.0 %	\$ 1,956.9	100.0 %

⁽¹⁾ Effective January 1, 2021, the insurance segment restructured its principal lines of business due to changes in management structures. The prior periods have been re-presented to ensure consistency of information.

⁽²⁾ Relates to gross written premium written by Aspen Underwriting Limited via Carbon Syndicate 4747.

First Party and Specialty Insurance: Our first party and specialty insurance line consists of U.S. and U.K. commercial property, specie, inland and ocean marine, marine and energy liability, onshore energy physical damage, offshore energy physical damage, credit and political risks, crisis management, accident and health and surety risks written on a primary, excess, quota share, program and facultative basis.

U.S. and U.K. Commercial Property: Property insurance provides physical damage and business interruption coverage for losses arising from weather, fire, theft and other causes. The U.S. commercial property team covers mercantile, manufacturing, municipal and commercial real estate business. The U.K. commercial team’s client base is predominantly U.K. institutional property owners, small and middle market corporates and public sector clients.

Specie: The specie business line focuses on the insurance of high value property items on an all risks basis, including fine art, general and bank related specie, jewelers' block and armored car.

Inland and Ocean Marine: The inland and ocean marine team writes business principally covering builders' construction risk, contractors' equipment, and global transportation exposures such as marine cargo and hull, inland transit, warehousing and war, in addition to exhibition, fine arts and museums insurance. The book also includes business generated by our subsidiary, Blue Waters Insurers, Corp., which acts as our managing general agent in Puerto Rico and produces inland, ocean marine and cargo business in Puerto Rico.

Marine and Energy Liability: In February 2020, we made the decision to cease writing marine and energy liability business and the business was put into runoff. Prior to that, the marine and energy liability business was based in the U.K. and included marine liability cover mainly related to the liabilities of ship-owners and port operators, including reinsurance of Protection and Indemnity Clubs. It also provided liability cover globally (including the U.S.) for companies in the oil and gas sector, both onshore and offshore and in the power generation sector. This class also included commercial construction liability for U.S. companies in the oil and gas sector, which is now being written under our global excess casualty line.

Onshore Energy Physical Damage: Our marine, energy and construction property unit underwrites a variety of worldwide onshore energy and construction sector classes of business with a focus on property covers.

Offshore Energy Physical Damage: Offshore energy physical damage provides insurance cover against physical damage losses in addition to operators' extra expenses for companies operating in the oil and gas exploration and production sector.

Credit and Political Risks: The credit and political risks team writes business covering the credit and contract frustration risks on a variety of trade and non-trade related transactions, as well as political risks (including multi-year war on land cover). We provide credit and political risks cover worldwide but with concentrations in a number of countries, such as China, Brazil, the Netherlands and the United States.

Crisis Management: The Crisis Management team writes insurance designed to protect individuals and corporations operating in high-risk areas around the world, including covering the shipping industry's exposure to acts of piracy. It also writes terrorism and political violence insurance, providing coverage for damage to property (largely fixed assets such as buildings) resulting from acts of terrorism, strikes, riots, civil commotion or political violence. This book is written on a global basis, although capacity is selectively deployed. In December 2020, we sold the renewal rights to our U.S. food and beverage product recall business to a third party.

Accident and Health: In March 2020, we made the decision to exit our global accident and health line of business and began winding down the business. Prior to that, the global accident and health team focused on insurance and reinsurance products which help protect individuals, groups and companies from the consequences of accidental death or disability whether resulting from accident or sickness. This included single or multi-person losses as well as major catastrophic events such as air crashes, earthquakes or terrorist attacks. Coverage written included whole account treaty and facultative reinsurance protection for insurance companies.

Surety Risks: In July 2020, we sold our renewal rights to our surety insurance book of business to a third party and executed a loss portfolio transfer transaction for the transfer of prior-year liabilities. Pursuant to the terms of the sale transaction, we currently continue to underwrite only a small portion of surety business on a fronted basis to the purchaser in the transaction, which is subject to a 100% quota share reinsurance agreement back to the purchaser.

Casualty and Liability Insurance: Our casualty and liability line consists of commercial liability, U.S. primary casualty, excess casualty, environmental liability and railroad liability, written on a primary, excess, quota share, program and facultative basis.

Commercial Liability: Commercial liability is primarily written in the United Kingdom and provides employers' liability coverage, products and public liability coverage for insureds domiciled in the United Kingdom and Ireland. The U.K. regional team also covers directors' and officers' ("D&O") and professional indemnity, predominantly to small and medium corporates.

U.S. Primary Casualty: The U.S. primary casualty account consists primarily of lines written within the primary insurance sectors. We are focused on delivering expertise to brokers and customers in hospitality, real estate, construction and products liability.

Excess Casualty: The excess casualty line comprises medium and large, sophisticated and risk-managed insureds worldwide and covers broad-based risks at lead/high excess attachment points, including general liability, commercial and residential construction liability, life science, railroads, trucking, product and public liability and associated types of cover found in general liability policies in the global insurance market, written from the United Kingdom, the United States and Bermuda.

Environmental Liability: The environmental account primarily provides contractors' pollution liability and pollution legal liability across industry segments that have environmental regulatory drivers and contractual requirements for coverage, including real estate and public entities, contractors and engineers, energy contractors and environmental contractors and consultants. The business is written in both the primary and excess insurance markets in the United States, Canada and the United Kingdom.

Railroad Liability: Our railroad liability business consists of primary and excess liability business for freight, commuter and excursion railroads. It also provides general liability coverage to the railroad support industry (contractors, repair shops and products manufacturers) as well as contingent liability for railcar fleet owners/managers and railroad protective liability in the United States.

Financial and Professional Lines Insurance: Our financial and professional lines consists of financial and corporate risks, professional liability, management liability, and cyber liability, written on a primary, excess, quota share, program and facultative basis.

Financial and Corporate Risks: Our financial institutions business is written on both a primary and excess of loss basis and consists of professional liability, crime insurance and D&O cover, with the largest exposure comprising risks headquartered in the United Kingdom, followed by Australia, the United States and Canada. We cover financial institutions including commercial and investment banks, asset managers, insurance companies, stockbrokers and insureds with hybrid business models. This account also includes a book of D&O insurance for commercial insureds located outside of the United States and a worldwide book of representations and warranties and tax indemnity business.

Professional Liability: Our professional liability business is written out of the United States (including errors and omissions ("E&O")), the United Kingdom and Bermuda and is written on both a primary and excess of loss basis. We insure a wide range of professions including lawyers, accountants, architects, engineers, doctors and medical technicians. This account may also extend coverage for cyber liability and data protection insurance. The cyber liability and data protection insurance covers firms for first party costs and third-party liabilities associated with cybersecurity breach and breach of contractual or statutory data protection obligations.

Management Liability: Our management liability business is written out of the United States, the United Kingdom and Bermuda. We insure a diverse group of commercial and financial institutions predominantly on an excess basis. Our products include D&O liability, fiduciary liability, employment practices liability, fidelity insurance and blended liability programs including E&O liability. The focus of the account is predominantly on risks headquartered in the U.S. or risks with a material U.S. exposure.

Cyber Liability: This account is written globally and consists of our privacy and network security liability (cyber liability) products as well as technology liability. Our privacy and network security liability products provide first party costs and third-party liabilities associated with privacy and cybersecurity breaches. Our technology liability product provides coverage for technology, media and telecommunications firms offering protection for damages and legal defense expenses associated with financial loss claims from third parties and various forms of intellectual property breaches. We also incorporate data protection indemnity insurance against costs and liabilities that may arise when a company breaches its data protection obligations.

On a significant portion of our insurance contracts across all our sub-segments, we are obligated to offer terrorism coverage under TRIA. Wherever possible, we exclude coverage protection against nuclear, biological, chemical or radiological ("NBCR") attacks. However, certain U.S. states (notably New York and Florida) prohibit admitted insurance companies, such as AAIC, from fully excluding such perils, resulting in some level of exposures to NBCR as well as fire following such events. We would expect to benefit from the protection of TRIA and the over-arching \$100 billion industry loss cap (subject to the relevant deductible and co-retention).

Underwriting and Reinsurance Purchasing

Our objective is to create a diversified portfolio of insurance and reinsurance risks, spread across lines of business, products, geographic areas of coverage, cedants and sources. The acceptance of appropriately priced risk is the core of our business. Underwriting requires judgment, based on important assumptions about matters that are inherently unpredictable and beyond

our control, and for which historical experience and probability analysis may not provide sufficient guidance. We view underwriting quality and risk management as critical to our success.

Underwriting. We underwrite according to the following principles:

- strive to build a diverse portfolio of risk that generates attractive returns by deploying capital in a targeted and efficient manner to deliver enhanced underwriting profitability;
- operate within agreed boundaries as defined by the business plan for the relevant class of business;
- operate within prescribed maximum underwriting authority limits, which we delegate to individual underwriters in accordance with an understanding of each individual underwriter's capabilities, tailored to the classes of business written by the particular underwriter;
- evaluate the underlying data provided by clients and adjust such data where we believe it does not adequately reflect the underlying exposure;
- price each submission based on our experience in the class of business, and where appropriate, by deploying one or more actuarial models either developed internally or licensed from third-party providers;
- maintain a peer review process to sustain high standards of underwriting discipline and consistency and a sampling methodology for simpler insurance risks;
- engage in peer reviews for more complex risk by several underwriters and input from catastrophe risk management specialists, our team of actuaries and senior management; and
- refer risks outside of agreed underwriting authority limits to the Group Underwriting Committee or relevant entity executive or board of directors as exceptions for approval before we accept the risks.

Reinsurance Purchasing. We purchase reinsurance and retrocession to mitigate and diversify our risk exposure to a level consistent with our risk appetite and to increase our insurance and reinsurance underwriting capacity. These agreements provide for recovery of a portion of our losses and loss adjustment expenses from our reinsurers. The amount and type of reinsurance that we purchase varies from year to year and is dependent on a variety of factors, including, but not limited to, the cost of a particular reinsurance contract and the nature of our gross exposures assumed, with the aim of securing cost-effective protection. We have a centralized ceded reinsurance department which coordinates the placement of all of our treaty reinsurance placements.

We have reinsurance covers in place for the majority of our insurance classes of business on an excess-of-loss basis and/or proportional treaty basis. The excess of loss covers provide protection in various layers and excess of varying attachment points according to the scope of cover provided.

With respect to natural perils coverage, we buy protections that cover both our insurance and reinsurance lines of business through a variety of products, including, but not limited to, excess of loss reinsurance, facultative reinsurance, aggregate covers, whole account covers and collateralized products which can be on either an indemnity or an index linked basis. For example, we may purchase industry loss warranty reinsurance which provides retrocessional coverage when insurance industry losses for a defined event exceed a certain level. We expect the type and level of coverage that we purchase will vary over time, reflecting our view of the changing dynamics of the underlying exposure and the reinsurance markets. We manage our risk by seeking to limit the amount of exposure assumed from any one reinsured and the amount of the aggregate exposure to catastrophe losses from a single event in any one geographical zone. Additionally, Aspen Re continues to purchase quota share and retrocessional reinsurance protection for a range of international perils and worldwide catastrophe losses through ACM and other collateralized reinsurance arrangements.

Although reinsurance agreements contractually obligate our reinsurers to reimburse us for an agreed-upon portion of our gross paid losses, we remain liable to our insureds to the extent that our reinsurers do not meet their obligations under these agreements. As a result, and in line with our risk management objectives, we evaluate the financial condition of our reinsurers and monitor concentrations of credit risk on an on-going basis. In general, we seek to place our reinsurance with highly rated companies with which we have a strong trading relationship or have fully collateralized arrangements in place. We maintain a list of authorized reinsurers graded for short, medium and long tail business which is regularly reviewed and updated.

The Company and certain of its subsidiaries entered into an adverse development cover reinsurance agreement with a subsidiary of Enstar Group Limited ("Enstar"), dated as of March 2, 2020 ("the Original Agreement"), pursuant to which Enstar's subsidiary reinsured losses incurred on or prior to December 31, 2019. Enstar's subsidiary provided \$770 million of cover in excess of \$3.805 billion retention up to an aggregate limit of \$4.575 billion, and an additional \$250 million of cover in

excess of \$4.815 billion. The consideration under the Original Agreement was \$770.0 million plus interest at 3.75% per annum, compounding daily, from the effective date of January 1, 2020 to the closing date.

On January 10, 2022, the Company and certain of its subsidiaries (“Aspen”) entered into an Amended and Restated Reinsurance Agreement with a subsidiary of Enstar (the “Agreement”), which amends and restates the Original Agreement, previously entered into between the parties. Under the terms of the Agreement, Enstar’s subsidiary will reinsure net losses incurred on or prior to December 31, 2019 on Aspen’s diverse mix of property, liability and specialty lines across the U.S., U.K. and other jurisdictions (the “Subject Business”) having net loss reserves of \$3.12 billion as of September 30, 2021. The Agreement provides for a limit of \$3.57 billion in consideration for a premium of \$3.16 billion. The amount of net loss reserves ceded, as well as the premium and limit amounts provided under the Agreement, will be adjusted for claims paid between October 1, 2021 and the closing date of the transaction. The premium includes \$770.0 million of premium previously paid with respect to reserves ceded under the Original Agreement, which will continue to be held in trust accounts to secure the Enstar subsidiary’s obligations under the Agreement. The incremental new premium will initially be held in funds withheld accounts maintained by Aspen but will be released to the trust accounts maintained by the Enstar subsidiary no later than September 30, 2025. The funds withheld by Aspen will be credited with interest at an annual rate of 1.75% plus, for periods after October 1, 2022, an additional amount equal to 50% of the amount by which the total return on the investments and cash and cash equivalents of the Company and its subsidiaries exceeds 1.75%. Under the Agreement, the Enstar subsidiary will assume claims control of the Subject Business upon closing and entrance into an administrative services agreement.

The Agreement includes customary representations and warranties, indemnification obligations, covenants and termination rights of the parties. Completion of the transaction is subject to regulatory approvals and satisfaction of various other closing conditions. The transaction is expected to close in the first half of 2022. If the transaction cannot be completed, the Original Agreement would remain in effect.

The Agreement is a disclosable subsequent event but did not impact the 2021 financial result. For subsequent events, refer to Item 18, Note 25 of our consolidated financial statements, “Subsequent Events.”

Risk Management

We have a comprehensive risk management framework that defines the corporate risk appetite, risk strategy and the policies in place to monitor, manage and mitigate the risk inherent in our business. Our risk management framework covers all risks in our risk universe, on a current and forward-looking basis, and is implemented in a consistent manner across the Aspen Group. It is the basis through which we protect our franchise value and seek to enable sustained profitable growth. Below is a summary of our current corporate governance bodies and risk management strategy:

Risk Governance

Board of Directors. The Company’s Board of Directors (the “Board”) considers effective identification, measurement, monitoring, management and reporting of the risks facing our business to be key elements of its responsibilities and those of the Group Chief Executive Officer and management. Matters relating to risk management that are reserved for the Board include approval of the internal controls and risk management framework and any changes to the Aspen Group’s risk appetite statement and key risk limits. The Risk Committee of the Board also receives reports at each scheduled meeting covering risk management processes including the design, operation, use and limitations of the internal model. The internal model is an economic capital model which has been developed internally for use in certain business decision-making processes, the assessment of risk-based capital requirements and for various regulatory purposes. As a result of these arrangements and processes, the Board, assisted by management and the various standing committees of the Board (the “Board Committees”), is able to exercise effective oversight of the operation of the risk management strategy described in “— Risk Management Strategy” below.

Board Committees. The Board delegates oversight of the management of certain key risks to its Risk, Audit, and Conflicts Committees. The Audit and Conflicts Committees are comprised entirely of independent directors and the chairs of the Board Committees report regularly to the Board on the committees’ discussions.

Risk Committee: The Risk Committee assists the Board in its oversight of the framework that governs risk management and solvency assessment practices group-wide as articulated in the Board approved Group Risk Policy. This specifically includes oversight of processes undertaken by management to identify, evaluate and mitigate the material risks to the Group’s strategic objectives, as well as monitoring adherence to the Board approved Risk Appetite Framework, solvency indicators, risk tolerance criteria, and key risk limits.

Audit Committee: The Audit Committee is primarily responsible for assisting the Board in its oversight of the integrity of the financial statements. The Audit Committee is also responsible for reviewing the adequacy and effectiveness of the Company’s internal controls, including the accounting and financial reporting process of the Company and audits of the

Company's financial statements, and oversight of both internal and external auditors. In addition, the Audit Committee oversees the Company's compliance with applicable laws and regulations.

Conflicts Committee: The Conflicts Committee reviews certain material transactions between Aspen Holdings and/or its subsidiaries and Apollo or its non-Aspen affiliates that may present a conflict of interest.

Management Committees: The Group Chief Executive Officer maintains an executive committee (the "Group Executive Committee"), which is the primary executive committee of the Company. It is comprised of global heads of key functions and other key business leads and is responsible for advising the Group Chief Executive Officer and assisting in the execution of his responsibilities to the Board, including with respect to matters relating to the overall strategy and conduct of the Aspen Group's business.

There are various standing committees (the "Executive Management Committees") of the Group Executive Committee, which have oversight of certain, business, operational and risk management processes and support the Group Executive Committee in the achievement of its objectives. As at December 31, 2021, these included:

Investment Committee: The Investment Committee is primarily responsible for monitoring the Aspen Group's investment risk and activities and setting overall investment policy, and ensuring that the Group Chief Risk Officer is kept informed of such matters.

Risk Management Committee: The primary purpose of the Risk Management Committee is to assist the Group Chief Risk Officer in her oversight duties in respect of the design and operation of the Aspen Group's risk management systems. In particular, the Risk Management Committee has specific responsibilities in relation to the internal model and for the establishment of risk limits for accumulating underwriting and investment exposures and monitoring solvency and liquidity requirements.

Reserve Committee: The Reserve Committee is responsible for managing reserving risk and making recommendations to the Group Chief Executive Officer and the Group Chief Financial Officer relating to the appropriate level of reserves to include in the Aspen Group's financial statements.

Underwriting Committee: The purpose of the Underwriting Committee is to assist the Group Chief Executive Officer in his oversight duties in respect of the management and control of overall underwriting risk.

Operations Committee: The purpose of the Operations Committee is to oversee the Aspen Group's operational support functions to ensure that they are strategically aligned with each other and the business functions, in order to provide coordinated, efficient and cost-effective operational support to the execution of the Aspen Group's strategic objectives.

The governance framework of the Executive Management Committees was restructured in February 2022, in order to enhance and streamline the management, oversight and reporting of such business, operational and risk management processes.

Risk Management Strategy

We operate an integrated enterprise-wide risk management strategy designed to protect shareholder value in a sustainable and efficient manner while providing a high level of policyholder protection. The execution of our integrated risk management strategy is based on:

- the establishment and maintenance of an internal control and risk management system based on a three lines of defense approach to the allocation of responsibilities between risk accepting units (first line), risk management activity and oversight from other central control functions (second line) and independent assurance (third line);
- identifying material risks to the achievement of the Aspen Group's objectives including emerging risks;
- the articulation at Group level of our risk appetite and a consistent set of key risk limits for each material component of risk;
- the cascading of risk appetite and key risk limits for material risks to each operating subsidiary and, where appropriate, risk accepting business units;
- measuring, monitoring, managing and reporting risk positions and trends;
- the use, subject to an understanding of its limitations, of the internal model to test strategic and tactical business decisions and to assess compliance with the risk appetite statement; and
- stress and scenario testing, including reverse stress testing, designed to help us better understand and develop contingency plans for the likely effects of extreme events or combinations of events on capital adequacy and liquidity.

Risk Appetite Statement. The risk appetite statement is a central component of the Aspen Group’s overall risk management framework and is approved by the Board. It sets out, at a high level, how we think about risk in the context of our business model, Aspen Group objectives and strategy, and provides the foundation for decision making during the implementation of our strategy and business plans. It sets out boundary conditions and limits for the level of risk we assume, together with a statement of the reward we aim to receive for this level of risk. Our risk appetite statement comprises the following components:

- ***Risk preferences:*** a high level description of the types of risks we prefer to assume and those we prefer to minimize or avoid;
- ***Return objective:*** a description of the return on capital we seek to achieve, subject to our risk constraints;
- ***Volatility objective:*** a description of earnings volatility tolerance;
- ***Capital objective:*** a description of the target level of risk adjusted capital; and
- ***Liquidity objective:*** a description of the target level of liquidity.

Risk Components. The main types of risks that we face are summarized as follows:

Insurance risk: The risk that underwriting profits or losses vary from their expected amounts, including the risk that reserves established in respect of prior periods differ significantly from the level of reserves included in the Aspen Group’s financial statements.

Market risk: The risk of variation in the income generated by, and the fair value of, our investment portfolio, cash and cash equivalents and derivative contracts including the effect of changes in foreign currency exchange rates.

Credit risk: The risk of diminution in the value of insurance receivables as a result of counter-party default. This principally comprises default and concentration risks relating to amounts receivable from intermediaries, policyholders and reinsurers. We include credit risks related to our investment portfolio under market risk. We include credit risks related to insurance contracts (e.g. credit and political risk policies) under insurance risk.

Liquidity risk: The risks of failing to maintain sufficient liquid financial resources to meet liabilities as they fall due or to provide collateral as required for commercial or regulatory purposes.

Operational risk: The risk of loss resulting from inadequate or failed internal processes, personnel or systems, or from external events. This includes the risk of material misstatement in financial reporting and non-compliance with regulatory requirements.

Group risk: The risk that events or circumstances affecting one or more companies in the Aspen Group threaten the solvency, liquidity or reputation of the Company.

Strategic risk: The risk of adverse impact on shareholder value or income and capital of adverse business decisions, poor execution or failure to respond to market changes.

Emerging risk: The risk that events or issues not previously identified or fully understood impact the operations or financial results of the Aspen Group.

We distinguish between “core” and “non-core” risks. Core risks comprise those risks which are inherent in the operation and value creation strategy of our business, including insurance risks in respect of our underwriting operations and market risks in respect of our investment activity. We actively seek core risks with a view to generating shareholder value but seek to manage the resulting volatility in our earnings and financial condition within the limits defined by our risk appetite. However, these core risks are intrinsically difficult to measure and manage and we may not, therefore, be successful in this respect. All other risks, including regulatory and operational risks, are classified as non-core. We seek, to the extent we regard as reasonably practicable and economically viable, to avoid or minimize our exposure to non-core risks.

Risk Limits Frameworks. Aspen’s Risk Limit Framework translates the risk appetite objectives into measurable criteria. Limits provide primary control for Group-wide accumulated risk exposures and establishes the connections to business planning by placing constraints on risk taking decisions.

Limits are established for the most important drivers of risk at the Group level and express the maximum level of allowable exposure per risk driver. At the highest level, risk limits are approved by the Board of Directors. Monitoring of the Group position against these limits is included in regular reporting to the Board of Directors or one or more of the Board Committees.

Business Distribution

Our business is produced principally through brokers and reinsurance intermediaries. The brokerage distribution channel provides us with access to an efficient, global distribution system without the significant time and expense which would be incurred in creating wholly-owned distribution networks. The brokers and reinsurance intermediaries typically act in the interest of insureds, ceding clients or insurers and are instrumental to our continued relationship with our clients.

The following tables show our gross written premiums by broker for each of our business segments for the twelve months ended December 31, 2021, 2020 and 2019:

Reinsurance	Twelve Months Ended December 31, 2021		Twelve Months Ended December 31, 2020		Twelve Months Ended December 31, 2019	
	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total
	(\$ in millions, except for percentages)					
Aon Corporation	\$ 465.4	29.1 %	\$ 358.0	21.6 %	\$ 311.9	21.0 %
Marsh & McLennan Companies, Inc.	449.8	28.2	358.7	21.7	301.5	20.3
Willis Group Holdings, Ltd.	282.7	17.7	283.4	17.1	278.7	18.8
Others ⁽¹⁾	399.1	25.0	656.3	39.6	593.4	39.9
Total	\$ 1,597.0	100.0 %	\$ 1,656.4	100.0 %	\$ 1,485.5	100.0 %

⁽¹⁾ 2020 includes gross written premium of \$334.8 million related to CGB DS; (2019 —\$312.5 million).

Insurance	Twelve Months Ended December 31, 2021		Twelve Months Ended December 31, 2020		Twelve Months Ended December 31, 2019	
	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total	Gross Written Premiums	% of Total ⁽¹⁾
	(\$ in millions, except for percentages)					
Marsh & McLennan Companies, Inc.	\$ 238.6	10.2 %	\$ 211.5	10.4 %	\$ 165.6	8.5 %
Aon Corporation	215.8	9.2	226.7	11.1	147.7	7.5
Ryan Specialty	214.9	9.2	151.7	7.4	111.6	5.7
Brown & Brown Inc	131.5	5.6	122.1	6.0	124.9	6.4
Euclid	121.1	5.2	29.3	1.4	41.0	2.1
AmWINS Group Inc	105.7	4.5	74.6	3.7	71.4	3.6
Willis Group Holdings, Ltd.	94.6	4.0	103.1	5.0	76.1	3.9
CRC Swett	77.9	3.3	82.2	4.0	76.8	3.9
Arthur J Gallagher (UK) Limited	73.3	3.1	62.0	3.0	52.5	2.7
Coastal Insurance Underwriters, Inc	70.1	3.0	77.3	3.8	61.0	3.1
Lockton Inc	61.2	2.6	59.3	2.9	51.4	2.6
Health Plan Intermediaries Holdings	28.0	1.2	72.0	3.5	14.5	0.7
Others	908.7	38.9	\$ 770.3	37.8	\$ 962.3	49.3
Total	\$ 2,341.4	100.0 %	\$ 2,042.1	100.0 %	\$ 1,956.9	100.0 %

⁽¹⁾ The 2019 prior period is re-presented to ensure consistency and replicate the current year breakdown for the addition of new material brokers.

Claims Management

We have a staff of experienced claims professionals organized into insurance and reinsurance teams which are managed separately, but operate under a global structure designed to achieve consistency and efficiencies across all lines of business. We have developed processes and internal business controls for identifying, tracking and settling claims, and authority levels have been established for all individuals involved in the reserving and settlement of claims.

The key responsibilities of our claims management departments include:

- processing, managing and resolving reported insurance or reinsurance claims efficiently and accurately to ensure the proper application of intended coverage, reserving in a timely fashion for the probable ultimate cost of both indemnity and expense and making timely payments in the appropriate amount on those claims for which we are legally obligated to pay;
- selecting appropriate counsel and experts for claims, manage claims-related litigation and regulatory compliance;
- contributing to the underwriting process by collaborating with underwriting teams and senior management in terms of the evolution of policy language and endorsements and providing claim-specific feedback and education regarding claims activity; and
- contributing to the analysis and reporting of financial data and forecasts by collaborating with the finance and actuarial functions relating to the drivers of actual claim reserve developments and potential for financial exposures on known claims.

On those accounts where it is applicable and permitted, a team of in-house claims professionals oversees and regularly audits claims handled under outsourcing agreements and manages those large claims and coverage issues on referral as required under the terms of those agreements.

Senior management receives a regular report on the status of our reserves and settlement of claims. We recognize that fair interpretation of our reinsurance agreements and insurance policies with our customers, and timely payment of valid claims, are a valuable service to our clients and enhance our reputation. Under the terms of the LPT with Enstar, the Enstar subsidiary will assume claims control of the applicable business upon closing of the transaction and entrance into an administrative services agreement. The transaction will result in certain operational risks for the Company, including in respect of claims management. For a description of the risks, refer to Item 3, “Risk Factors — Risks Related to Our Business — We rely on the execution of internal processes to maintain our operations and the operational risks that are inherent to our business, including those resulting from fraud or employee errors or omissions, may result in financial losses” and for a description of the transaction, refer to Item 5, “Operating and Financial Review and Prospects — Operating Results — Strategic Initiatives”

Reserves

Under U.S. Generally Accepted Accounting Principles (“U.S. GAAP”) and applicable insurance laws and regulations in the countries where we operate, we are required to establish loss reserves for the estimated unpaid portion of the ultimate liability for losses and loss expenses under the terms of our policies and agreements with our insured and reinsured customers. The process of estimating these reserves involves a considerable degree of judgment and, as of any given date, is inherently uncertain. For a full discussion regarding our loss and loss expenses reserving process, refer to Item 5, “Operating and Financial Review and Prospects — Critical Accounting Estimates — Reserving Approach” and, in connection with the risks associated therewith, Item 3D, “Risk Factors — Insurance Risks — Our financial condition and operating results may be adversely affected if actual claims exceed our loss reserves.”

Investments

Our investment strategy is focused on delivering stable investment income and total return through all market cycles while maintaining appropriate portfolio liquidity and credit quality to meet the requirements of our customers, rating agencies and regulators. To enhance investment returns where possible, we tactically adjust the duration of the investment portfolio and asset allocation taking into account the average liability duration of our reinsurance and insurance risks and our views of interest rates, the yield curve, credit spreads and markets for different assets.

As at December 31, 2021, we maintained a Group-Level management Investment Committee that establishes Group investment policy and guidelines and supervises our investment activity, in accordance with the investment plan, which includes the investment strategy, for the Company as determined by the Board. The Investment Committee regularly monitors our overall investment results and performance against our investment objectives and guidelines. These guidelines specify minimum criteria on the overall credit quality and liquidity characteristics of the portfolio, and include limitations on the size of

certain holdings and restrictions on purchasing certain types of securities. The Investment Committee and other members of management review our investment performance and assess credit and market risk concentrations and exposures to issuers. We follow an investment strategy designed to emphasize the preservation of capital and provide sufficient liquidity for the prompt payment of claims.

For additional information concerning our investments, refer to Item 5, “Operating and Financial Review and Prospects”, Item 18, Notes 4 and 6 of our consolidated financial statements, “Investments,” and “Fair Value Measurements,” respectively. For additional information concerning Current Expected Credit Losses (“CECL”) on Investments, refer to Note 2(c) of our consolidated financial statements, “Basis of Preparation and Significant Accounting Policies — Accounting for Investments, Cash and Cash Equivalents.”

Competition

The insurance and reinsurance industries are mature and highly competitive. Competition varies significantly on the basis of product and geography. Insurance and reinsurance companies compete on the basis of many factors, including premium charges, general reputation and perceived financial strength, the terms and conditions of the products offered, ratings assigned by independent rating agencies, speed of claims payments, reputation and experience in the particular risk to be underwritten, quality of service, the jurisdiction where the reinsurer or insurer is licensed or otherwise authorized, capacity and coverages offered and various other factors. Increased competition could result in fewer submissions for our products and services, lower rates charged, slower premium growth and less favorable policy terms and conditions, any of which could adversely impact our growth and profitability.

We compete with major U.S., U.K., Bermudian, European and other international insurers and reinsurers and underwriting syndicates from Lloyd’s, some of which have longer operating histories, more capital and/or more favorable financial strength ratings than we do, as well as greater marketing, management and business resources. We also compete with capital market participants that create alternative products, such as catastrophe bonds, that are intended to compete with traditional reinsurance products.

For a further discussion on the risks related to competition in our industry, please refer to Item 3D, “Risk Factors — Strategic Risks — Competition and consolidation in the (re)insurance industry could reduce our growth and profitability.”

Ratings

Ratings by independent agencies are an important factor in establishing the competitive position of (re)insurance companies and are important to our ability to market and sell our products and services. Rating organizations continually review the financial positions of insurers, including us. As of the date of filing, the financial strength ratings of our Operating Subsidiaries were as follows:

Rating Agency	Rating	Rated Operating Subsidiary	Agency’s Rating Definition	Ranking of Rating
Standard & Poor’s Financial Services LLC (“S&P”)	A- (Strong - Stable outlook)	Aspen U.K., Aspen Bermuda, and AAIC*	Strong capacity to meet financial commitments but somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than those in higher-rated categories	The ‘A’ grouping is the third highest of ten major rating categories.
A.M. Best	A (Excellent) (Stable)	Aspen U.K., Aspen Bermuda, Aspen Specialty and AAIC	An excellent ability to meet ongoing insurance obligations	The ‘A’ grouping is the second highest of seven major rating categories.

**Note that Aspen Specialty does not maintain its own rating from S&P.*

These ratings reflect the respective opinions of S&P and A.M. Best regarding the ability of the relevant Operating Subsidiary to pay claims and are not evaluations directed to our investors or recommendations to buy, sell or hold our securities. These ratings are subject to periodic review by, and may be revised downward or revoked, at the sole discretion of, S&P and A.M. Best, respectively. Additionally, rating organizations may change their rating methodology, which could have a material impact on our financial strength ratings.

For a discussion of some potential risks relating to the ratings of our Operating Subsidiaries, refer to Item 3D, “Risk Factors — Strategic Risks — Our Operating Subsidiaries are rated and our Lloyd’s business benefits from a rating by one or more of A.M. Best and S&P and a decline in any of these ratings could adversely affect our standing among brokers and customers and cause our premiums and earnings to decrease” and “Risk Factors — Strategic Risks — We have experienced a ratings downgrade and there can be no assurance that we and our subsidiaries will not experience any further downgrades, which may result in an adverse effect on our business, financial condition and operating results.”

Regulatory Matters

General

The business of insurance and reinsurance is regulated in most countries, although the degree and type of regulation varies significantly from one jurisdiction to another. Compliance obligations are increasing in most jurisdictions as the focus on insurance regulatory controls has escalated in recent years, with particular emphasis on regulation of solvency, risk management and internal controls. The discussion below summarizes the material laws and regulations applicable to our Operating Subsidiaries and, where relevant, Peregrine. Our companies have met or exceeded the solvency margins and ratios applicable to them under relevant laws and regulations as at December 31, 2021.

Group Supervision

The Bermuda Monetary Authority (the “BMA”) acts as the group supervisor of the Aspen Group and has named Aspen Bermuda as the designated insurer. The Insurance Act and related group supervision regulations (collectively the “Group Supervision Regime”) set out provisions regarding group supervision and the responsibilities of the designated insurer. The Group Supervision Regime is in addition to the regulation of the Company’s various Operating Subsidiaries in their local jurisdictions.

As the group supervisor, the BMA performs a number of functions including: (i) coordinating the gathering and dissemination of relevant or essential information for going concern or emergency situations; (ii) conducting ongoing supervisory reviews and assessments of the Aspen Group’s financial position and governance systems; (iii) assessing the Aspen Group’s position against the key areas of focus for the BMA, including compliance with the rules on solvency, corporate governance, risk management and internal control processes, as well as monitoring intra-group transactions; (iv) convening and conducting supervisory colleges with other supervisory authorities that have regulatory oversight of entities within the Aspen Group; and (v) coordinating any enforcement action that may need to be taken against the Aspen Group or any member of the Aspen Group. As the designated insurer, Aspen Bermuda is required to facilitate and maintain compliance by the Aspen Group with the Insurance Act and the Group Supervision Regime.

Annual and Quarterly Filings. On an annual basis, the Aspen Group is required to submit to the BMA: (i) a group statutory financial return; (ii) audited group financial statements including notes to the financial statements, in accordance with GAAP standards (“Group Financial Statements”); and (iii) a group capital and solvency return, which includes the Group Bermuda Solvency Capital Requirement (“BSCR”), a risk-based capital adequacy model, and associated schedules, including, amongst others, a Group Solvency Self-Assessment (“GSSA”), a Financial Condition Report (the “FCR”) and an opinion of a BMA approved Group Actuary on the economic balance sheet technical provisions. In addition, the Aspen Group files quarterly group financial returns with the BMA. The GSSA is a self-assessment of our risk and solvency requirements that allows the BMA to obtain our view of the capital resources required to achieve our business objectives and to assess our governance, risk management and controls surrounding this process. The Group Financial Statements are published by the BMA on its website and the FCR is published on our public website.

Group Minimum Solvency Margin and Group Enhanced Capital Requirements. Aspen Holdings must ensure that the Aspen Group’s statutory assets exceed the amount of its statutory liabilities by the aggregate minimum margin of solvency of each qualifying member of the insurance group. A member is a qualifying member if it is subject to solvency requirements in the jurisdiction in which it is registered.

In addition, every insurance group must maintain available statutory capital and surplus in an amount equal to or exceeding its Enhanced Capital Requirement (“ECR”). The ECR is determined either by reference to the BSCR model or an approved internal capital model. The Aspen Group currently relies on the BSCR model to establish its ECR. The BMA also expects insurance groups to operate at or above a group Target Capital Level (“TCL”), which the BMA has set at 120% of the group ECR. The Aspen Group holds capital in excess of its TCL as at December 31, 2021. While an insurance group is not currently required to maintain its statutory capital and surplus at this level, the TCL serves as an early warning tool for the BMA and failure to maintain statutory capital at least equal to the TCL will result in additional reporting requirements and enhanced regulatory monitoring, as well as the submission of a remediation plan to restore capital above the TCL.

Bermuda

Aspen Bermuda is licensed as a Class 4 insurer and is subject to the Insurance Act, which imposes solvency and liquidity standards as well as auditing and reporting requirements on Bermuda insurers and reinsurers, and it empowers the BMA to supervise, investigate, require information and intervene in the affairs of Bermuda registered insurance companies. There are a

number of remedial actions the BMA can take to protect the public interest if it determines that a Bermuda insurer or reinsurer may become insolvent or that a breach of the Insurance Act or of a registration condition has occurred or is about to occur.

In addition to requiring the appointment of a principal representative in Bermuda, the appointment of an independent auditor, the appointment of a loss reserve specialist and the filing of various financial statements and returns, significant provisions of the Insurance Act applicable to Aspen Bermuda include:

Enhanced Capital Requirements. Similar to the Group requirements, in order to minimize the risk of a shortfall in capital arising from an unexpected adverse deviation, the BMA expects Class 4 insurers such as Aspen Bermuda to maintain a TCL equal to 120% of its ECR. As at December 31, 2021, Aspen Bermuda holds capital in excess of its TCL.

Minimum Solvency Margin and Minimum Liquidity Ratio. Aspen Bermuda is also required to comply with a minimum solvency margin and minimum liquidity ratio in respect of its business. The minimum solvency margin is the greater of: (i) \$100,000,000; or (ii) 50% of net written premiums (being gross written premiums less any premiums ceded (not exceeding 25% of gross premiums)) in its current financial year; or (iii) 15% of net losses and loss expense provisions and other insurance reserves; or (iv) 25% of the ECR reported at the end of its relevant year. The minimum liquidity ratio requires that the value of relevant assets not be less than 75% of the amount of relevant liabilities.

Restrictions on Dividends, Distributions and Reduction of Capital. Aspen Bermuda may not declare or pay any dividends during any financial year if it would cause the insurer to fail to meet its relevant solvency margins, enhanced capital requirements or liquidity ratio, and an insurer which fails to meet its relevant margins on the last day of any financial year may not, without the approval of the BMA, declare or pay any dividends during the next financial year. In addition, as a Class 4 insurer, Aspen Bermuda may not in any financial year pay dividends which would exceed 25% of its total statutory capital and surplus, as shown on its statutory balance sheet in relation to the previous financial year, unless it files with the BMA a solvency affidavit at least seven days in advance of payment. Further, Aspen Bermuda must obtain the prior approval of the BMA before reducing by 15% or more its total statutory capital as set out in its previous year's financial statements.

The Insurance Amendment (No. 2) Act 2018 amended the Insurance Act to provide for the prior payment of unsecured policyholders' liabilities ahead of general unsecured creditors in the event of the liquidation or winding up of an insurer. The amendments provide among other matters that, subject to certain statutorily preferred debts, the insurance debts of an insurer must be paid in priority to all other unsecured debts of the insurer. Insurance debt is defined as a debt to which an insurer is or may become liable pursuant to an insurance contract excluding debts owed to an insurer under an insurance contract where the insurer is the person insured.

In addition, our Bermuda companies, including Aspen Holdings and Aspen Bermuda, must comply with the provisions of the Bermuda Companies Act 1981, as amended (the "Companies Act"), regulating the payment of dividends and distributions. A Bermuda company may not declare or pay a dividend or make a distribution out of contributed surplus if there are reasonable grounds for believing that: (i) the company is, or would after the payment be, unable to pay its liabilities as they become due; or (ii) the realizable value of the company's assets would thereby be less than its liabilities.

Peregrine

Special Purpose Insurers and Segregated Account Companies. Peregrine is registered as a special purpose insurer ("SPI") under the Insurance Act and licensed to carry on special purpose business. Special purpose business is defined under the Insurance Act as insurance business under which an insurer fully collateralizes its liabilities to the persons insured, in the forms contemplated by the Insurance Act.

Unlike other (re)insurers, SPIs are fully funded to meet their (re)insurance obligations and are deemed "bankruptcy remote". As a result, the application and supervision processes are streamlined to facilitate the transparent structure. SPIs are required to file electronic statutory financial returns and the BMA has the discretion to modify such insurer's statutory filings requirements under the Insurance Act. Like other (re)insurers, the principal representative of an SPI has a duty to inform the BMA in relation to solvency matters, where applicable.

Segregated Account Companies. Peregrine is also registered as segregated accounts company under the Bermuda Segregated Accounts Companies Act 2000, as amended. As a segregated accounts company, Peregrine is required to segregate the assets and liabilities linked to their respective segregated accounts from the assets and liabilities linked to their other respective segregated accounts and from their general account assets and liabilities. The segregated account representative of a segregated accounts company has the duty to inform the Registrar of Companies in relation to solvency matters and non-compliance, where applicable.

Economic Substance

Parent, the Company and certain of our Bermuda-domiciled subsidiaries are also subject to the Economic Substance Act 2018, as amended, and the Economic Substance Regulations 2018, as amended (together the “ESA”). The ESA was enacted to demonstrate Bermuda’s commitment to comply with international standards with respect to cooperation for tax purposes and to ensure that Bermuda does not facilitate the use of structures which attract profits, but which do not reflect real economic activity within Bermuda. The ESA provides that a registered entity other than an entity which is resident for tax purposes in certain jurisdictions outside Bermuda (“non-resident entity”) that carries on as a business any one or more of the “relevant activities” referred to in the ESA must comply with economic substance requirements. The list of “relevant activities” includes carrying on any one or more of the following activities: banking, insurance, fund management, financing, leasing, headquarters, shipping, distribution and service center, intellectual property and holding entities. Under the ESA, if an entity is engaged in one or more “relevant activities”, it is required to maintain a substantial economic presence in Bermuda and to comply with the economic substance requirements set forth in the ESA. An entity will comply with those economic substance requirements if it: (a) is managed and directed in Bermuda; (b) undertakes “core income generating activities” (as may be prescribed under the ESA) in Bermuda in respect of the relevant activity; (c) maintains adequate physical presence in Bermuda; (d) has adequate senior executives, employees or other persons in Bermuda with suitable qualifications; and (e) incurs adequate operating expenditure in Bermuda in relation to the relevant activity undertaken by it.

The ESA requires entities subject to it to make annual filings with the Bermuda Registrar of Companies to demonstrate the economic substance of the entity’s activities and business in Bermuda. Companies that are licensed to and carry on insurance as a relevant activity are generally considered to operate in Bermuda with adequate substance, with respect to their insurance business, if they comply with the existing provisions of (a) the Companies Act relating to corporate governance; and (b) the Insurance Act, that are applicable to the economic substance requirements, and the Registrar will have regard to such companies’ compliance with the Insurance Act (in addition to compliance with the Companies Act) in his assessment of compliance with the economic substance requirements. For those Aspen entities subject to the ESA, we expect that the filings will continue to meet the ESA requirements.

Privacy Laws

The Bermuda Personal Information Protection Act 2016 (PIPA) regulates how any individual, entity or public authority may use personal information. PIPA reflects a set of internationally accepted privacy principles and good business practices for the use of personal information. Although PIPA was passed on July 27, 2016, the sections that are currently in effect are limited to those that relate to the establishment and appointment of the PIPA commissioner (PIPA Commissioner), the hiring of the PIPA Commissioner’s staff, and the general authority of the PIPA Commissioner to inform the public about PIPA. Following the PIPA Commissioner’s appointment, effective January 20, 2020 the PIPA Commissioner’s office has begun communications with the public and stakeholders regarding full implementation of PIPA. On October 30, 2020 the PIPA Commissioner issued guidance regarding privacy safeguarding of personal information by public companies, however, PIPA’s remaining provisions have not been fully implemented and regulations under PIPA have not yet been provided.

In addition, the Insurance Amendment Act of 2020 became operative in August 2020 and requires entities regulated by the BMA to provide notice to the BMA of certain cybersecurity events. As a result, the BMA’s Insurance Sector Operational Cyber Risk Management Code of Conduct (Cyber Risk Code), which includes a series of minimum and recommended cybersecurity standards, became effective on January 1, 2021. The Cyber Risk Code is designed to promote the stable and secure management of information technology systems of regulated entities and requires that all registrants implement their own technology risk programs, determine what their top risks are and develop an appropriate risk response. This requires all registrants to develop a cyber risk policy which is to be delivered pursuant to an operation cyber risk management program and appoint an appropriately qualified member of staff or outsourced resource to the role of Chief Information Security Officer. The role of the Chief Information Security Officer is to deliver the operational cyber risk management program.

In November 2021, the board of directors of Aspen Bermuda approved a cyber risk policy. The board of directors of Aspen Bermuda will review and approve such policy on at least an annual basis. The BMA will assess a registrant’s compliance with the Cyber Risk Code in a proportionate manner relative to the nature, scale and complexity of its business. While it is acknowledged that some registrants will use a third party to provide technology services and that they may outsource their IT resources (for example, to an insurance manager where applicable), when so outsourced, the overall responsibility for the outsourced functions will remain with the registrant’s board of directors. Failure to comply with the requirements of the Cyber Risk Code will be taken into account by the BMA in determining whether a registrant is conducting its business in a sound and prudent manner as prescribed by the Bermuda Insurance Act and may result in the BMA exercising its powers of intervention and investigation.

U.K. and E.U. Regulation

General. Aspen U.K. is authorized by the Prudential Regulation Authority (“PRA”) to effect and carry out (re)insurance contracts in the U.K. in classes of general (non-life) business and is regulated by both the PRA with respect to prudential matters and by the FCA with respect to the conduct of its business. AMAL is authorized by the PRA and regulated by the PRA with respect to prudential matters and the FCA with respect to the conduct of its business. Aspen UK Syndicate Services Limited (AUKSSL) is authorized and regulated by the FCA with respect to prudential and conduct of business.

Prior to the United Kingdom’s decision to withdraw from the E.U. customs union and single market, an insurance company with authorization to write insurance business in the U.K. could provide cross-border services in other member states of the EEA subject to having notified the appropriate EEA host state regulator via the PRA prior to commencement of the provision of services and the appropriate EEA host state regulator not having good reason to refuse consent. Aspen U.K. had notified the Financial Services Authority (the PRA/FCA’s predecessor) of its intention to write insurance and reinsurance business in all other EEA member states. As a result, prior to Brexit, Aspen U.K. was licensed to write insurance business under the “freedom of services” within all EEA member states (freedom of services and freedom of establishment rights together, “Passporting Rights”) contained in the European Council’s Insurance Directives. Also prior to Brexit, as a general insurer, Aspen U.K. was also able to carry out reinsurance business on a cross-border services basis across the EEA.

Brexit Transition Update

As a result of Brexit concluding on December 31, 2020, Aspen U.K. lost its EEA financial services Passporting Rights. However, AMAL continues to be able to access the EEA market through Lloyd’s Brussels. Lloyd’s Brussels commenced underwriting all non-life risks from non-U.K. EEA countries from January 1, 2019. Our business written through Lloyd’s Brussels stamp 5383 is 100% reinsured by Syndicate 4711.

In addition, Aspen Bermuda established a branch in Zurich, Switzerland in 2019 to write property and casualty reinsurance with inception dates of January 1, 2020 and later.

In 2020, Aspen U.K. contacted all thirty EEA regulators where Aspen U.K. had written policies to advise them that Aspen U.K. had ceased writing insurance business in their jurisdiction, and that Aspen U.K. would not actively underwrite new insurance risks, renew risks, or make mid-term adjustments to existing policies in their jurisdiction. Aspen U.K. requested their permission to continue to collect premiums and pay claims (including those that arise in the future) without requiring local authorization.

Confirmation has been received from twenty-four EEA regulators that Aspen U.K. is permitted to continue collecting premium and paying claims under temporary transitional arrangements; where such transitional arrangements are limited in time, Aspen U.K. is taking action so that regulated activities in respect of impacted policies are completed within the scope of such arrangements. Four EEA regulators have not agreed to Aspen U.K.’s request, of which only Sweden has live policies and claims outstanding. Action (including novation) is being taken and further options evaluated to ensure that valid claims on Swedish policies can be settled. Aspen U.K. did not receive a response from two of the regulators, however Aspen U.K. does not have any live policies or claims in these jurisdictions. In 2021, Aspen U.K. wrote to all EEA regulators who have requested further information (e.g. run-off plans) to comply with their temporary transitional arrangements.

For more information on the uncertainty surrounding the implementation and effect of Brexit, refer to Item 3D, “Risk Factors - Regulatory Risks - The United Kingdom’s withdrawal from the E.U. could adversely impact our business, results of operations and financial condition”.

Solvency Requirements. Aspen U.K. and AMAL (by virtue of being a managing agent at Lloyd’s) are required to meet economic risk-based solvency requirements that were originally set out by the E.U. directive covering the capital adequacy, risk management and regulatory reporting for insurers (the “Solvency II Directive”). The Solvency II Directive, together with European Commission ‘delegated acts’ and guidance issued by the European Insurance and Occupational Pensions Authority (“EIOPA”), has been adopted by the PRA in the U.K. and sets out classification and eligibility requirements, including the features which capital must display in order to qualify as regulatory capital.

Despite the Brexit transitional period coming to an end, the European Union (Withdrawal) Act 2018, as amended, has transposed all applicable direct E.U. legislation into domestic U.K. law, thus ensuring the continuing application of the regulatory framework brought about by the Solvency II Directive under the U.K.’s financial services regulatory regime.

In June 2020, the U.K. government revealed plans to review the Solvency II Directive, together with the associated regulations and the European Commission delegated acts (“Solvency II Review”) to ensure that it is properly tailored to take account of the structural features of the U.K. insurance sector, with Her Majesty’s Treasury (“HM Treasury”) publishing a ‘Call for Evidence’ in October 2020, outlining the motives behind the review and inviting feedback on various areas, including, amongst others, the standard formula for capital requirements, the risk margin, the matching adjustment and reporting requirements. In early July 2021, the HM Treasury published the response to the Solvency II Review along with its next steps.

The response suggest that the Solvency II Directive could be enhanced by being more effective and efficient, including the removal of certain requirements. The HM Treasury report also considers that material change might create future discrepancy between EIOPA and PRA regimes. The PRA is also undertaking a review of the Solvency II Directive so that the U.K. can develop an appropriate post-Brexit replacement. On July 20, 2021, the PRA launched a quantitative impact study (“QIS”) for its review of the Solvency II Directive. The QIS, which contains both quantitative studies and qualitative questions, is focused on three main areas: a) calculation of the matching adjustment, b) risk margin, and c) transitional measures on technical provision. The scenarios tested in the QIS are designed to gather relevant data to allow the modelling of a range of potential policy options and do not represent reform proposals or decisions. The HM Treasury published a second consultation on the Future Regulatory Framework Review in November 2021 and jointly with the PRA will evaluate the 2021 quantitative impact study outcomes, in order to comprehend which combination of improvements would best meet the U.K government’s objectives and what the total effect would be. The Future Regulatory Framework Review was established to determine how the financial services regulatory framework should adapt to the U.K.’s new position outside of the E.U. and to address how the framework is fit for the future. It looks to ensure that the government establishes a coherent, agile and internationally respected approach to financial services regulation in the U.K. The consultation period closed on February 9, 2022. On April 28, 2022, the HM Treasury announced a third consultation period for Solvency II, which will inform the design of the final reform package. The consultation period will close on July 21, 2022.

In January 2022, the U.K. Parliament, via its Industry and Regulators Committee, launched an inquiry and with it a ‘Call for Evidence’ into the U.K. insurance and reinsurance industry and, specifically, into the regulation of the London market, the U.K.’s market for commercial and wholesale specialty risks. The purpose of the inquiry was to “explore the extent to which regulatory policy is well-designed and proportionately applied and the possibilities for optimizing policy following Brexit.” The inquiry will further consider the roles of the current regulators, such as the Financial Conduct Authority and the Bank of England, as well as the appropriateness of regulation. The deadline for written submissions was February 11, 2022.

On September 22, 2021, the European Commission published its proposals (2021/0295(COD)) (“EC Proposals”) for amendments to the Solvency II Directive. The EC Proposals relate to proportionality, quality of supervision, reporting, long-term guarantee measures, macro-prudential tools, sustainability risks, group and cross-border supervision. Such proposals include a new category of low risk profile reinsurers benefiting from more proportionate rules, improvement to the quality of supervision, reporting requirements for low-risk profile undertakings, and an increased percentage of the risk-adjusted credit spread. Further proposals also include giving national supervisory authorities tools to prevent the materialization of risks for financial stability in insurance markets, and changing the application of the regime to insurance holding companies and mixed financing holding companies. The EC Proposals also place an emphasis on sustainability risks, and proposes a requirement on insurers to identify material exposure to climate change risks, with EIOPA being given additional mandates in relation to sustainability risk. As a result of the EC Proposals the capital requirements may be set to change through reforms to reduce the risk margin provision that insurers must hold against certain long-term business and to lower the capital charges for equities that are treated as “long-term”. These amendments to the Solvency II Directive may have a bearing on how the PRA and the HM Treasury consider their regulatory analysis in the U.K., going forward.

The Solvency II Directive requires insurers to maintain minimum Solvency Capital Requirement (“SCR”), which is calculated by an approved internal capital model or by a standard formula prescribed by the Solvency II Directive. Aspen U.K. has received approval from the PRA, and AMAL has received approval from Lloyd’s, to use an agreed internal model to calculate their respective SCR (the “Internal Model”). Aspen U.K. and AMAL are required to ensure that the Internal Model operates properly on a continuous basis and that it continues to comply with the “Solvency Capital Requirements - Internal Models” provisions as set out in the PRA rulebook and the Solvency II Directive, and, with respect to AMAL, within the Lloyd’s regulatory framework, including the principles for doing business at Lloyd’s. If Aspen U.K. fails to comply with these requirements, the PRA may revoke its approval for Aspen U.K. to use the Internal Model. In addition, failure to adequately capture areas of risk (including as may be identified in the Own Risk and Solvency Assessment (“ORSA”)) in the calculation of the SCR may result in the PRA applying a capital add-on to the SCR calculated by the Internal Model. Aspen U.K. must also maintain the ability to calculate its SCR using the Standard Formula as prescribed by Solvency II.

Aspen U.K. and AMAL are required to maintain a minimum margin of solvency equivalent to their SCR at all times, the calculation of which depends on the type and amount of insurance business written as well as reserve, credit, market and operational risks. The financial resources maintained in support of the SCR must be adequate, both as to amount and quality, to ensure that there is no significant risk that an entity’s liabilities cannot be met as they fall due. If the PRA with respect to Aspen U.K. or Lloyd’s with respect to AMAL, considers that there are insufficient capital resources, it can impose additional requirements in relation to the amount and quality of the resources it considers necessary. Any failure to comply with such requirements introduced by regulators can result in intervention by regulators or imposition of sanctions, which could have an adverse effect on Aspen U.K. and/or AMAL’s results and financial position.

Solvency II Regime Reports and Returns. Under the Solvency II Directive regime, Aspen U.K. is required to submit quarterly and annual filings with the PRA, including an annual Solvency and Financial Condition Report (“SFCR”), which must also be posted on Aspen’s website. Aspen U.K. must submit an annual ORSA to the PRA. The ORSA report is produced annually and provides a summary of all of the activity and processes during the preceding year to assess and report on risks and ensure that our overall solvency needs are met at all times including a forward-looking assessment. It also explains the linkages between business strategy, business planning and capital and risk management processes. In 2021, the PRA granted Aspen U.K. a waiver for five years absolving it from the requirement to produce certain regulatory returns at the EEA-sub-group level due to Aspen Bermuda being subject to equivalent group supervision.

Restrictions on Dividend Payments. The company law of England and Wales prohibits English companies, including Aspen U.K., AMAL and AUL, from declaring dividends to their shareholders unless they have profits available for distribution. The determination of whether a company has profits available for distribution is based on its accumulated realized profits and other distributable reserves less its accumulated realized losses. While the U.K. insurance regulatory rules impose no statutory restrictions on a general insurer’s ability to declare a dividend, the PRA’s rules require each authorized insurance company within its jurisdiction to maintain its solvency margin at all times. Accordingly, Aspen U.K., AMAL and AUL may not pay a dividend if the payment of such dividend would result in their SCR coverage ratio falling below certain levels. In addition, any future changes regarding regulatory requirements, including those described above, may restrict the ability of Aspen U.K., AMAL and AUL to pay dividends in the future.

Brexit and the U.K. GDPR. Under the U.K. GDPR, companies not established in the U.K. but who process personal data in relation to the offering of goods or services to individuals in the U.K., or to monitor their behavior will be subject to the U.K. GDPR and will be required to appoint a data protection representative in the U.K., provided certain exceptions are not met. Otherwise, the requirements of the U.K. GDPR are virtually identical to those of the E.U. GDPR and as such, may lead to similar compliance and operational costs. For information on E.U. GDPR, refer to Item 3, “Risk Factors — Other Operational Risks — Evolving privacy and data security regulations could expose our business to reputational harm and cause losses.”

In addition, Brexit has implications for transfers of personal data between the U.K. and the E.U. and vice versa. Transfers of personal data from the U.K. to the E.U. are unrestricted and do not require additional safeguards since the U.K. has formally approved the adequacy of the E.U. and all 12 nations deemed adequate by the E.U. As regards transfers of personal data from the EEA to the U.K. under the terms of the Trade and Cooperation Agreement agreed between the E.U. and U.K. on December 24, 2020, such data flows remain unrestricted until the end of June 2021, provided the U.K. makes no substantive changes to its data protection laws. During this “bridging period”, the European Commission will assess the adequacy of the U.K. from a data protection law perspective. If the European Commission were to grant the U.K. an “adequacy decision”, transfers of personal data from the EEA to the U.K. would continue unrestricted and would not require any additional safeguards. To the extent the European Commission does not grant the U.K. an adequacy decision as at the end of the bridging period, data transfer mechanisms will need to be put in place to legitimize the transfer of personal data from the EEA to the U.K.

Branch Regulations

General

Aspen U.K. and Aspen Bermuda are required to meet local capital requirements and make required local regulatory filings in connection with their respective branch office operations.

Switzerland

In 2019, ABL established a branch in Zurich, Switzerland to write property and casualty reinsurance and specialty reinsurance with inception dates from January 1, 2020. A branch that writes only reinsurance is not currently subject to supervision under the Insurance Supervision Act (Switzerland) by the Financial Markets Supervisory Authority (“FINMA”).

Aspen U.K. established a property and casualty reinsurance branch in Zurich, Switzerland in 2007. In 2010, Aspen U.K. established an insurance branch in Zurich, Switzerland, which was regulated by FINMA pursuant to the Insurance Supervision Act (Switzerland). In 2017, Aspen U.K. discontinued writing insurance business via the insurance branch in Switzerland. In 2020, Aspen U.K. ceased writing reinsurance via the reinsurance branch in Switzerland, however, FINMA maintains supervision over the Aspen U.K. branch while the business is in run off.

Singapore

In February 2021, Aspen Bermuda received approval from the Monetary Authority of Singapore (“MAS”) and established a reinsurance branch in Singapore. The activities of this branch are regulated by the MAS pursuant to The Insurance Act of Singapore. Aspen Bermuda is also regulated by the Accounting and Corporate Regulatory Authority (“ACRA”) as a foreign company in Singapore.

Aspen U.K. has a reinsurance branch in Singapore that is regulated by the MAS and pursuant to The Insurance Act of Singapore and by ACRA as a foreign company in Singapore. Action was taken earlier in Q2 2021 to transition the business currently written through our Aspen U.K. Singapore branch to the newly established Aspen Bermuda branch in Singapore.

AMAL set up a subsidiary company, Aspen Singapore Pte. Ltd. (“ASPL”), to access insurance business in Singapore and regulatory approval for ASPL to act as an intermediary was received from MAS in 2015. ASPL was incorporated by ACRA in 2015 as a local company regulated by the Companies Act of Singapore. ASPL went into run-off in September 2021.

Canada

Aspen U.K. established a Canadian branch in 2006 whose activities are regulated by the Office of the Superintendent of Financial Institutions (“OSFI”). OSFI is the federal regulatory authority that supervises Canadian and non-Canadian insurance companies operating in Canada pursuant to the Insurance Companies Act (Canada). In addition, the branch is subject to the laws and regulations of each of the provinces and territories in which it is licensed.

Australia

In 2008, Aspen U.K. received authorization from the Australian Prudential Regulation Authority (“APRA”) to establish a branch in Australia. The activities of the Australian branch are regulated by APRA pursuant to the Insurance Act of Australia 1973. Aspen U.K. is also registered by the Australian Securities and Investments Commission as a foreign company in Australia under the Corporations Act of Australia 2001.

In 2021, the Company formed Aspen Australia Service Company Pty Limited (“AASC”), a coverholder which will underwrite reinsurance business on behalf of Syndicate 4711 at Lloyd’s with effect from April 1, 2022. Aspen U.K.’s Australia branch ceased underwriting new business as of the same date, and the Company intends for the Aspen U.K. Australia branch to go into run-off in accordance with APRA regulation.

For additional information on our branches, refer to Item 18, Note 20(a) of our consolidated financial statements, “Commitments and Contingent Liabilities - Restricted Assets.”

Other Regulated Firms

AUKSSL (previously APJ Services Limited) is authorized and regulated by the FCA and is subject to a separate prudential regime and other requirements for insurance intermediaries under the FCA Handbook.

Lloyd’s Regulation

General. The operations of Syndicate 4711 are subject to regulation and supervision of the PRA, FCA and the Council of Lloyd’s. AMAL is the managing agent for Syndicate 4711 and AUL provides underwriting capacity to Syndicate 4711 and is a Lloyd’s corporate member. The FCA and PRA both regulate insurers, insurance intermediaries and Lloyd’s itself. Lloyd’s establishes its own bylaws and regulations, including requirements made under those bylaws for all managing agents to maintain that are designed to meet applicable regulatory requirements.

Solvency Requirements. Underwriting capacity of a member of Lloyd’s must be supported by providing a deposit (referred to as “Funds at Lloyd’s”) in the form of cash, securities or letters of credit in an amount determined in accordance with Lloyd’s requirements and the Solvency II regime. The amount of such deposit is calculated for each member through the completion of an annual capital adequacy exercise. Under these requirements, Lloyd’s must demonstrate that each member has sufficient assets to meet its underwriting liabilities plus a required solvency margin.

Intervention Powers. The Council of Lloyd’s has wide discretionary powers to regulate members’ underwriting at Lloyd’s. It may, for instance, change the basis on which syndicate expenses are allocated or vary the Funds at Lloyd’s or the investment criteria applicable to the provision of Funds at Lloyd’s. Exercising any of these powers might affect the return on an investment of the corporate member in a given underwriting year. Further, the annual business plans of a syndicate are subject to the review and approval by Lloyd’s.

Each member of Lloyd’s is required to contribute a percentage of that member’s underwriting capacity for the relevant year of account to the Lloyd’s central fund (the “Central Fund”). If a member of Lloyd’s is unable to pay its debts to policyholders, such debts may be payable by the Central Fund, which in many respects acts as an equivalent to a state guaranty fund in the U.S. If Lloyd’s determines that the Central Fund needs to be increased, it has the power to assess premium levies on current Lloyd’s members. The Council of Lloyd’s has discretion to call or assess up to an additional 5% of a member’s underwriting

capacity in any one year as a Central Fund contribution. Our syndicate capacity for the 2022 underwriting year is £900.0 million (2021 underwriting year was originally £565.0 million, uplifted to £725.0 million).

Lloyd's Brussels. Lloyd's Brussels is authorized and regulated by the NBB and regulated by the FSMA. Lloyd's Brussels is an authorized insurance company licensed to write non-life risks across the EEA and the U.K. and also maintains 19 branches across Europe. The use of Lloyd's Brussels provides AMAL with access to the European market to write non-life insurance risks.

Jersey Regulation

In 2010, we purchased APJ Jersey, a Jersey registered insurance company which is subject to the jurisdiction of the Jersey Financial Services Commission ("JFSC"). The JFSC sets the solvency regime for insurance companies under its jurisdiction. APJ Jersey holds funds in excess of the minimum requirement. APJ Jersey ceased underwriting new and renewal business in April 2020 and was placed into run-off in June 2020.

U.S. Regulation

General. Our U.S. operations are subject to extensive governmental regulation and supervision by the states and jurisdictions in which insurance entities operating in the U.S. are domiciled, licensed and/or eligible to conduct business. AAIC is licensed to write insurance on an admitted basis in all 50 U.S. states, the District of Columbia, Puerto Rico, Guam and the U.S. Virgin Islands. Aspen Specialty is licensed in North Dakota and is eligible to write surplus lines policies in all 50 U.S. states, Puerto Rico and the District of Columbia. Aspen U.K. and Syndicate 4711 are not licensed to write insurance on an admitted basis in any state in the U.S., but are alien insurers eligible to write surplus lines business in all 50 U.S. states, the District of Columbia, Puerto Rico and other U.S. jurisdictions based on their listing in the Quarterly Listing of Alien Insurers of the International Insurers Department ("IID") of the National Association of Insurance Commissioners ("NAIC"), the organization that works to promote standardization of best practices and assists state insurance regulatory authorities and insurers in the U.S. by promulgating model insurance laws and regulations for adoption by the states. However, model insurance laws and regulations are only effective when adopted by the states. Pursuant to IID requirements, Aspen U.K. and Syndicate 4711 have established a U.S. surplus lines trust fund to secure obligations under U.S. surplus lines policies. As of December 31, 2021, Aspen U.K.'s and Syndicate 4711's surplus lines trust fund was \$216.0 million.

The insurance laws and regulations of our U.S. subsidiaries' domiciliary states have the most significant impact on our U.S. operations as well as the lead state regulator of an insurance holding company system. AAIC is domiciled in Texas and Aspen Specialty is domiciled in North Dakota. Following the Merger, AAIC and Aspen Specialty became part of the Apollo Global Management Group holding company system. The lead state insurance regulator for the Apollo Global Management Group holding company system is the Iowa Insurance Division.

Generally, U.S. states regulate insurance holding companies to assure the fairness of inter-affiliate transactions, the propriety of dividends paid to corporate parents and the benefits of any proposed change of control transaction. States also regulate insurer solvency, accounting matters and risk management, as well as a range of operational matters, including authorized lines of business, permitted investments, policy forms and premium rates for admitted companies, maximum single policy risks, adequacy of reserves for losses and unearned premiums and maintenance of in-state deposits for the benefit of policyholders. To monitor compliance, state insurance departments perform periodic market conduct examinations and financial fitness examinations, and require the filing of annual and other reports relating to the financial condition of companies and other matters. Certain U.S. regulatory requirements are highlighted below.

Although the U.S. federal government does not directly regulate the insurance business, federal legislation and administrative policies in several areas can significantly affect the insurance business. The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") established the Federal Insurance Office (the "FIO") within the U.S. Department of the Treasury headed by a Director appointed by the Treasury Secretary. While currently not having a general supervisory or regulatory authority over the business of insurance, the Director of the FIO performs various functions with respect to insurance. The Director of the FIO has also submitted reports to the U.S. Congress on (i) modernization of U.S. insurance regulation (provided in December 2013) and (ii) the U.S. and global reinsurance market (provided in November 2013 and January 2015, respectively). Such reports could ultimately lead to changes in the regulation of insurers and reinsurers in the U.S. In addition, AAIC is a certified surety company approved by the U.S. Department of the Treasury and is subject to federal regulations related to Treasury certified sureties.

State Insurance Holding Company Acts. All U.S. states have laws regulating insurance holding company systems. These laws require insurance companies, which are formed and chartered in the state (referred to as "domestic insurers"), to register with the state department of insurance (referred to as their "domestic state or regulator") and file information concerning the

operations of companies within the holding company system that may materially affect the operations, management or financial condition of the insurers within the system. Insurance holding company regulations principally relate to (i) state insurance approval of the acquisition of domestic insurers, (ii) prior review or approval of certain transactions between the domestic insurer and its affiliates, and (iii) regulation of dividends made by the domestic insurer. All transactions within a holding company system affecting domestic insurers must be determined to be fair and reasonable.

As a result of the NAIC's Solvency Modernization Effort, which dates back to 2008, in 2014, the NAIC adopted the Corporate Governance Annual Disclosure Model Act, which has been enacted by our lead state of Iowa, as well as our domestic states of Texas and North Dakota. The model law requires insurers to make an annual confidential filing regarding their corporate governance policies. In addition, the NAIC adopted the Risk Management and Own Risk and Solvency Assessment Model Act ("ORSA"), which also has been adopted by Iowa, Texas and North Dakota. ORSA requires insurers to maintain a risk management framework and conduct an internal risk and solvency assessment of the insurer's material risks in normal and stressed environments. Many state insurance holding company laws, including those of Iowa, Texas and North Dakota, have also been amended to require insurers to file an annual confidential enterprise risk report with their lead state regulator, disclosing material risks within the entire holding company system that could pose an enterprise risk to the insurer.

State Dividend Limitations. Under Texas and North Dakota law, respectively, AAIC and Aspen Specialty may only pay dividends out of earned surplus as distinguished from contributed surplus. In addition, under Texas and North Dakota law, an insurance company's policyholder surplus after payment of a dividend must be reasonable in relation to its outstanding liabilities and adequate for its financial needs.

In addition, Texas and North Dakota law generally limit the ability of AAIC or Aspen Specialty to pay dividends above a specified level, without prior regulatory approval. Dividends or distributions in excess of specified level are deemed "extraordinary" and are subject to prior notice to and approval of the applicable state insurance regulator.

Aspen U.S. Holdings, Inc. ("Aspen U.S. Holdings") must also meet its own dividend eligibility requirements under Delaware corporate law in order to distribute any dividends received from AAIC. In particular, any dividend paid by Aspen U.S. Holdings must be declared out of surplus or net profits.

State Risk-Based Capital Regulations. U.S. insurers are subject to risk-based capital ("RBC") guidelines that provide a method to measure the total adjusted capital (statutory capital and surplus plus other adjustments) taking into account the specific risk characteristics of the insurer's investments and products. The risk-based capital requirement for property and casualty insurers measures: (i) underwriting risk, which is the risk of errors in pricing and reserves; (ii) asset risk, which is the risk of asset default for fixed assets and loss-in-market value for equity assets; (iii) credit risk, which is the risk of losses from unrecoverable reinsurance and the inability of insurers to collect agents' balances and other receivables; and (iv) off-balance sheet risk, which is primarily the risk created by excessive growth. The capital requirements for each risk category are determined by applying specified factors to assets, premiums, reserves and other items, with higher factors for items with greater underlying risk and lower factors for items with less risk. The formula is used by insurance regulators as an early warning tool to identify deteriorating or weakly capitalized companies for the purpose of initiating corrective company action or regulatory action. Insurers having less statutory surplus than required by the RBC model formula will be subject to varying degrees of regulatory action depending on the level of capital inadequacy. As of December 31, 2021, AAIC and Aspen Specialty exceeded the levels that would require company action or regulatory action.

Guaranty Fund Assessments and Residual Market Mechanisms. Most states require licensed insurance companies to participate in guaranty funds in order to provide funds for payment of losses for insurers which have become insolvent. Assessments are generally between 1% and 2% of annual premium written in the state. Some states also require licensed and admitted insurers to participate in various state residual market mechanisms whose goal is to provide affordability and availability of insurance to those clients who may not otherwise be able to obtain insurance, including, for example catastrophe insurance in high-risk areas. If losses exceed the funds, the pool is available to pay those losses. The pools have the ability to assess insurers to provide additional funds to the pool. The amounts of the assessment for each company are normally based upon the proportion of each insurer's (and in some cases the insurer's and its affiliates') written premium for coverages similar to those provided by the pool, and are frequently uncapped.

Cybersecurity Regulations. The Gramm-Leach-Bliley Act requires financial institutions to safeguard the confidentiality and security of nonpublic personal information. In 2017, new cybersecurity rules took effect for financial institutions, insurers and certain other companies supervised by the New York Department of Financial Services (the "NYDFS Cybersecurity Regulation"), such as AAIC, which is licensed in New York. The NYDFS Cybersecurity Regulation imposes significant regulatory requirements intended to protect the confidentiality, integrity and availability of information systems.

In 2017, the NAIC also adopted the Insurance Data Security Model Law (the “Cybersecurity Model Law”). The Cybersecurity Model Law requires insurers, insurance producers and other entities required to be licensed under state insurance laws to comply with certain requirements under state insurance laws, such as developing and maintaining a written information security program, conducting risk and overseeing the data security practices of third-party vendors. The Cybersecurity Model Law closely resembles the NYDFS Cybersecurity Regulation and has been adopted by several U.S. states; however, several states are developing and/or have enacted their own laws and regulations imposing obligations regarding the handling of personal data. For example, in 2018 California enacted the California Consumer Privacy Act (“CCPA”), which came into effect on January 1, 2020, and broadly regulates the collection, processing and disclosure of the personal information of California residents, imposes limits on the “sale” of personal information and grants California residents certain rights to, among other things, access and delete data about them in certain circumstances. CCPA also established a private right of action, with potentially significant statutory damages, whereby businesses that fail to implement reasonable security measures to protect against breaches of personal information could be liable to affected consumers. Additionally, California subsequently enacted the California Privacy Rights Act (“CPRA”), which amends the CCPA, imposing additional limitations and obligations with respect to covered businesses’ use and sharing of certain personal data. The CPRA will come into full effect in January 2023; compliance with CCPA/CPRA may increase the cost of providing services in California. Other states have considered – and some states have adopted – similar proposals.

Operations of Aspen U.K. and Syndicate 4711. As stated above, Aspen U.K. and Syndicate 4711, are eligible to write surplus lines business as alien, non-admitted insurers in all 50 U.S. states, the District of Columbia and other U.S. jurisdictions. Because Aspen U.K. and Syndicate 4711 are not licensed under the laws of any U.S. state, U.S. solvency regulation tools otherwise applicable to admitted insurers do not generally apply to them. However, Aspen U.K. and Syndicate 4711 are subject to federal and state incidental regulations in areas such as those pertaining to federal and state reporting related to terrorism coverage and post-disaster emergency orders.

Credit for Reinsurance. Aspen U.K. and Aspen Bermuda also provide reinsurance to U.S. cedants. In general, a U.S. domiciled ceding company that obtains reinsurance from a reinsurer that is licensed, accredited or approved by the jurisdiction in which the ceding company is domiciled is permitted to reflect in its statutory financial statements a credit in an aggregate amount equal to the liability for unearned premiums and loss reserves and loss expense reserves ceded to the reinsurer. Many jurisdictions also permit ceding companies to take credit on their statutory financial statements for reinsurance obtained from unlicensed or non-admitted reinsurers if certain prescribed security arrangements are made. Aspen U.K. and Aspen Bermuda have obtained approval of a multi-beneficiary trust arrangement that satisfies the credit for reinsurance requirements for their U.S. customers. Generally, the minimum trust fund amount is \$20.0 million plus an amount equal to 100% of a reinsurer’s U.S. reinsurance liabilities collateralized under this arrangement. Aspen Bermuda has obtained approval to post reduced collateral with respect to obligations owed to cedants domiciled in Florida, New York and North Dakota (i.e., 50% versus 100%).

Recent developments in U.S. and international laws are trending towards eliminating collateral requirements for alien reinsurers operating in non-domestic markets. The Dodd-Frank Act authorized the U.S. Department of the Treasury and the Office of the U.S. Trade Representative to negotiate covered agreements governing certain matters relating to insurance with foreign jurisdictions, including reinsurance collateral, group supervision and exchange of information between supervisory authorities. Such covered agreements could pre-empt state insurance laws. Pursuant to this authority, in September 2017, the U.S. federal authorities and the E.U. signed a covered agreement to address, among other things, group supervision and reinsurance collateral requirements and, in anticipation of Brexit, the U.S. and U.K. signed a covered agreement in December 2018 consistent with the U.S. and E.U. agreement. The U.S. also released a “Statement of the United States on the Covered Agreement with the European Union” (the “Policy Statement”) providing the U.S.’s interpretation of certain provisions in the E.U. agreement. In terms of reinsurance, both covered agreements eliminate collateral and local presence requirements for alien reinsurers that satisfy certain criteria, including being domiciled in a “reciprocal jurisdiction.” U.S. state regulators have until September 22, 2022 to adopt the reinsurance requirements for E.U. and U.K. reinsurers that meet the prescribed minimum conditions set forth in the covered agreements or state law imposing reinsurance collateral requirements may be subject to federal preemption. In 2019 the NAIC adopted additional revisions to its Credit for Reinsurance Model Law and Model Regulation (together, the “2019 Amended Credit for Reinsurance Model Act”) to conform to the reinsurance collateral elimination requirements of the covered Agreements. Texas and North Dakota adopted the 2019 Amended Credit for Reinsurance Model Act. The NAIC has approved Bermuda as a “reciprocal jurisdiction.” As of April 15, 2022, Aspen Bermuda has already been approved as a reciprocal jurisdiction reinsurer eligible for zero collateral in seventeen states and will seek additional approvals in the states and jurisdictions that enact the 2019 Amended Credit for Reinsurance Model Act.

Developing International Matters and Group Capital. In November 2019, the International Association of Insurance Supervisors (IAIS) adopted the Common Framework for the Supervision of Internationally Active Insurance Groups (ComFrame). ComFrame is applicable to entities that meet the IAIS’s criteria for internationally active insurance groups (IAIGs) and are designated as such. ComFrame establishes international standards for the designation of a group-wide

supervisor for each IAIG and for the imposition of group supervision, group capital requirements, uniform standards for insurer corporate governance, enterprise risk management and other control functions and resolution planning applicable to an IAIG in addition to the current legal entity capital requirements imposed by relevant insurance laws and regulations. The NAIC has also promulgated amendments to the insurance holding company system model law that addresses supervision of IAIGs to allow state insurance regulators in the U.S. to be designated as group-wide supervisors for U.S.-based IAIGs or acknowledge another regulatory official acting as the group wide supervisor of an IAIG. In November 2019, the IAIS also adopted a revised version of the risk-based global insurance capital standard (ICS), which is the group capital component of ComFrame. In December 2020, the NAIC adopted a group capital calculation tool (“GCC”) using an RBC aggregation methodology for all entities within an insurance holding company system group, including non-U.S. entities, and is seeking effective equivalency of such tool to the ICS for U.S.-based IAIGs. The NAIC has also adopted changes to the insurance holding company system model law to require, subject to certain exceptions, the ultimate controlling person of every insurer subject to the holding company registration requirement to file an annual group capital calculation with its lead state regulator. The goal is to provide U.S. regulators with a method to aggregate the available capital and the minimum capital of each entity in a group in a way that applies to all groups regardless of their structure. The Policy Statement with respect to the U.S. participation on the covered agreements also provides that the U.S. expects that the GCC will satisfy the group capital assessment requirement under the E.U. and U.K. covered agreements. The NAIC has stated that the calculation will be a regulatory tool and will not constitute a requirement or standard. It is not possible to predict what impact any such regulatory tool may have on our business.

In the event that Apollo and Apollo’s insurance company affiliates become an IAIG, we may be subject to a group capital calculation consistent with or comparable to international capital standards in that context. It is possible that the development of these international standards will have an impact on our capital position and capital structure in the future. We cannot predict with any degree of certainty the additional capital requirements, compliance costs or other burdens these requirements may impose on us.

Other U.S. Regulated Entities

Investment adviser regulation. Our subsidiary Aspen Capital Advisors Inc. (“Aspen Advisors”) is registered with the SEC as a registered investment adviser. Aspen Advisors is the investment adviser to a private investment fund that primarily invests in securities tied to weather, natural disasters or other insurance risks as well as certain collateralized property catastrophe reinsurance contracts. In the future, Aspen Advisors may form and manage additional privately offered pooled investment vehicles, customize funds for single investors or groups of investors or manage separately managed accounts of other qualified clients on a limited basis. Aspen Advisors net assets under management as at December 31, 2021 were \$64.8 million (December 31, 2020 — \$81.9 million), all of which were managed on a discretionary basis. The amount disclosed differs from Aspen Advisors “regulatory assets under management” disclosed in Part 1 of its Form ADV, which is calculated in accordance with the requirements of that form.

Aspen Advisors is subject to regulation as an investment adviser by the SEC. Federal and state securities laws and regulations are primarily intended to protect investors in the securities markets and generally grant regulatory agencies broad rulemaking and enforcement powers, including the power to limit or restrict the conduct of business for failure to comply with such laws and regulations. The SEC and state securities regulatory authorities from time to time may make inquiries and conduct examinations regarding compliance by Aspen Advisors with securities and other laws and regulations. We intend to cooperate with such inquiries and examinations and take corrective action when warranted. Aspen Advisors may also be subject to similar laws and regulations in foreign countries if it provides investment advisory services, offers products similar to those described above or conducts other activities.

Legal Proceedings

Similar to the rest of the insurance and reinsurance industry, we are subject to litigation and arbitration in the ordinary course of our business. Our subsidiaries are regularly engaged in the investigation, conduct and defense of disputes, or potential disputes, resulting from questions of insurance and reinsurance coverage or claims activities. Pursuant to our insurance and reinsurance arrangements, many of these disputes are resolved by arbitration or other forms of alternative dispute resolution. In some jurisdictions, notably the U.S., a failure to deal with such disputes or potential disputes in an appropriate manner could result in an award of “bad faith” punitive damages against our Operating Subsidiaries. In addition, we may be subject to lawsuits and regulatory actions in the normal course of business that do not arise from, or directly relate to, insurance and reinsurance coverage or claims. This category of litigation typically involves, among other things, allegations of underwriting errors or omissions, employment claims or regulatory activity.

While any legal or arbitration proceedings contain an element of uncertainty, we do not believe that the eventual outcome of any specific litigation, arbitration or alternative dispute resolution proceedings to which we are currently a party will have a material adverse effect on the financial condition of our business as a whole.

C. Organizational Structure

The Company's ordinary shares are owned by Parent, which is an affiliate of certain investment funds managed by affiliates of Apollo Global Management, Inc., a leading global investment manager. The common stock of Apollo Global Management, Inc. and certain preferred shares of its subsidiary, Apollo Asset Management, Inc., are publicly traded on the NYSE.

The Company's principal operating subsidiaries at December 31, 2021 are as follows:

Name of Subsidiary	Jurisdiction of Incorporation	Ultimate Ownership Interest Held by AIHL
Aspen Insurance UK Limited	United Kingdom	100.0%
Aspen Bermuda Limited	Bermuda	100.0%
Aspen Specialty Insurance Company	North Dakota	100.0%
Aspen American Insurance Company	Texas	100.0%
Aspen Underwriting Limited*	United Kingdom	100.0%

* AUL (as corporate member of Syndicate 4711 which is managed by AMAL; AUL also contributes capital as a corporate member of Carbon Syndicate 4747).

Refer to Exhibit 8.1 to this report for a listing of all the Company's subsidiaries.

D. Property, Plants and Equipment

We lease office space in Hamilton, Bermuda where we are headquartered. In addition, the Company and its subsidiaries lease office space in the United States, the United Kingdom, Australia, Singapore and Switzerland. We renew and enter into leases in the ordinary course of business as required. For more information on our leasing arrangements, refer to Item 18, Note 18 of our consolidated financial statements, "Operating Leases."

Item 4A. Unresolved Staff Comments

Not applicable.

Item 5. Operating and Financial Review and Prospects

The following is a discussion and analysis of our financial condition and results of operations for the twelve months ended December 31, 2021, 2020 and 2019. This discussion and analysis should be read in conjunction with our audited consolidated financial statements and related notes contained in Item 18 of this report. The discussion below includes forward-looking statements, which, although based on assumptions that we consider reasonable, are subject to risks and uncertainties which could cause actual events or conditions to differ materially from those expressed or implied by the forward-looking statements. See Item 5G, Safe Harbor below and Item 3D, Risk Factors of this report for a discussion of risks and uncertainties.

Executive Overview

Business Improvement Initiatives. We continued to implement a number of strategic initiatives to strengthen the fundamentals of our businesses and better position us to create value over the long-term. Following the Merger in February 2019, we undertook a comprehensive underwriting portfolio review resulting in a series of decisions to wind down business that did not meet our underwriting performance criteria. We also took strategic steps to reduce volatility in the underwriting portfolio by reducing our catastrophe exposure.

We have now largely completed this work to reposition our portfolio. Notwithstanding the work to reposition the portfolio, which included the exiting of a number of non-performing lines, we grew our gross written premiums to \$3.9 billion, up from \$3.7 billion in 2020. This growth was targeted in classes of business where we have the expertise, product set and market presence to generate underwriting profits across market cycles. In addition, we have expanded our capital markets capabilities and we have continued to deploy our strategic investment allocation, which is aimed at improving yields in our investment portfolio. Notable milestones included:

- In October 2021, Aspen received approval to significantly grow its Lloyd's capacity to £900 million for the 2022 year of account. The growth in capacity included a significant book of business that was transferred from Aspen U.K. This was in line with our strategy to simplify our balance sheet and more strategically align our platforms, while also increasing relevance and scale in the important Lloyd's market; and
- Aspen's participation in the alternative reinsurance market through ACM continued to grow with managed third-party capital increasing to \$917.7 million in 2021, up from \$680.8 million at the end of 2020, and fee income increased from \$31.0 million in 2020 to \$61.4 million in 2021.

Improving Underwriting Performance. In 2021, the Company reported an adjusted underwriting income of \$28.3 million in the twelve months ended December 31, 2021 up from \$(87.0) million underwriting loss in the twelve months ended December 31, 2020 resulting in an adjusted combined ratio of 98.8% compared to 103.4% in 2020.

Balance Sheet Strengthening Through Loss Portfolio Agreement. On January 10, 2022, the Company entered into the LPT. The LPT sees Enstar assume net loss reserves of \$3.12 billion, in connection with losses with dates of loss on or prior to December 31, 2019 in relation to 2019 and prior accident years, which is subject to a limit of \$3.57 billion. The existing ADC between the parties that closed in June 2020, under which Enstar assumed \$770.0 million of loss reserves, will also be absorbed into the LPT. The LPT transaction will positively impact the Aspen Group's overall capital position and enable it to further deploy capital into the continued attractive market environment while significantly improving the protection of its balance sheet and future earnings from the potential impact of the recent soft market cycle. The transaction is expected to close in the first half of 2022.

Simplified operating model, improved leadership capabilities and culture. During 2021, we have successfully reorganized and simplified our operating model around our operating segments and made a number of senior appointments to the leadership team. We are also working hard to establish a culture at Aspen that can attract and retain the very best talent. As part of this, we continue to build a diverse and inclusive environment that encourages and empowers our people, while also taking steps to consider how we can best manage our impact on the environment and positively affect the communities we serve. Notable activity in 2021 included:

- The senior appointments of Christopher (Chris) Coleman as Group Chief Financial Officer, Aileen Mathieson as Group Chief Investment Officer, Rob Houghton as Group Chief Operating Officer and the promotion of Christian Dunleavy as Group Chief Underwriting Officer.

- The launch of our inaugural ESG report. This report is an important milestone on our journey to build a more sustainable future for Aspen, and outlines the significant work we have already done including building a more diverse and inclusive culture, understanding the impact of what we underwrite and thinking carefully about where we invest.

Capital Management. We continue to focus on capital management and maintain our strong capital base. In addition, the previously mentioned LPT with Enstar will provide meaningful capital benefits. In addition, our parent company, Highlands Bermuda Holdco, Ltd., contributed additional capital totaling \$45.0 million during 2021.

As we look ahead to 2022, we are well-positioned in Insurance and Reinsurance segments and in those classes of business where we have the expertise, product set and market presence to generate underwriting profits, and in a market that we believe will continue to see rate improvements. We continue to hold a significant surplus against our capital requirements, and together with multiple platforms, strong distribution, a reputation for technical expertise and an improving culture, we are well placed to achieve our objective of becoming a top quartile specialty (re)insurer in the near term.

A. Operating Results

Our consolidated financial statements are prepared in accordance with U.S. GAAP. The discussions that follow include tables and commentary relating to our consolidated income statement and our segmental operating results for the twelve months ended December 31, 2021, 2020 and 2019 and should be read in conjunction with our audited consolidated financial statements and related notes contained in this report. This discussion contains forward-looking statements that involve risks and uncertainties and that are not historical facts, including statements about our beliefs and expectations. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed below and particularly under the headings “Risk Factors,” “Business Overview” and “Cautionary Statement Regarding Forward-Looking Statements” contained in Item 3D and Item 4, and the Explanatory Note of this report, respectively.

Operating highlights

- Gross written premiums of \$3,938.4 million in 2021, an increase of 6.5% from 2020.
- Overall underwriting loss of \$30.0 million (combined ratio of 101.2%) for 2021, including \$326.7 million, or 13.6 percentage points, of pre-tax catastrophe losses related to significant industry events, including Hurricane Ida, European floods, U.S. winter storms and other catastrophe losses. Underwriting loss \$87.0 million (combined ratio of 103.4%) for 2020, which included \$360.8 million or 14.2 percentage points of pre-tax catastrophe losses, net of reinsurance, including \$181.2 million of losses experienced due to COVID-19 (7.1 combined ratio percentage points).
- Net adverse development on prior year loss reserves for 2021 of \$(45.1) million, or 1.9 combined ratio points, compared with net favorable development for 2020 of \$0.9 million, or 0.0 combined ratio points.
- As at December 31, 2021, the Company has recognized \$68.1 million of recoverables on the ADC. This recoverable gain on the ADC is amortized into the income statement over the settlement period of the ceded reserves as per accounting requirements for retroactive reinsurance under US GAAP. For the twelve months ended December 31, 2021, amortization of the ADC recoverable gain totaling \$9.8 million has been recognized as income within net insurance losses and loss adjustment expenses. The remaining recoverable balance of the ADC of \$58.3 million has been recognized as a deferred gain on the balance sheet within reinsurance recoverables unpaid losses.

	As at December 31, 2021		
	Reinsurance	Insurance	Total
	(\$ in millions)		
Total Recoverable on ADC	\$ 51.2	\$ 16.9	\$ 68.1
Less: Amortization in income statement ⁽¹⁾	\$ 9.8	\$ —	\$ 9.8
Recoverables recognized as deferred gain on balance sheet ⁽²⁾	\$ 41.4	\$ 16.9	\$ 58.3

(1) The amortization of the ADC in insurance segment has been offset by recognition of other immaterial retroactive contracts for the twelve months ending December 31, 2021.

(2) The ADC has been allocated across segments in line with premium paid.

- Adjusted underwriting income \$28.3 million (adjusted combined ratio of 98.8% for 2021 includes the full economic benefit arising on the ADC totaling \$58.3 million (2.4 percentage points) currently recognized as a deferred gain within reinsurance recoverables on the balance sheet.
- Our capital markets business contributed total fee income of \$61.4 million in the twelve months ended December 31, 2021. Income from ACM’s activities is primarily allocated to the line of business being ceded and serves to reduce

acquisition expenses for that business. Total capital grew to more than \$900 million as at December 31, 2021, compared with \$680.8 million at December 31, 2020.

- Non-operating costs in 2021 of \$20.6 million included \$19.3 million of severance, consulting and professional services in relation to non-recurring projects and other costs, \$0.4 million of impairment charges related to lease assets as a result of exiting certain office space and \$0.9 million of amortization of intangible assets and other non-operating expenses. Non-operating costs in 2020 of \$32.7 million included \$18.2 million of severance and other costs, \$12.9 million of impairment charges related to lease assets as a result of sub-leasing certain office space and \$1.6 million of amortization of intangible assets and other non-operating expenses.
- Net income/(loss), adjusted for preference share dividends, on average equity of (0.7)% for 2021 compared with (5.4)% in 2020.

*Shareholders' equity**. Total shareholders' equity decreased by \$112.4 million from \$2,887.2 million as at December 31, 2020 to \$2,774.8 million as at December 31, 2021, the most significant movements of which were as follows:

- a reduction of \$142.7 million in other comprehensive income which included \$157.9 million of net unrealized losses on available for sale investments, a \$21.4 million gain in foreign currency translation and a \$6.2 million net loss in the value of hedged foreign exchange contracts;
- a decrease of \$14.7 million in retained earnings primarily due to a net profit of \$29.8 million and the payment of \$44.5 million in dividends on our outstanding Preference Shares; and
- \$45.0 million additional capital contribution from our parent company Highlands Bermuda Holdco, Ltd.

As at December 31, 2021, our total shareholders' equity included Preference Shares with a total value as measured by their respective liquidation preferences of \$775.0 million less issue costs of \$21.5 million (2020 — \$775.0 million less issue costs of \$21.5 million).

**Correction of immaterial error*: During the current year, management identified immaterial errors which resulted in the revision of the Company's comparative financial statements, as further described below:

- *Foreign exchange gains and losses*. During the second quarter of 2021, the Company identified an error regarding incorrect treatment of foreign exchange gains and losses arising as a result of currency matching issues within Aspen U.K.'s underwriting premiums receivables.
- *Income tax expense*. During the year, the Company identified an error regarding the completeness and accuracy of the information used in recognizing both current and deferred income taxes on Aspen U.K.'s branches and the associated application thereof in respect of local tax rules in the various jurisdiction.
- *Net earned premium*. During the year, the Company identified immaterial differences within gross written and re-insurance premium relating to prior year which have been corrected.

The tables below sets out the impact of these corrections to the twelve months ended December 31, 2020 relating to these immaterial errors:

	For the Twelve Months Ended December 31, 2020			
	(\$ in millions)			
	As Previously Reported	Corrections	As Currently Reported	
Income Statement				
Underwriting profit/(loss)	\$ (81.9)	\$ (5.1)	\$	(87.0)
Net Loss	\$ (40.1)	\$ (16.3)	\$	(56.4)
Shareholders Equity				
Retained earnings	\$ 1,425.7	\$ (28.5)	\$	1,397.2
Accumulated Other Comprehensive Income				
Cumulative foreign currency translation	\$ (89.8)	\$ (87.6)	\$	(177.4)
Unrealized appreciation/(depreciation) on investments	\$ 186.8	\$ 5.7	\$	192.5

Refer to Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" for further details.

Consolidated Group Result

	Twelve Months Ended		
	December 31, 2021	December 31, 2020	December 31, 2019
	(\$ in millions, except for percentages)		
Underwriting Revenues			
Gross written premiums ⁽¹⁾	\$ 3,938.4	\$ 3,698.5	\$ 3,442.4
Net premiums written ⁽¹⁾	2,587.7	2,577.8	2,427.9
Net premiums earned ⁽¹⁾	2,410.5	2,527.5	2,293.3
Underwriting Expenses			
Losses and loss adjustment expenses	(1,693.3)	(1,840.8)	(1,679.7)
Amortization of deferred policy acquisition costs	(414.1)	(465.7)	(412.7)
General and administrative expenses	(333.1)	(308.0)	(341.5)
Other Income and Expense			
Corporate expenses	(64.3)	(70.2)	(54.5)
Non-operating expenses	(20.6)	(32.7)	(125.6)
Net investment income	147.5	154.6	197.3
Realized and unrealized investment gains	56.2	98.5	97.1
Realized and unrealized investment losses	(47.4)	(27.4)	(10.9)
Change in fair value of loan notes issued by variable interest entities	—	—	(3.1)
Realized loss on the debt extinguishment	—	—	(5.5)
Change in fair value of derivatives	(35.9)	(65.1)	(144.2)
Interest on long-term debt	(14.3)	(33.9)	(20.2)
Net realized and unrealized foreign exchange gains/(losses) ⁽¹⁾	40.0	(13.8)	(9.6)
Other income	14.7	49.8	4.9
Other expenses ⁽¹⁾	(10.8)	(10.8)	(1.7)
Income/(loss) before income tax ⁽¹⁾	\$ 35.1	\$ (38.0)	\$ (216.6)
Income tax (expense)	(5.3)	(18.4)	(22.9)
Net Income/(loss) ⁽¹⁾	29.8	(56.4)	(239.5)
Other Metrics			
Underwriting (Loss)	(30.0)	(87.0)	(140.6)
Loss ratio	70.2 %	72.8 %	73.2 %
Expense ratio	31.0 %	30.6 %	32.9 %
Combined ratio	101.2 %	103.4 %	106.1 %
Adjusted combined ratio ⁽²⁾	98.8 %	103.4 %	106.1 %

⁽¹⁾ Net earned premium has been corrected for immaterial errors in relation to gross written premium and reinsurance premium payables for periods 2020 and prior. Net realized and unrealized exchange gains/(losses) and change in foreign currency translation adjustment have been corrected to account for the correction of foreign exchange movements on underwriting premium receivables which should have been matched with an underwriting premium receivable payment for periods 2020 and prior. Income tax expense has been correct for historic current and deferred income tax on Aspen U.K.'s branches due to the deficiency in the completeness and accuracy of branch data and associated application thereof in respect of local tax rules in various jurisdictions. Underwriting loss and net income/(loss) have been corrected as a result of the corrections mentioned above for periods 2020 and 2019. Refer to Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" for further details.

⁽²⁾ Adjusted combined ratio includes the full economic benefit arising on the ADC, including the \$58.3 million (2.4 percentage points) currently recognized as a deferred gain within reinsurance recoverables on the balance sheet.

For discussion of 2019 and 2020 results, refer to our [Annual Report on Form 20-F](#) (2019) and our [Annual Report on Form 20-F](#) (2020), respectively, available on the internet site maintained by the SEC at www.sec.gov.

Gross written premiums. The following table sets forth the overall change in gross written premiums for our two business segments in the twelve months ended December 31, 2021, 2020 and 2019:

Business Segment	Gross Written Premiums for the Twelve Months Ended December 31,					
	2021		2020		2019	
	(\$ in millions)	% change	(\$ in millions)	% change	(in millions)	
Reinsurance ⁽¹⁾	\$ 1,597.0	(3.6)%	\$ 1,656.4	11.5 %	\$ 1,485.5	
Insurance	2,341.4	14.7 %	2,042.1	4.4 %	1,956.9	
Total	\$ 3,938.4	6.5 %	\$ 3,698.5	7.4 %	\$ 3,442.4	

¹⁾ 2020 includes gross written premium of \$334.8 million related to CGB DS; (2019 —\$312.5 million)

²⁾ Prior period information for twelve months ended December 31, 2020 have been corrected downward by \$5.1 million for immaterial errors. Refer to Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" for further details. Gross written premium and net earned premium has been restated by this amount for the twelve months ended 2020 throughout the remainder of the financial statements.

Overall gross written premiums increased by 6.5% in 2021 compared to 2020. Gross written premiums in our reinsurance segment decreased by 3.6% in 2021 compared to 2020 mainly due to the CGB Sale which contributed \$334.8 million of our U.S. agricultural business in 2020 in specialty reinsurance lines, partially offset by an increase in property catastrophe, casualty reinsurance and other property reinsurance lines premiums. Gross written premiums in our insurance segment increased by 14.7% primarily due to rate improvements in both financial and professional insurance lines and casualty and liability insurance lines, partially offset by the decrease in first party and specialty insurance due to our decision to cease underwriting in accident and health, international marine and energy liability business which are currently part of our legacy lines.

Ceded written premiums. The following table sets forth the overall change in ceded written premiums for our two business segments in the twelve months ended December 31, 2021, 2020 and 2019:

Business Segment	Ceded Written Premiums for the Twelve Months Ended December 31,					
	2021		2020		2019	
	(\$ in millions)	% change	(\$ in millions)	% change	(in millions)	
Reinsurance	\$ 398.0	11.0 %	\$ 358.7	53.0 %	\$ 234.4	
Insurance	952.7	25.0 %	762.0	(2.3)%	780.1	
Total	\$ 1,350.7	20.5 %	\$ 1,120.7	10.5 %	\$ 1,014.5	

Total ceded written premiums in 2021 increased by \$230.0 million compared to 2020. Changes in our reinsurance program decreased our retention ratio, which is defined as net written premiums as a percentage of gross written premiums, from 69.7% in 2020 to 65.7% in 2021. Ceded reinsurance premiums increased for our reinsurance segment, primarily due to an increase in the level of reinsurance purchased to protect our property catastrophe reinsurance business line. Ceded reinsurance premiums increased for our insurance segment primarily due to an increase in gross written premiums and consequently an increase in the proportion of business ceded to quota share contracts from excess of loss contracts.

Net premiums earned. The following table sets forth the overall change in net premiums earned for our two business segments in the twelve months ended December 31, 2021, 2020 and 2019:

Business Segment	Net Premiums Earned for the Twelve Months Ended December 31,					
	2021		2020		2019	
	(\$ in millions)	% change	(\$ in millions)	% change	(in millions)	
Reinsurance ⁽¹⁾	\$ 1,118.8	(13.1)%	\$ 1,287.7	2.6 %	\$ 1,255.2	
Insurance	1,291.7	4.2 %	1,239.8	19.4 %	1,038.1	
Total	\$ 2,410.5	(4.6)%	\$ 2,527.5	10.2 %	\$ 2,293.3	

¹⁾ Includes net premiums earned of \$334.8 million related to CGB DS (2019 —\$312.5 million).

Net premiums earned decreased by \$117.0 million, or 4.6%, in 2021 compared to 2020 due to a \$20.1 million decrease in gross earned premiums and a \$96.9 million increase in ceded earned premiums.

Losses and loss adjustment expenses. We have presented loss ratios adjusted for the impact of retroactive reinsurance contracts as we believe that the presentation of adjusted loss ratios more appropriately reflects the full economic benefit of the adverse development covers on the underlying performance of the business. Additionally, we have also presented current year loss ratios adjusted for prior year reserve movements.

The underlying changes in loss ratios by business segment for the twelve months ended December 31, 2021, 2020 and 2019 are shown in the tables below.

For the Twelve Months Ended December 31, 2021	Total Loss Ratio ⁽¹⁾	Adjustment for retroactive reinsurance contracts ⁽²⁾	Adjusted Loss Ratio	Prior Year Reserve Movements⁽³⁾	Adjusted Accident Year Loss Ratio
Reinsurance	63.0 %	(3.7)%	59.3 %	15.7 %	75.0 %
Insurance	76.5 %	(1.3)%	75.2 %	(12.6)%	62.6 %
Total	70.2 %	(2.4)%	67.8 %	0.5 %	68.3 %

⁽¹⁾ The total loss ratio includes catastrophes of 22.8% for Reinsurance, 5.6% for Insurance and 13.6% for the Aspen Group on a consolidated basis.

⁽²⁾ The ADC agreement has been allocated to segments in line with the agreement and premiums paid.

⁽³⁾ Prior year reserve movements includes the impact of retroactive reinsurance contracts as any gain on these contracts relate to prior years and therefore provides for a more complete understanding of the current year impact on our underlying performance

For the Twelve Months Ended December 31, 2020	Total Loss Ratio ⁽¹⁾	Adjustment for retroactive reinsurance contracts	Adjusted Loss Ratio	Prior Year Reserve Movements	Adjusted Accident Year Loss Ratio
Reinsurance	74.4 %	— %	74.4 %	2.8 %	77.2 %
Insurance	71.1 %	— %	71.1 %	(2.8)%	68.3 %
Total	72.8 %	— %	72.8 %	— %	72.8 %

⁽¹⁾ The total loss ratio includes catastrophes of 18.9% for Reinsurance, 9.4% for Insurance and 14.2% for Group.

For the Twelve Months Ended December 31, 2019	Total Loss Ratio (1)	Adjustment for retroactive reinsurance contracts	Adjusted Loss Ratio	Prior Year Reserve Movements	Adjusted Accident Year Loss Ratio
Reinsurance	73.1 %	— %	73.1 %	4.4 %	77.5 %
Insurance	73.4 %	— %	73.4 %	(11.0)%	62.4 %
Total	73.2 %	— %	73.2 %	(2.6)%	70.6 %

⁽¹⁾ The total loss ratio includes catastrophes of 10.1% for Reinsurance, 1.7% for Insurance and 6.3% for Group.

The overall loss ratio for 2021 of 70.2% improved by 2.6 percentage points compared to 2020 and losses and loss adjustment expenses decreased from \$1,840.8 million in 2020 to \$1,693.3 million in 2021. This was mainly due to improved current year underlying claims performance offset by a \$46.0 million unfavorable movement in prior year development, from a release of \$0.9 million in 2020 to a strengthening of \$45.1 million in 2021. Furthermore, there was a decrease in large losses of \$7.2 million and a \$34.1 million decrease in catastrophe losses, from \$360.8 million in 2020 to \$326.7 million in 2021.

The current loss ratio includes \$9.8 million of recoveries from the ADC and other retroactive contracts. The adjusted accident year loss ratio for 2021 of 68.3%, includes the full economic benefit arising on the ADC, including the \$58.3 million (2.4 percentage points) currently recognized as a deferred gain within reinsurance recoverables on the balance sheet. The adjusted loss ratio improved by 4.5% percentage points compared to 2020 primarily due to the recoveries on the ADC for 2019 and improved current year underlying claims performance.

	As at December 31, 2021			
	Reinsurance	Insurance	Total	
	(\$ in millions)			
Total Recoverable on ADC	\$ 51.2	\$ 16.9	\$	68.1
Less: Amortization in income statement	\$ 9.8	\$ —	\$	9.8
Recoverables recognized as deferred gain on balance sheet	\$ 41.4	\$ 16.9	\$	58.3

In the reinsurance segment, the loss ratio for 2021 was 63.0% compared to 74.4% in 2020 largely due to a \$98.3 million increase in reserve releases, coupled by better accident year underlying claim performance. This has been offset by an increase in catastrophe losses of \$11.0 million and a \$7.4 million increase in large losses. In 2021, there were \$255.0 million of net catastrophe losses, including \$97.5 million from Hurricane Ida, \$61.1 million from U.S. winter storms, \$65.7 million from European floods, and \$30.7 million of other weather-related events. In 2020, we experienced \$244.0 million of net catastrophe losses, associated with losses from COVID-19, Hurricanes Laura and Isaias, California wildfires and other weather-related events. Large losses experienced during 2021 were \$21.7 million, comprised of \$4.7 million of satellite related losses, \$12.5 million of fire damage related losses and \$4.5 million of cyber related losses.

In the insurance segment, the loss ratio for 2021 was 76.5% compared to 71.1% in 2020. The increase in the loss ratio in 2021 was primarily due to a \$144.3 million increase in reserve strengthening, from \$35.2 million strengthening in 2020 to \$179.5 million strengthening in 2021, offset by increase in net earned premiums of \$51.9 million, \$14.6 million decrease in large losses and a \$45.1 million decrease in catastrophe losses. In 2021, the insurance segment experienced \$71.7 million of net catastrophe losses, due to \$25.6 million from U.S. winter storm losses, \$23.2 million from Hurricane Ida and \$22.9 million from other weather-related events. Large losses experienced during 2021 included \$34.6 million, comprised of \$13.7 million of fire related losses, \$5.9 million of property damage related losses, \$6.0 million of crisis related losses and \$9.0 million related to cyber crime.

In 2020, our insurance segment experienced \$116.8 million of net catastrophe losses, due to \$52.5 million from COVID-19 losses and \$64.3 million from other weather-related events. Large losses experienced during 2020 included \$49.2 million of fire, property damage, construction and credit risk related losses.

Overall, prior year reserve strengthening totaled \$45.1 million in 2021, compared with net favorable reserve development of \$0.9 million in 2020. Reserve releases in the reinsurance segment in 2021 were \$134.4 million compared to \$36.1 million in 2020 and came primarily from casualty reinsurance and specialty reinsurance. Net unfavorable reserve development in the insurance segment in 2021 was \$179.5 million compared to net unfavorable reserve development of \$35.2 million in 2020 and came primarily from casualty insurance lines and first party and specialty lines. Current prior year reserve strengthening includes \$9.8 million of ADC recoveries. The remaining ADC recoveries of \$58.3 million is currently recognized as a deferred gain within reinsurance recoverables on the balance sheet and, if included within the income statement, we would recognize overall favorable prior year reserve development for accident years 2020 and 2021.

Further information relating to the release of reserves can be found below under “— Reserves for Losses and Loss Adjustment Expenses — Prior Year Loss Reserves.”

Acquisition expenses. We monitor the ratio of expenses to net earned premium as a measure of the cost effectiveness of our policy acquisition costs, which are deferred and amortized, and general and administrative expenses. The tables below present the contribution of the amortization of deferred policy acquisition costs and general and administrative expenses to the net expense ratios for the twelve months ended December 31, 2021, 2020 and 2019.

<u>Ratios Based on Net Earned Premium</u>	For the Twelve Months Ended December 31, 2021		
	Reinsurance	Insurance	Total
Net policy acquisition expense ratio	19.8 %	14.9 %	17.2 %
General and administrative expense ratio	10.8 %	16.4 %	13.8 %
Total expense ratio	30.6 %	31.3 %	31.0 %

<u>Ratios Based on Net Earned Premium</u>	For the Twelve Months Ended December 31, 2020		
	Reinsurance	Insurance	Total
Net policy acquisition expense ratio	19.1 %	17.7 %	18.4 %
General, and administrative expense ratio	8.6 %	15.9 %	12.2 %
Total expense ratio	27.7 %	33.6 %	30.6 %

<u>Ratios Based on Net Earned Premium</u>	For the Twelve Months Ended December 31, 2019		
	Reinsurance	Insurance	Total
Net policy acquisition expense ratio	21.1 %	14.2 %	18.0 %
General administrative expense ratio	8.9 %	22.1 %	14.9 %
Total expense ratio	30.0 %	36.3 %	32.9 %

Net policy acquisition expense ratio decreased from 18.4% in 2020 to 17.2% in 2021. This decrease of \$51.6 million in 2021 compared to 2020 was primarily due to underwriters achieving favorable brokerage terms and higher ceded commission on quota share contracts within insurance lines of business, partially offset by higher expenses incurred within reinsurance lines due to changes in the mix of business.

General and administrative expense ratio increased from 12.2% in 2020 to 13.8% in 2021. This increase of \$25.1 million from \$308.0 million in 2020 to \$333.1 million in 2021 was primarily due to an increase in IT managed services and hosting costs, increase in Lloyd's syndicate fees as a result of higher premiums written through the Lloyd's platform, additional expenses due to the inclusion of our investment in Carbon Syndicate and increased spend on consulting and professional services.

Combined ratio. We monitor the ratio of losses and loss adjustment expenses, policy acquisition expenses and general and administrative expenses to net earned premium (the "combined ratio") as a measure of relative performance where a lower ratio represents a better result than a higher ratio. The combined ratios for our two business segments for the twelve months ended December 31, 2021, 2020 and 2019 were as follows:

Business Segment	Combined Ratios for the Twelve Months Ended December 31,		
	2021	2020	2019
Reinsurance	93.6 %	102.1 %	103.1 %
Insurance	107.8 %	104.7 %	109.7 %
Total ⁽¹⁾	101.2 %	103.4 %	106.1 %
Adjusted total combined ratio ⁽²⁾	98.8 %	103.4 %	106.1 %

¹⁾ The total combined ratio excludes the impact from corporate expenses and non-operating expenses.

²⁾ The adjusted total combined ratio includes the full economic benefit arising on the ADC, including the \$58.3 million (2.4 percentage points) currently recognized as a deferred gain liability on the balance sheet.

The adjusted combined ratio for 2021 of 98.8% improved by 4.6 percentage points compared to 2020 due to a decrease in both the loss ratio and net policy acquisition expense ratio, offset by an increase in the general and administrative expense ratio. The decrease in loss ratio was primarily due to the recovery on the ADC for 2019 and prior year deterioration and a reduction in current accident year losses. The decrease in net acquisition expenses was due to underwriters achieving favorable brokerage terms and higher ceded commission on quota share contracts. The increase in expense ratio was due to an increase in IT costs, increase in Lloyd's syndicate fees, additional expenses due to the inclusion of Aspen's investment in Carbon Syndicate and increased spend on consulting and professional services.

Corporate expenses. In 2021, we incurred corporate expenses of \$64.3 million (2020 — \$70.2 million). The decrease in corporate expense in 2021 compared to 2020 was due to lower staff costs, decreased facilities costs and other corporate expenses.

Non-operating expenses. In 2021, we incurred non-operating expenses of \$20.6 million, which included \$19.3 million of severance, consulting and professional services in relation to non-recurring projects and other costs, \$0.4 million of impairment charges related to lease assets as a result of exiting certain office space and \$0.9 million of amortization of intangible assets and other non-operating expenses. Non-operating expenses in 2020 totaled \$32.7 million, which included \$18.2 million severance, retention awards and other costs, \$12.9 million of impairment charges related to lease assets as a result of sub-leasing certain office space, and \$1.6 million of amortization of intangible assets and other non-operating expenses.

Other income, net. In 2021, we earned other income of \$14.7 million (2020 — \$49.8 million), which included a gain of \$9.7 million in relation to the prior year's sale of our surety business, based upon having met certain premium production levels prescribed in the sale agreement, partially offset by other expenses totaling \$10.8 million (2020 — \$10.8 million).

In addition to net other income, ACM sources capital and develops alternative reinsurance structures to leverage the Company's underwriting and analytical expertise and earns management and performance fees from third party investors primarily through the placement and management of ILS funds and other offerings. For the twelve months ended December 31, 2021 the Company earned \$61.4 million (2020 — \$31.0 million) in fee income through third-party capital management activities. The increase in fee income is due to the growth achieved in the third-party managed capital and managed earned premium in 2021. Fee income earned through third party capital management activities is primarily recorded through underwriting profit/(loss) as a decrease to acquisition expenses.

Investment gains. Total net realized and unrealized investment gains for the twelve months ended December 31, 2021 were \$8.8 million (2020 — gains of \$71.1 million), driven primarily by mark to market gains in our fixed income portfolios.

Net investment income. In 2021, we generated net investment income of \$147.5 million, a decrease of 4.6% from the prior year (2020 — \$154.6 million), largely as a result of redeploying \$770.0 million of the investment portfolio to the adverse development cover. Net investment income in 2021 is comprised primarily of interest on our fixed income securities portfolio.

Change in fair value of derivatives. In the first quarter of 2019, the Company entered into fixed for floating interest rate swaps with a total notional amount of \$3,138.0 million due to mature between January 18, 2021 and January 18, 2034. The interest rate swaps were used in the ordinary course of the Company's investments activities to partially mitigate any negative impact of rises in interest rates on the market value of the Company's fixed income portfolio. During 2020, we unwound the remaining \$1,250.0 million of our interest rate swaps. For the twelve months ended December 31, 2020, there was a loss of \$81.1 million.

We use foreign exchange contracts to manage foreign currency risk. A foreign exchange contract involves an obligation to purchase or sell a specified currency at a future date at a price set at the time of the contract. Foreign exchange contracts will not eliminate fluctuations in the value of our assets and liabilities denominated in foreign currencies, but rather allow us to establish a rate of exchange for a future point in time.

As at December 31, 2021, we held foreign exchange contracts that were not designated as hedging under ASC 815 - "*Derivatives and Hedging*" with a notional amount of \$1,545.7 million (2020 — \$1,402.3 million). The foreign exchange contracts are recorded as derivatives at fair value in the balance sheet with changes recorded as a change in fair value of derivatives in the statement of operations. For the twelve months ended December 31, 2021, the impact of foreign exchange contracts on net income was a loss of \$35.9 million (December 31, 2020 — gain of \$16.0 million).

As at December 31, 2021, we held foreign exchange contracts that were designated as hedging under ASC 815 with a notional amount of \$143.1 million (2020 — \$90.6 million). The foreign exchange contracts are recorded as derivatives at fair value with the effective portion recorded in other comprehensive income and the ineffective portion recorded as a change in fair value of derivatives in the statement of operations. The contracts are considered to be effective and therefore the movement in other comprehensive income representing the effective portion was reflected as a loss of \$6.2 million for the twelve months ended December 31, 2021 (December 31, 2020 — gain of \$0.3 million).

As the foreign exchange contracts settle, the realized gain or loss is reclassified from other comprehensive income into general administrative and corporate expenses of the statement of operations and other comprehensive income. For the twelve months ended December 31, 2021, the amount recognized within general, administration and corporate expenses for settled foreign exchange contracts was a realized loss of \$5.7 million (December 31, 2020 — loss of \$3.2 million recognized within general, administrative and corporate expenses).

The change in fair value of derivatives in 2021 was attributable to fixed for floating interest rate swaps that had a loss of \$Nil (2020 — loss of \$81.1 million), which was partly offset by a loss on foreign exchange contracts of \$35.9 million (2020 — gain of \$16.0 million).

Interest expense. Interest expense of \$14.3 million in the twelve months ended December 31, 2021 represents the interest due on the 2023 Senior Notes. The decrease in interest charge from \$33.9 million in the twelve months ended December 31, 2020 was due to the interest payable on deferred premium payments on the ADC of \$19.6 million included within the twelve months ended December 31, 2020.

Realized loss on debt extinguishment. On September 30, 2019, we redeemed the remaining \$125.0 million of our 2020 6.00% Senior Notes resulting in a realized loss, or make-whole payment, of \$5.5 million.

As at December 31, 2021, Aspen Holdings' material debt outstanding was our \$300 million 4.650% Senior Notes due 2023 (the "2023 Senior Notes") and a draw down on a credit facility of \$100 million payable within 12 months.

Change in fair value of loan notes issued by variable interest entities. There were no loan notes outstanding since the final payment was made to noteholders after commutation of the reinsurance agreement on July 1, 2019 and therefore we recognized a zero change in fair value of loan notes. The \$3.1 million change in the value of the loan notes in 2019 represented the proportion of profit generated by Silverton attributable to third-party investors.

Income (loss) before tax. In the twelve months ended December 31, 2021, income before tax was \$35.1 million (2020 — loss of \$38.0 million).

Income tax expense. There was an income tax expense for the twelve months ended December 31, 2021 of \$5.3 million as well as an income tax expense of \$18.4 million in 2020. The effective tax rate (defined as the tax charge or credit, divided by the profit or loss before tax), for the twelve months ended December 31, 2021 on our profit before tax was 15.1% (2020 — (48.4)%). The effective tax rate is driven by Base Erosion and Anti-abuse Tax in our U.S. operations and foreign taxes on profits in branches of U.K. entities that are subsequently unable to utilize foreign tax credits arising from their branches.

The effective tax rate is subject to revision in future periods if circumstances change and depends on the relative profitability of the business underwritten in Bermuda (where the rate of tax on corporate profits is zero), the United Kingdom (where the corporation tax rate is currently 19%) and the United States (where the federal income tax rate is currently 21%). The tax in each of the years is representative of the geographic spread of our business between taxable and non-taxable jurisdictions in such years.

Net income/(loss) after tax. We reported a net income after taxes of \$29.8 million in 2021 compared to a net loss of \$56.4 million in 2020. The difference in net income was primarily due to the \$57.0 million improvement in the underwriting result, a reduction in non-operating expenses of \$12.1 million and the increase in other income due the contingency gain of \$9.7 million in relation to the prior year's sale of our surety business. The net loss of \$56.4 million in 2020 compared to the net loss of \$239.5 million in 2019 was primarily as a result an improvement in the underwriting results, a reduction in non-operating expenses and the increase in other income due to the gain on the sale of our renewal rights to our surety insurance book of business to a third party, totaling \$43.1 million, offset by unfavorable movement in the level of prior year reserve releases, a decrease in underwriting income and an increase in large losses.

Other comprehensive income. Total other comprehensive income decreased by \$142.7 million (2020 — \$96.4 million increase), net of taxes, for the twelve months ended December 31, 2021. The decrease in total other comprehensive income includes a net unrealized loss of \$137.2 million in the available for sale investment portfolio (2020 — \$175.1 million net unrealized gain) largely attributable to the impact of rising interest rates on our bond portfolios, a \$20.4 million reclassification of net realized gains to net income (2020 — \$67.1 million reclassified realized gains), a \$6.2 million unrealized loss (2020 — \$0.3 million unrealized gain) on the hedged derivative contracts and an unrealized gain in foreign currency translation of \$21.4 million (2020 — \$11.9 million unrealized loss) largely attributable to the impact from the continued strengthening of the U.S. dollar.

Recent Developments

COVID-19: The ongoing COVID-19 pandemic, and the actions taken by the governments, businesses and individuals in response to the pandemic have resulted in ongoing economic and societal disruption. Our business has adapted to the ongoing COVID-19 pandemic and, while there is still some uncertainty about the outcome of certain existing COVID-19 related claims, our results are not expected to be materially adversely affected by new claims related to COVID-19 in the twelve months ended December 31, 2021 or going forward.

Our exposures are controlled and limited by our insurance and reinsurance contracts, which include specific terms and conditions defining if and how our policies respond to losses arising from the COVID-19 pandemic. However, legislative, regulatory or judicial actions and social influences may seek to extend coverage or payment terms beyond intended contractual obligations or result in an increase in the frequency or severity of claims beyond expected levels. There are ongoing lawsuits and other legal actions challenging the promptness of coverage determinations or the coverage determinations themselves on

claims under applicable insurance or reinsurance policies, including, among others, business interruption claims, which could result in increased claims, litigation and related expenses.

For a full discussion of the risks associated with COVID-19, please refer to Item 3D, “Risk Factors — Risks Relating to Recent Developments — The coronavirus pandemic and the responses thereto have already adversely affected our business and operations, and the ultimate effects thereof on our business, our operations and our financial condition and results of operations remain highly uncertain and impossible to predict.”

Russian invasion of Ukraine: On February 24, 2022, Russia launched a full-scale military invasion of Ukraine. As a result of this action, various nations, including the U.S., E.U., U.K. and other jurisdictions, have imposed economic sanctions against Russia. We cannot predict the impact of the invasion and any heightened military conflict, economic impact or geopolitical instability that may follow, including heightened operating risks in the E.U., additional sanctions or counter-sanctions, heightened inflation, cyber disruptions or attacks, and higher energy costs. Any of the foregoing could have a material adverse effect on our business, financial condition, and results of operations.

Inflation: As at March 2022, general economic inflation has increased and there is a risk of inflation remaining elevated for an extended period, the possible effects are referred to within Item 5G, “Operating and Financial Review and Prospects — Effects of Inflation”.

Strategic Initiatives

Loss Portfolio Transfer (“LPT”) Agreement:

On January 10, 2022, Aspen Insurance Holdings Limited and certain of its subsidiaries (“Aspen”) entered into an Amended and Restated Reinsurance Agreement (the “Agreement”) with a subsidiary of Enstar Group Limited (“Enstar”), which amends and restates the Adverse Development Cover Agreement, dated as of March 2, 2020 (the “Original Agreement”), previously entered into between the parties.

Under the Original Agreement, Enstar reinsured losses incurred on or prior December 31, 2019, by providing \$770.0 million cover in excess of \$3.805 billion retention up to an aggregate limit of \$4.575 billion, and an additional \$250.0 million of cover in excess of \$4.815 billion.

Under the terms of the Agreement, Enstar’s subsidiary will reinsure net losses incurred on or prior to December 31, 2019 on Aspen’s diverse mix of property, liability and specialty lines across the U.S., U.K. and other jurisdictions (the “Subject Business”) having net loss reserves of \$3.12 billion as of September 30, 2021. The Agreement provides for a limit of \$3.57 billion in consideration for a premium of \$3.16 billion, which includes \$770.0 million of premium previously paid with respect to reserves ceded under the Original Agreement. This transaction will further positively impact our capital position, freeing up capital and enabling us to further deploy this into the continued attractive market environment.

Completion of the transaction is subject to regulatory approvals and satisfaction of various other closing conditions. The transaction is expected to close in the first half of 2022. If the transaction cannot be completed, the Original Agreement would remain in effect.

Aspen Re America (“ARA”) Renewal Rights:

Reinsurance business assumed by Aspen U.K. was historically underwritten pursuant to a delegated authority arrangement with its U.S. affiliate, Aspen Re America, Inc. (“ARA”), a Delaware corporation registered as a reinsurance intermediary. Effective January 1, 2022, AAIC acquired the renewal rights to the ARA business from Aspen U.K. for \$19.0 million. This move enhances our cost of capital efficiency and distribution model, as well as bolsters the efficiency and flexibility of Aspen’s capital, and builds our balance sheet strength. Aspen U.K. will continue to be the primary operating entity through which U.K. property and casualty business and the credit, political risk portfolios written by Aspen Insurance is underwritten (subject to underwriting and operating guidelines). Our U.S. reinsurance underwritten by ARA will no longer use Aspen U.K. for new and renewal business beginning January 1, 2022.

This transaction has no impact on the consolidated group financial statements for the Company, however it is part of Aspen’s strategy to simplify its business model and create operational efficiency.

Increased Lloyd’s Capacity:

Following a successful business planning process with Lloyd’s, Aspen has now received approval to significantly grow the size of our Lloyd’s platform in 2022. This will see us increasing our capacity to £900 million in 2022. This growth has primarily been driven by moving an existing and well-performing portfolio of reinsurance business from Aspen U.K. onto our Lloyd’s platform. Growing our presence in Lloyd’s is a critical part of our overall balance sheet simplification strategy. It also allows us to better utilize the advantages of the Lloyd’s platform, both for capital efficiencies and ease of access.

Underwriting Results by Business Segment

We are organized into two business segments, namely reinsurance and insurance. We have determined our reportable segments, Reinsurance and Insurance, by taking into account the manner in which management makes operating decisions and assesses operating performance. Profit or loss for each of the business segments is measured by underwriting income or loss. Underwriting profit is the excess of net earned premiums over the sum of losses and loss expenses, amortization of deferred policy acquisition costs and general and administrative expenses. Underwriting income or loss provides a basis for management to evaluate the segment's underwriting performance.

Management measures segment results on the basis of the combined ratio, which is obtained by dividing the sum of the losses and loss expenses, amortization of deferred policy acquisition costs and operating and administrative expenses by net premiums earned. Other than corporate expenses, indirect operating and administrative expenses are allocated to business segments predominantly based on each segment's proportional share of gross earned premiums.

Non-underwriting disclosures. We provide additional disclosures for corporate and other (non-operating) income and expenses. Corporate and other income and expenses include net investment income, net realized and unrealized investment gains or losses, expenses associated with managing the Aspen Group, certain strategic and other costs, changes in fair value of derivatives and changes in fair value of loan notes issued by variable interest entities, interest expense, net realized and unrealized foreign exchange gains or losses and income taxes, which are not allocated to the business segments. Corporate expenses are not allocated to our business segments as they typically do not fluctuate with the levels of premiums written and are not directly related to our segment operations.

We do not allocate our assets by business segment as we evaluate underwriting results of each segment separately from the results of our investment portfolio. Segment profit or loss for each of our business segments is measured by underwriting income or loss. Refer to Item 18, Note 3 of our consolidated financial statements, "Segment Reporting" for information on gross and net premiums written and earned, underwriting income or loss, and combined ratios and reserves for each of our business segments.

Reinsurance

Our reinsurance segment consists of property catastrophe reinsurance, other property reinsurance, casualty reinsurance and specialty reinsurance. For a more detailed description of this segment, refer to Item 4, "Business Overview — Business Segments — Reinsurance" and Item 18, Note 3 of our consolidated financial statements, "Segment Reporting."

Gross written premiums. The table below shows our gross written premiums for each line of business in our reinsurance segment for the twelve months ended December 31, 2021, 2020 and 2019 and the percentage change in gross written premiums for each line of business:

Lines of Business	For the Twelve Months Ended December 31,					
	2021		2020		2019	
	(\$ in millions)	% change	(\$ in millions)	% change	(\$ in millions)	
Property catastrophe reinsurance	\$ 376.5	20.7 %	\$ 311.8	24.9 %	\$ 249.6	
Other property reinsurance	473.6	18.5 %	399.6	12.0 %	356.9	
Casualty reinsurance	445.5	14.1 %	390.5	32.5 %	294.7	
Specialty reinsurance	301.4	(45.6)%	554.5	(5.1)%	584.3	
Total	<u>\$ 1,597.0</u>	<u>(3.6)%</u>	<u>\$ 1,656.4</u>	<u>11.5 %</u>	<u>\$ 1,485.5</u>	

The increase in gross written premiums in 2021 compared to 2020 in property catastrophe reinsurance was primarily due to an increase in reinstatement premiums owing to material catastrophe events such as U.S. winter storms, Hurricane Ida and European floods. The increase in gross written premiums in other property reinsurance was primarily due to underlying improvements in pricing, compounded by an increase in reinstatement premium owing to current year catastrophe experience. The increase in gross written premiums in casualty reinsurance was primarily due to material rate improvements in U.S. casualty lines and organic growth. The decrease in gross written premiums in specialty reinsurance was primarily due the sale of our interest in Crop Re to CGB DS, which contributed \$334.8 million in gross written premiums in 2020. This has been offset by organic growth within our mortgage business.

Ceded written premiums. Total ceded written premiums in 2021 were \$398.0 million, an increase of \$39.3 million compared to 2020. The increase in ceded written premiums was due to an increase in the level of reinsurance purchased protecting our property catastrophe reinsurance business lines.

Net premiums earned. Net premiums earned decreased by \$168.9 million, or 13.1%, in 2021 compared to 2020 largely due to an increase in ceded premiums as a result of increased cession rates on property catastrophe reinsurance and lower gross written premiums.

Losses and loss adjustment expenses. The loss ratio was 63.0% in 2021, a decrease of 11.4 percentage points compared to 74.4% in 2020. The decrease in the loss ratio was mainly due to \$98.3 million increase in reserve releases, offset by an increase in catastrophe losses of \$11.0 million and a \$7.4 million increase in large losses.

In 2021, our reinsurance segment experienced \$255.0 million of net catastrophe losses, including \$97.5 million from Hurricane Ida, \$61.1 million from U.S. winter storms, \$65.7 million from European floods and \$30.7 million of other weather-related events. Large losses experienced in our reinsurance segment during 2021 were \$21.7 million, comprised of \$4.7 million of satellite related losses, \$12.5 million of fire damage related losses and \$4.5 million of cyber related losses.

In 2020, our reinsurance segment experienced \$244.0 million of net catastrophe losses, including \$128.7 million of losses from COVID-19, \$35.3 million from Hurricane Laura, \$9.5 million from California wildfires, \$4.7 million from Hurricane Isaias and \$65.8 million from other weather-related events. Large losses experienced in our reinsurance segment during 2020 were \$14.3 million, comprised of \$1.6 million of aviation losses, \$4.1 million of fire-related losses, \$1.6 million of water damage-related losses and \$7.0 million of business interruption losses unrelated to COVID-19.

Prior year reserve releases totaled \$134.4 million in the current period compared with \$36.1 million in the twelve months ended December 31, 2020. Reserve releases in 2021 were primarily from specialty reinsurance and casualty reinsurance. The reserve releases in 2020 were primarily from casualty reinsurance, property catastrophe reinsurance and specialty reinsurance, partially offset by strengthening on other property reinsurance lines.

Policy acquisition, general and administrative expenses. Amortization of deferred policy acquisition costs were \$221.6 million for the twelve months ended December 31, 2021, equivalent to 19.8% of net premiums earned (2020 — \$246.0 million or 19.1% of net premiums earned). The increase in the acquisition ratio was due to changes in the mix of business.

Our general and administrative expenses increased by \$10.5 million from \$110.8 million in 2020 to \$121.3 million in 2021. Our general and administrative expense ratio was 10.8% in 2021 compared to 8.6% in 2020 due to an increase in indirect costs such as IT managed services and hosting costs.

Insurance

Our insurance segment consists of casualty and liability insurance, first party and specialty insurance, financial and professional lines insurance and Carbon Syndicate. For a more detailed description of this segment, refer to Item 4, “Business Overview — Business Segments — Insurance” and Item 18, Note 3 of our consolidated financial statements, “Segment Reporting.”

Gross written premiums. The table below shows our gross written premiums for each line of business for the twelve months ended December 31, 2021, 2020 and 2019 and the percentage change in gross written premiums for each line:

Lines of Business ⁽¹⁾	Twelve Months Ended					
	2021		2020		2019	
	(\$ in millions)	% change	(\$ in millions)	% change	(\$ in millions)	
Casualty and liability insurance	\$ 615.4	19.9 %	\$ 513.1	7.9 %	\$ 475.6	
First party and specialty insurance	807.9	(4.5)%	846.0	(3.2)%	874.1	
Financial and professional lines insurance	907.6	32.9 %	683.0	12.5 %	607.2	
Carbon Syndicate ⁽²⁾	10.5	100.0 %	—	— %	—	
Total	<u>\$ 2,341.4</u>	<u>14.7 %</u>	<u>\$ 2,042.1</u>	<u>4.4 %</u>	<u>\$ 1,956.9</u>	

⁽¹⁾ Effective January 1, 2021, the insurance segment restructured its principal lines of business due to changes in management structures. The prior periods have been re-presented to ensure consistency of information.

⁽²⁾ Refers to the premium made from an investment to a new start up, Carbon Syndicate 4747.

The increase in gross written premiums in 2021 compared to 2020 in casualty and liability insurance was attributable to strong performance across retention, rate improvements and new business across our U.S. and U.K. platforms. The increase in gross written premiums in financial and professional lines insurance was largely attributable to stronger professional service market in the current year resulting in increased premium on management and professional liability lines of business and increased lines on major programs. The decrease in gross written premiums in first party and specialty insurance was largely

attributable to our decision to cease underwriting in accident and health and international marine and energy liability business which are currently part of our legacy lines. This decrease has been offset by rate increases and new business in U.K. commercial property lines and U.S. programs business.

Ceded written premiums. Total ceded written premiums for 2021 was \$952.7 million, an increase of \$190.7 million from 2020. Ceded written premiums increased primarily within the financial and professional lines due to increase in gross written premium and consequently increase in the proportion of business ceded to quota share from excess of loss contracts.

Net premiums earned. Net premiums earned increased by \$51.9 million, or 4.2%, in 2021 compared to 2020 largely due to increased gross written premium written within the year.

Losses and loss adjustment expenses. The loss ratio in 2021 was 76.5% compared to 71.1% in 2020. The increase in the loss ratio in 2021 was primarily due to a \$144.3 million of unfavorable reserve development, from \$35.2 million strengthening in 2020 to \$179.5 million strengthening in 2021, mainly due to deterioration of legacy lines business including international marine and energy liability and accident and health, plus further deterioration within continuing U.S. primary casualty lines and the recognition of opioid provision. This has been offset by reserve releases on a number of classes following good claims experience and recognition of recoveries on the ADC, increase in net earned premiums of \$51.9 million, \$14.6 million decrease in large losses and a \$45.1 million decrease in catastrophe losses. The loss ratio in 2020 of 71.1% decreased from 73.4% in 2019 due primarily to a \$79.2 million decrease in reserve releases, and a \$24.5 million increase in large losses. These movements more than offset the impact from a \$201.7 million increase in net earned premiums and a \$98.7 million increase in catastrophe losses.

In 2021, the insurance segment experienced \$71.7 million of net catastrophe losses, due to \$25.6 million from U.S. winter storm losses, \$23.2 million from Hurricane Ida and \$22.9 million from other weather-related events. Large losses experienced during 2021 included \$34.6 million, comprised of \$13.7 million of fire related losses, \$5.9 million of property damage related losses, \$6.0 million of crisis related losses and \$9.0 million related to cyber crime.

In 2020, the insurance segment experienced \$116.8 million of net catastrophe losses, due to \$52.5 million from COVID-19 losses and \$64.3 million from other weather-related events. Large losses experienced during 2020 included \$49.2 million, comprised of \$12.9 million of construction related losses, \$4.0 million of property damage related losses, \$15.3 million of credit risk related losses, \$14.5 million of accident and health related losses and \$2.5 million related to cyber crime.

In 2021, there was net unfavorable reserve development of \$179.5 million compared with \$35.2 million in the twelve months ended December 31, 2020. The net unfavorable reserve development was primarily from deterioration of legacy lines business including international marine and energy liability and accident and health, plus further deterioration within continuing U.S. primary casualty lines and the recognition of opioid provision. This has been offset by reserve releases on a number of classes following good claims experience and recognition of recoveries on the ADC.

The reserve strengthening in 2020 was primarily from our first party and specialty and casualty insurance lines. Prior year reserve releases are further discussed under “Reserves for Losses and Loss Adjustment Expenses” below.

Policy acquisition, general and administrative expenses. Amortization of deferred policy acquisition costs were \$192.5 million in 2021, equivalent to 14.9% of net premiums earned (2020 — \$219.7 million or 17.7% of net premiums earned). The decrease in the acquisition expense ratio in 2021 compared with 2020 was due to underwriters achieving favorable brokerage terms and higher ceded commission on quota share contracts.

Our general and administrative expenses increased by \$14.6 million to \$211.8 million in 2021 from \$197.2 million in 2020. Our general and administrative expense ratio was 16.4% in 2021 compared to 15.9% in 2020 due to increased IT and staff costs and additional expenses rising from the investment in carbon syndicate.

Balance Sheet

Total cash and investments

As at December 31, 2021 and December 31, 2020, total cash and investments, including accrued interest receivable were \$7.8 billion and \$7.5 billion, respectively. Total cash and investments increased by cashflow generated by operating activities, \$100.0 million inflow of cash from short term credit facilities and additional capital contributed by our parent company Highlands Bermuda Holdco, Ltd. of \$45.0 million. Our investment strategy is focused on delivering stable investment income and total return through all market cycles while maintaining appropriate portfolio liquidity and credit quality to meet the requirements of our customers, rating agencies and regulators.

As of December 31, 2021, a significant majority of funds available for investment were deployed in a widely diversified portfolio of high quality, investment grade securities, including U.S. government, corporate and U.S. agency mortgage-backed bonds. We also invest a portion of our portfolio in other investments such as unrated private fixed and floating rate investments and other specialty classes. These securities generally pay a higher rate of interest or return and may have a higher degree of credit or default risk.

Book yield for the year ended December 31, 2021 on the fixed income portfolio (including private investments, short term investments and cash within those portfolios) was 2.10%, a decrease of 24 basis points from 2.34% at December 31, 2020. Our fixed income portfolio duration as at December 31, 2021 was 3.07 years compared to 2.70 years as at December 31, 2020. As at December 31, 2021, the average credit quality of our fixed income portfolio was "AA-", with 87.3% of the portfolio being rated "A" or higher. The average rating of our mortgage-backed securities was AA+. As at December 31, 2020, the average credit quality of our fixed income portfolio was "AA," with 85.0% of the portfolio being rated "A" or higher. The average credit quality is calculated using the Bloomberg Barclays Index credit quality methodology.

As at December 31, 2021, the Company had a 2.0% position in real estate funds and a 3.6% position in middle market loans ("MML") and commercial mortgage loans ("CML"), representing in total 5.6% of our total cash and investments, excluding catastrophe bonds and funds held by variable interest entities (the "Managed Portfolio"). As at December 31, 2020, the Company had a 1.5% position in real estate funds and a 3.6% position in MML and CML representing in total 5.1% of our Managed Portfolio.

Unrealized gains in the available for sale investment portfolio, net of taxes, were \$34.6 million as at December 31, 2021, a decrease of \$157.9 million from the net \$192.5 million unrealized gains as at December 31, 2020.

As at January 1, 2020, we had investments in four entities classified as other investments, equity method: a micro-insurance incubator ("MVI"), Bene Assicurazioni ("Bene"), Digital Risk Resources, LLC ("Digital Re") and Crop Re. On December 14, 2020, we completed the sale of our interest in Crop Re to CGB DS. As at December 31, 2021, the Company has paid \$2.5 million of capital as an equity investment in the holding company of a multi-line reinsurer ("Multi-line Reinsurer"), following the Company having previously, on December 23, 2019, committed \$5.0 million as an equity investment. The strategy for the Multi-line Reinsurer is to combine a diversified reinsurance business, focused primarily on long-tailed lines of property and casualty business and, potentially to a lesser extent, life business, with a diversified investment strategy. Refer to Item 18, Note 4 of our consolidated financial statements, "Investments" for further details.

In March, 2021 the Company committed an additional \$0.8 million equity contribution to MVI over a 2 year period and paid \$0.4 million in the period ending December 31, 2021.

For further information regarding these investments, refer to Item 18, Note 4 of our consolidated financial statements, "Investments."

On December 20, 2017, the Company committed to, and during 2018 invested \$100.0 million as a limited partner to a real estate fund, classified as other investments. As at December 31, 2021, the current fair value of the fund was \$129.9 million.

On September 30, 2021, the Company committed and paid in full \$20.0 million as a limited partner to a third party managed real estate fund. The Partnership was established to make equity and equity related investments in multifamily and other commercial real estate properties located in the United States and its territories, with the goal of generating superior risk-adjusted returns. The Partnership seeks to acquire commercial real estate assets including real estate assets (or interests therein) that may have management or operational problems and require improvements or lack sufficient capital, including mortgage loans and development or redevelopment properties. As at December 31, 2021, the current fair value of the fund is \$21.4 million, for an aggregate fair value of \$151.3 million across both real estate funds.

The composition of our cash and investments as at December 31, 2021 and 2020 is summarized below:

	As at December 31, 2021		As at December 31, 2020	
	Estimated Fair Value	Percentage of Total Cash and Investments	Estimated Fair Value	Percentage of Total Cash and Investments
(\$ in millions except for percentages)				
Fixed Income Securities — Available for Sale				
U.S. government	\$ 1,084.3	13.8 %	\$ 1,101.2	14.7 %
U.S. agency	21.5	0.3	34.3	0.5
Municipal	82.6	1.1	67.1	0.9
Corporate	2,208.3	28.2	1,826.2	24.3
Non-U.S. government-backed corporate	136.8	1.7	63.4	0.8
Foreign government	250.7	3.2	273.1	3.6
Asset-backed	0.5	—	2.3	—
Non-agency commercial mortgage-backed	6.9	0.1	7.4	0.1
Agency mortgage-backed	1,090.0	13.9	973.1	13.0
Total Fixed Income Securities — Available for Sale	\$ 4,881.6	62.3 %	\$ 4,348.1	57.9 %
Fixed Income Securities — Trading				
U.S. government	116.3	1.5 %	120.5	1.6 %
Municipal	4.0	0.1	3.5	—
Corporate	96.8	1.2	103.5	1.4
High yield loans	76.9	1.0	9.8	—
Non-U.S. government-backed corporate	13.1	0.2	—	—
Foreign government	34.5	0.4	41.6	0.6
Asset-backed	785.7	10.0	539.1	7.2
Agency mortgage-backed securities	30.2	0.4	37.6	0.5
Total Fixed Income Securities — Trading	\$ 1,157.5	14.8 %	\$ 855.6	11.4 %
Total other investments, equity method	3.9	0.1	0.9	—
Total other investments ⁽¹⁾	151.3	1.9	109.4	1.5
Total catastrophe bonds — trading	3.4	0.1	18.8	0.3
Privately-held investments — Trading				
Commercial mortgage loans	211.5	2.7	163.6	2.2
Middle market loans	65.4	0.8	112.1	1.5
Asset-backed securities	26.6	0.3	18.6	0.2
Equity securities	3.6	—	5.0	0.1
Total privately-held investments — Trading	\$ 307.1	3.8 %	\$ 299.3	4.0 %
Total short-term investments — available for sale	10.1	0.1	87.8	1.2
Total short-term investments — trading	2.0	0.1	35.4	0.5
Total cash and cash equivalents	1,314.1	16.8	1,747.3	23.2
Total Cash and Investments	\$ 7,831.0	100.0 %	\$ 7,502.6	100.0 %
Net receivable for securities sold	\$ (25.2)		\$ 1.4	
Accrued interest receivable	30.8		29.3	
Total Investable Assets	\$ 7,836.6		\$ 7,533.3	

⁽¹⁾ Total other investments represents our investments in real estate funds. For further information refer to Item 18, Note 4 our consolidated financial statements, “Investments.”

Our mortgage-backed portfolio is supported by loans diversified across a number of geographic and economic sectors. The following table summarizes the fair value of our mortgage-backed securities by rating and class as at December 31, 2021:

	AAA	AA+ and Below (\$ in millions)	Total
Agency	\$ —	\$ 1,120.1	\$ 1,120.1
Non-agency commercial	—	7.0	7.0
Total mortgage-backed securities	\$ —	\$ 1,127.1	\$ 1,127.1

The average rating of our mortgage-backed portfolio was AA+.

Sub-prime securities. We define sub-prime related investments as those supported by, or containing, sub-prime collateral based on creditworthiness. We do not invest directly in sub-prime related securities.

As at December 31, 2021, the Company had invested \$3.6 million in equity securities in privately-held investments, as part of the Company's strategic asset allocation. We had no other investments in equity securities as at December 31, 2021.

Valuation of Investments

Fair Value Measurements. Our estimates of fair value for financial assets and liabilities are based on the framework established in the fair value accounting guidance included in ASC Topic 820, *Fair Value Measurements and Disclosures*. For a description of the framework, refer to Item 18, Note 6 of our consolidated financial statements, "Fair Value Measurements."

Valuation of Investments, Equity Method. The value of our investments in MVI, Digital Re and Multi-line Reinsurer are based on our share of the capital position of the entities which includes income and expenses reported in quarterly management accounts. Each of MVI, Digital Re and Multi-line Reinsurer is subject to annual audit evaluating the financial statements of the entities. We periodically review the management accounts of MVI, Digital Re and Multi-line Reinsurer and evaluate the reasonableness of the valuation of our investment.

Valuation of Other Investments. The Company's other investments represent our investments in real estate funds. Adjustments to the fair values are made based on the net asset value of the investments. The net valuation criteria established by the manager of such investments are established in accordance with the governing documents and the asset manager's valuation guidelines, which include: the discounted cash flows method and the performance multiple approach, which uses a multiple/capitalization rate derived from market data of comparable companies or assets to produce operating performance metrics. Alternative valuation methodologies may be employed for investments with unusual characteristics.

Valuation of Privately-held Investments. Privately-held investments are initially valued at cost or transaction value which approximates fair value. In subsequent measurement periods, the fair values of these securities are determined using internally developed discounted cash flow models. These models include inputs that are specific to each investment. The inputs used in the fair value measurements include dividend or interest rates and appropriate discount rates. The selection of an appropriate discount rate is judgmental and is the most significant unobservable input used in the valuation of these securities. A significant increase (decrease) in this input in isolation could result in significantly lower (higher) fair value measurement for other privately-held investments. In order to assess the reasonableness of the inputs the Company uses in the discounted cash flow models, the Company maintains an understanding of current market conditions, issuer specific information that may impact future cash flows as well as collaboration with independent vendors for most securities to assess the reasonableness of the discount rate being used.

Current Expected Credit Losses ("CECL") / Other-than-temporary Impairment of Investments. Following the Company's adoption of ASU 2016-13 "*Financial Instruments - Credit Losses (Topic 326)*", effective January 1, 2020, credit losses on available for sale debt securities accounting policy is applicable; prior to this date, the comparative periods presented the other-than-temporary impairment of investment accounting policy which was applicable:

Credit Losses on Available for Sale Debt Securities. A detailed analysis is performed each reporting period end to assess declines in the fair values of available for sale debt securities. Our credit loss model employs a discounted cash flow approach across all asset classes. Credit losses are only computed for assets held at an unrealized loss at the balance sheet date and will have a fair value floor. Default probabilities are estimated for each rating from AAA to C and analysis is undertaken separately for different assets classes and geographies. The expected credit losses, and subsequent adjustments to such losses are recorded within net realized gains/(losses) and is deducted from the amortized cost basis of the financial asset, with the net carrying value of the financial asset presented on the consolidated balance sheet at the amount expected to be collected.

Following the adoption of these ASUs with effect from January 1, 2020, the Company recognized a reduction in the Company's available-for-sale investment portfolio by \$0.6 million, recognizing current expected credit losses adjustment of

\$0.6 million through opening retained earnings. As at December 31, 2021 we recognized a credit loss provision of \$2.7 million, realizing a loss of \$2.5 million within the twelve months ended December 31, 2021.

For further discussion, refer to Item 18, Note 2(c) of our consolidated financial statements, “Basis of Preparation and Significant Accounting Policies — Accounting for Investments, Cash and Cash Equivalents.”

Reserves for Losses and Loss Adjustment Expenses

Provision is made at the end of each year for the estimated ultimate cost of claims incurred but not settled at the balance sheet date, including the cost of IBNR claims and development of existing reported claims. The estimated cost of claims includes expenses to be incurred in settling claims and a deduction for the expected value of salvage and other recoveries. Estimated amounts recoverable from reinsurers on unpaid losses and loss adjustment expenses are calculated to arrive at a net claims reserve.

Reserves by segment. As at December 31, 2021, we had total net loss and loss adjustment expense reserves of \$4,313.7 million (December 31, 2020 — \$3,970.1 million). This amount represented our best estimate of the ultimate liability for payment of losses and loss adjustment expenses. Of the total gross reserves for unpaid losses of \$7,611.8 million at the balance sheet date of December 31, 2021, a total of \$3,962.1 million, or 52.1%, represented IBNR claims (December 31, 2020 — \$3,887.2 million and 54.3%, respectively). The following tables analyze gross and net loss and loss adjustment expense reserves by business segment as at December 31, 2021 and 2020, respectively:

Business Segment	As at December 31, 2021		
	Gross	Reinsurance Recoverable	Net
	(\$ in millions)		
Reinsurance	\$ 3,329.1	\$ (1,180.7)	\$ 2,148.4
Insurance	4,282.7	(2,117.4)	2,165.3
Total losses and loss expense reserves	<u>\$ 7,611.8</u>	<u>\$ (3,298.1)</u>	<u>\$ 4,313.7</u>

Business Segment	At December 31, 2020		
	Gross	Reinsurance Recoverable	Net
	(\$ in millions)		
Reinsurance	\$ 3,150.6	\$ (1,054.9)	\$ 2,095.7
Insurance	4,014.7	(2,140.3)	1,874.4
Total losses and loss expense reserves	<u>\$ 7,165.3</u>	<u>\$ (3,195.2)</u>	<u>\$ 3,970.1</u>

The increase in reinsurance recoverables in 2021 compared with 2020 was due predominantly to the recognition of additional recoveries based on gross losses incurred. Within reinsurance recoverables we have recognized \$68.1 million of recoverables on the ADC, of which \$58.3 million has been deferred on the balance sheet and has been offset within reinsurance recoverables.

The gross reserves may be further analyzed between outstanding claims and IBNR as at December 31, 2021 and 2020 as follows:

	As at December 31, 2021			
	Gross Outstandings	Gross IBNR	Gross Reserve	% IBNR
	(\$ in millions, except for percentages)			
Reinsurance	\$ 1,785.4	\$ 1,543.7	\$ 3,329.1	46.4 %
Insurance	1,864.3	2,418.4	4,282.7	56.5 %
Total losses and loss expense reserves	<u>\$ 3,649.7</u>	<u>\$ 3,962.1</u>	<u>\$ 7,611.8</u>	<u>52.1 %</u>

	As at December 31, 2020			
	Gross Outstandings	Gross IBNR	Gross Reserve	% IBNR
	(\$ in millions, except for percentages)			
Reinsurance	\$ 1,541.3	\$ 1,609.3	\$ 3,150.6	51.1 %
Insurance	1,736.8	2,277.9	4,014.7	56.7 %
Total losses and loss expense reserves	\$ 3,278.1	\$ 3,887.2	\$ 7,165.3	54.3 %

Prior year loss reserves. For the twelve months ended December 31, 2021, there was an overall increase in our estimate of ultimate net claims to be paid in respect of prior accident years. An analysis of this overall net increase/(decrease) by business segment is as follows for each of the twelve months ended December 31, 2021, 2020 and 2019:

Business Segment	For the Twelve Months Ended		
	December 31, 2021	December 31, 2020	December 31, 2019
	(\$ in millions)		
Reinsurance	\$ 134.4	\$ 36.1	\$ 54.9
Insurance	(179.5)	(35.2)	(114.4)
Total losses and loss expense reserves changes	\$ (45.1)	\$ 0.9	\$ (59.5)

For the twelve months ended December 31, 2021. The analysis of the development by each segment is as follows:

Reinsurance. Net reserve releases of \$134.4 million in 2021 were mainly due to releases on casualty reinsurance and specialty reinsurance.

Insurance. Net unfavorable reserve development of \$179.5 million in 2021 was primarily from casualty insurance lines and first party specialty lines.

For the twelve months ended December 31, 2020. The analysis of the development by each segment is as follows:

Reinsurance. Net reserve releases of \$36.1 million in 2020 were mainly due to releases on casualty reinsurance, property catastrophe reinsurance and specialty reinsurance, partially offset by strengthening on other property reinsurance lines.

Insurance. Net unfavorable reserve development of \$35.2 million in 2020 was primarily from our casualty lines.

We did not make any significant changes in methodologies used in our reserving process between 2020 and 2021.

Critical Accounting Policies

We believe that the following are critical accounting policies used in the preparation of our consolidated financial statements. A statement of all the significant accounting policies we use to prepare our financial statements is included in the Notes to the consolidated financial statements. If factors such as those described in Item 3D, "Risk Factors" cause actual events to differ from the assumptions used in applying the accounting policies and calculating financial results, there could be a material adverse effect on our operating results, financial condition and liquidity.

Written Premiums

Written premiums comprise the estimated premiums on contracts of insurance and reinsurance entered into in the reporting period, except in the case of proportional reinsurance contracts, where written premiums relate only to our estimated proportional share of premiums due on contracts entered into by the ceding company prior to the end of the reporting period.

All premium estimates are reviewed regularly, comparing actual reported premiums to expected ultimate premiums along with a review of the collectability of premiums receivable. Based on management's review, the appropriateness of the premium estimates is evaluated, and any adjustments to these estimates are recorded in the periods in which they become known. Adjustments to original premium estimates could be material and these adjustments may directly and significantly impact earnings in the period they are determined because the subject premium may be fully or substantially earned.

We refer to premiums receivable which are not fixed at the inception of the contract as adjustment premiums. The proportion of adjustment premiums included in the premium estimates varies between business lines with the largest adjustment premiums associated with property and casualty reinsurance business and the smallest with property and liability insurance lines.

Adjustment premiums are most significant in relation to reinsurance contracts. Different considerations apply to non-proportional and proportional treaties as follows:

Non-proportional treaties. A large number of the reinsurance contracts we write are written on a non-proportional or excess of loss treaty basis. As the ultimate level of business written by each cedant can only be estimated at the time the reinsurance is placed, the reinsurance contracts generally stipulate a minimum and deposit premium payable under the contract with an adjustable premium determined by variables such as the number of contracts covered by the reinsurance, the total premium received by the cedant and the nature of the exposures assumed. Minimum and deposit premiums generally cover the majority of premiums due under such treaty reinsurance contracts and the adjustable portion of the premium is usually a small portion of the total premium receivable. For excess of loss contracts, the minimum and deposit premium, as defined in the contract, is generally considered to be the best estimate of the contract's written premium at inception. Accordingly, this is the amount we generally record as written premium in the period the underlying risks incept.

During the life of a contract, notifications from cedants and brokers may affect the estimate of ultimate premium and result in either increases or reductions in reported revenue. Changes in estimated adjustable premiums do not generally have a significant impact on short-term liquidity as the payment of adjustment premiums generally occurs after the expiration of a contract.

Many non-proportional treaties also include a provision for the payment to us by the cedant of reinstatement premiums based on loss experience under such contracts. Reinstatement premiums are the premiums charged for the restoration of the reinsurance limit of an excess of loss contract to its full amount after payment by the reinsurer of losses as a result of an occurrence. These premiums relate to the future coverage obtained during the remainder of the initial policy term and are included in revenue in the same period as the corresponding losses.

Proportional treaties ("treaty pro rata"). Estimates of premiums assumed under treaty pro rata reinsurance contracts are recorded in the period in which the underlying risks are expected to incept and are based on information provided by brokers and ceding companies and estimates of the underlying economic conditions at the time the risk is underwritten. We estimate premiums receivable initially and update our premium estimates regularly throughout the contract term based on treaty statements received from the ceding company.

The reported gross written premiums for treaty pro rata business include estimates of premiums due to us but not yet reported by the cedant because of time delays between contracts being written by our cedants and their submission of treaty statements to us. This additional premium is normally described as pipeline premium. Treaty statements disclose information on the underlying contracts of insurance written by our cedants and are generally submitted on a monthly or quarterly basis, from 30 to 90 days in arrears. In order to report all risks incepting prior to a period end, we estimate the premiums written between the last submitted treaty statement and the period end. Treaty pro rata premiums are written predominantly in our other property, specialty and casualty reinsurance lines of business.

Property treaty pro rata contributed significantly to our reinsurance segment where we wrote \$319.6 million in gross written premium in 2021 (2020 — \$285.1 million), or 20.0% of the gross written premiums in our reinsurance segment, of which \$31.3 million was estimated (2020 — \$5.0 million) and \$288.3 million was reported by the cedants (2020 — \$280.1 million). Excluding the impact of costs, such as reinsurance premiums and operating expenses, we estimate that the impact of a \$1.0 million increase/decrease in our estimated gross written premiums in our property treaty pro rata business would increase/decrease net income before tax by approximately \$0.1 million for the year ended December 31, 2021 (2020 — \$0.1 million increase/decrease).

The most likely drivers of change in our premium estimates in decreasing order of magnitude are:

- changes in renewal rate or rate of new business acceptances by cedant insurance companies leading to lower or greater volumes of ceded premiums than our estimate, which could result from changes in the relevant primary market that could affect more than one of our cedants or could be a consequence of changes in marketing strategy or risk appetite by a particular cedant;
- changes in the rates being charged by cedants; and
- differences between the pattern of inception dates assumed in our estimate and the actual pattern of inception dates.

We anticipate that ultimate premiums might reasonably be expected to vary by up to 5% as a result of variations in one or more of the assumptions described above, although larger variations are possible. Based on gross written premiums of \$319.6 million (2020 — \$285.1 million) in our property reinsurance treaty pro rata account as at December 31, 2021, a variation of 5% could increase or reduce net income before tax by approximately \$0.2 million (2020 — \$Nil).

Earned premiums. Premiums are recognized as earned over the policy exposure periods. The premium related to the unexpired portion of each policy at the end of the reporting period is included in the balance sheet as unearned premiums.

Accounting for retroactive reinsurance agreements: Retroactive reinsurance agreements are reinsurance agreements under which a reinsurer agrees to reimburse the Company as a result of past insurable events. For these agreements, the excess of the amounts ultimately collectible under the agreement over the consideration paid is recognized as a deferred gain liability which is amortized into income over the settlement period of the ceded reserves once the paid losses have exceeded the minimum retention. The amount of the deferral is recalculated each period based on actual loss payments and updated estimates of ultimate losses. If the consideration paid exceeds the ultimate losses collectible under the agreement, the net loss on the retroactive reinsurance agreement is recognized within income immediately.

Premiums payable for retroactive reinsurance coverage and meeting the conditions of reinsurance accounting are reported as reinsurance recoverables to the extent that those amounts do not exceed recorded liabilities relating to underlying reinsurance contracts. To the extent that recorded liabilities on an underlying reinsurance contract exceed premiums payable for retroactive coverage, a deferred gain is recognized.

B. Liquidity and Capital Resources

Liquidity

Liquidity is a measure of a company's ability to generate cash flows sufficient to meet short-term and long-term cash requirements of its business operations. Management monitors the liquidity of Aspen Holdings and of each of its Operating Subsidiaries and arranges credit facilities to enhance short-term liquidity and capital resources on a stand-by basis. As a holding company, Aspen Holdings relies on dividends and other distributions from its Operating Subsidiaries to provide cash flow to meet ongoing cash requirements, including claims settlements, any future debt service payments and other expenses, and to pay dividends, if any, to our preference and ordinary shareholders.

As at December 31, 2021, Aspen Holdings held \$87.5 million (December 31, 2020 — \$91.9 million) of cash, cash equivalents and investments. Management considers the current cash and cash equivalents, together with dividends declared or expected to be declared by subsidiary companies and our credit facilities, sufficient to appropriately satisfy the liquidity requirements of Aspen Holdings. Aspen Holdings' liquidity depends on dividends, capital distributions and interest payments from our Operating Subsidiaries. Aspen Holdings also has recourse to the credit facility described under "Letter of Credit Facilities" below.

The ability of our Operating Subsidiaries to pay dividends or other distributions is subject to the laws and regulations applicable to each jurisdiction, as well as the Operating Subsidiaries' need to maintain capital requirements adequate to maintain their insurance and reinsurance operations and their financial strength ratings issued by independent rating agencies. We do not expect to suffer tax on foreign earnings since our significant source of earnings outside of Bermuda is the U.K. and no taxes are imposed on profits repatriated from the U.K. to Bermuda. For a further discussion of the various restrictions on our ability and our Operating Subsidiaries' ability to pay dividends, refer to Item 4, "Business Overview — Regulatory Matters." For a discussion of the volatility and liquidity of our other investments, refer to Item 3D, "Risk Factors — Market and Liquidity Risks," and for a discussion of the impact of insurance losses on our liquidity, refer to Item 3D, "Risk Factors — Insurance Risks" and Item 18, Note 15 of our consolidated financial statements, "Statutory Requirements and Dividend Restrictions."

Operating Subsidiaries. As at December 31, 2021, the Operating Subsidiaries held \$1,156.8 million (December 31, 2020 — \$1,600.2 million) in cash and short-term investments that are readily realizable securities. Management monitors the value, currency and duration of cash and investments held by the Operating Subsidiaries to ensure they are able to meet their insurance and other liabilities as they become due and was satisfied that there was a comfortable margin of liquidity as at December 31, 2021 and for the foreseeable future.

On an ongoing basis, our Operating Subsidiaries' sources of funds primarily consist of premiums written, investment income and proceeds from sales and redemptions of investments. Cash is used primarily to pay reinsurance premiums, losses and loss adjustment expenses, brokerage commissions, general and administrative expenses, taxes, interest and dividends and to purchase new investments. The potential for individual large claims and for accumulations of claims from single events means that substantial and unpredictable payments may need to be made within relatively short periods of time.

For all material currencies in which our underwriting activities are written we ensure that sufficient cash and short-term investments are held in such currencies to enable us to meet potential claims without liquidating long-term investments and adversely affecting our investment return. This follows the matching principle which matches our assets and liabilities in currency to mitigate foreign currency risk whenever possible.

We manage these risks by making regular forecasts of the timing and amount of expected cash outflows and ensuring that we maintain sufficient balances in cash and short-term investments to meet these estimates. Notwithstanding this policy, if these cash flow forecasts are incorrect, we could be forced to liquidate investments prior to maturity, potentially at a significant loss. Historically, we have not had to liquidate investments at a significant loss to maintain sufficient levels of liquidity.

Where we incur losses in currencies which are not normally held we will convert funds into the appropriate currencies to mitigate our currency risk and also make funds available to settle claims in local currencies as and when they become due. For local regulatory reasons, we hold assets in trusts which limits our liquidity to some degree. The process of matching assets with liabilities in currency means, however, that at any one time we will hold cash and short-term assets in all major currencies which are available to settle claims.

The liquidity of our Operating Subsidiaries is also affected by the terms of our contractual obligations to policyholders and by undertakings to certain regulatory authorities to facilitate the issue of letters of credit or maintain certain balances in trust funds for the benefit of policyholders, or restricted for other reasons. The following table shows the forms of collateral or other security provided in respect of these obligations and undertakings as at December 31, 2021 and December 31, 2020:

	As at December 31, 2021	At December 31, 2020
	(\$ in millions, except percentages)	
Regulatory trusts and deposits:		
Affiliated transactions	\$ 891.3	\$ 1,027.9
Third party	3,099.7	2,762.2
Letters of credit / guarantees	539.8	516.8
Total restricted assets (excluding illiquid assets)	4,530.8	4,306.9
Other investments — real estate funds (illiquid assets)	151.3	109.4
Total restricted assets and illiquid assets	\$ 4,682.1	\$ 4,416.3
Total as percent of cash and invested assets	59.7 %	58.6 %

Refer to Item 18, Note 20(a), “Commitments and Contingencies — Restricted Assets” of our consolidated financial statements for further detail on our trust fund balances which we are required to maintain in accordance with contractual obligations to policyholders and in compliance with regulatory requirements.

Consolidated cash flows for the twelve months ended December 31, 2021. Total net cash flow generated in operations for the twelve months ended December 31, 2021 was \$524.7 million, an increase in cash from the equivalent period in 2020. The increase in cash generated in operations for the twelve months ended December 31, 2021 was mainly attributable to the cash outflow in 2020 due to the purchase of the adverse development cover. We paid net claims of \$1,309.8 million in 2021 and utilized cash of \$950.3 million for investing during the period.

Cash flow from financing activities were \$0.5 million, including additional capital contribution of \$45.0 million, offset by preference share dividends of \$44.5 million. At December 31, 2021, we had a balance of cash and cash equivalents of \$1,314.1 million.

Consolidated cash flows for the twelve months ended December 31, 2020. Total net cash flow used in operations for the twelve months ended December 31, 2020 was \$672.7 million, a \$334.9 million increase in cash used from the equivalent period in 2019. The increase in cash used in operations for the twelve months ended December 31, 2020 was mainly attributable the purchase of the adverse development cover. For the twelve months ended December 31, 2020, the cash flows used in operations required funds to be realized from the investment portfolio. We paid net claims of \$1,764.6 million in 2020, and generated cash inflows of \$1,151.2 million from investing during the period.

Capital Resources

We maintain our capital at an appropriate level as determined by our internal risk appetite and the financial strength required by our customers, regulators and rating agencies. We monitor and review the Aspen Group and the Operating Entities' capital and liquidity positions on an ongoing basis. The following table shows our capital structures as at December 31, 2021 compared to December 31, 2020:

	As at December 31, 2021	At December 31, 2020
	(\$ in millions)	
Share capital, additional paid-in capital, retained income and accumulated other comprehensive income attributable to ordinary shareholders ⁽¹⁾	\$ 2,021.3	\$ 2,133.7
Preference shares (liquidation preferences net of issue costs)	753.5	753.5
Long-term debt	299.9	299.9
Total capital	\$ 3,074.7	\$ 3,187.1

⁽¹⁾Total shareholders' equity has been corrected by \$(110.4) million as at December 31, 2020, split between retained earnings and accumulated other comprehensive income totaling \$(28.5) million and \$(81.9) million, respectively. Refer to Item 18, Note 26 of our consolidated financial statements, "Correction of Immaterial Errors" for more information.

As at December 31, 2021, total shareholders' equity was \$2,774.8 million compared to \$2,887.2 million as at December 31, 2020. Our total shareholders' equity as at December 31, 2021 includes three classes of preference shares with a total value as measured by their respective liquidation preferences of \$753.5 million net of share issuance costs (December 31, 2020 — \$753.5 million, three classes of preference shares).

Our preference shares are classified in our balance sheet as equity but may receive a different treatment in some cases under the capital adequacy assessments made by certain rating agencies. Such securities are often referred to as "hybrids" as they have certain attributes of both debt and equity. Management monitors the ratio of the total of debt and hybrids to total capital which was 34.3% as of December 31, 2021 (December 31, 2020 — 33.1%). Total capital is defined as being shareholders' equity plus outstanding debt and excluding loan notes issued by variable interest entities.

As at December 31, 2021, Aspen Holdings' material debt outstanding was our 2023 Senior Notes and a draw down on a credit facility of \$100 million payable within 12 months. As at December 31, 2021 and 2020, the value of debt less amortization expenses was \$299.9 million and \$299.9 million, respectively.

Management monitors the ratio of debt to total capital which was 9.8% as at December 31, 2021 (December 31, 2020 — 9.4%).

The principal capital management transaction during 2021 was as follows:

- During the fourth quarter of 2021, our parent company Highlands Bermuda Holdco, Ltd. contributed additional capital totaling \$45.0 million.

The principal capital management transaction during 2020 was as follows:

- During the fourth quarter of 2020, our parent company Highlands Bermuda Holdco, Ltd. contributed additional capital totaling \$268.0 million.

Access to capital. Our business operations are in part dependent on our financial strength, the opinions of the independent rating agencies thereof as discussed elsewhere in this report and the market's perception thereof, as measured by total shareholders' equity, which was \$2,774.8 million as at December 31, 2021 (December 31, 2020 — \$2,887.2 million). Our ability to access the capital markets is dependent on, among other things, our operating results, market conditions and our perceived financial strength. We regularly monitor our capital and financial position, as well as investment and securities market conditions, both in general and with respect to Aspen Holdings' securities. Our preference shares and depositary shares are listed on the NYSE.

Letter of Credit Facilities. Refer to Item 18, Note 23 of our consolidated financial statements, "Credit Facility and Long-term Debt" for discussion of our credit agreements and letter of credit facilities.

C. Research and Development, Patents and Licenses, etc.

Not applicable.

D. Trend Information

Throughout 2021 and into 2022, the (re)insurance market experienced rate increases. Although the (re)insurance market remains competitive and there remains no shortage of available capital, market conditions and rates are strengthening, which we expect to continue. Our own capital base has been bolstered by the \$45.0 million capital contributions received from our shareholder in the fourth quarter of 2021. As the rate environment improves, we will continue to seek opportunities to deploy capital most efficiently to achieve attractive risk-adjusted returns. We have repositioned our portfolio during the last several years and believe our business is well-positioned for the current market environment. We also believe that steps we have taken in recent years to streamline our operations and manage expenses combined with this improving rate environment will help us increase our underwriting margins. We remain focused, however, on identifying and capitalizing on adequately priced business without sacrificing underwriting discipline.

COVID-19 is expected to continue to impact global markets. Refer to Item 3D, “Risk Factors” and “Cautionary Statement Regarding Forward-Looking Statements” included in this report.

E. Critical Accounting Estimates

Our consolidated financial statements contain certain amounts that are inherently subjective in nature and require management to make assumptions and best estimates to determine the reported values. We believe that the following critical accounting estimates are the most significant estimates used in the preparation of our consolidated financial statements.

Reserving Approach

We are required by U.S. GAAP to establish loss reserves for the estimated unpaid portion of the ultimate liability for losses and loss expenses (“ultimate losses”) under the terms of our policies and agreements with our insured and reinsured customers. Our loss reserves comprise the following components:

- the cost of claims reported to us but not yet paid known as case reserves (“case reserves”);
- Reserves to cover the anticipated cost of IBNR claims. Within this, we also include the potential development of reported claims; and
- the expenses associated with settling claims, including legal and other fees and the general expenses of administering the claims adjustment process, known as the loss adjustment expenses (“LAE”).

Case Reserves. For reported claims, reserves are established on a case-by-case basis within the parameters of coverage provided in the insurance policy or reinsurance agreement. The method of establishing case reserves for reported claims differs among our operations. With respect to our insurance operations, we are advised of potential insured losses and our claims handlers’ record reserves for the estimated amount of the expected indemnity settlement, loss adjustment expenses and cost of defense where appropriate. The reserve estimate reflects the judgment of the claims personnel and is based on claim information obtained to date, general reserving practices, the experience and knowledge of the claims personnel regarding the nature of the specific claim and where appropriate and available, advice from legal counsel, loss adjusters and other claims experts.

With respect to our reinsurance claims operations, claims handlers set case reserves for reported claims generally based on the claims reports received from our ceding companies and take into consideration our cedants’ own reserve recommendations and our prior loss experience with the cedant. Additional case reserves (“ACR”), in addition to the cedants’ own recommended reserves, may be established by us to reflect our estimated ultimate cost of a loss. ACRs are generally the result of either a claims handler’s own experience and knowledge of handling similar claims, general reserving practices or the result of reserve recommendations following an audit of cedants’ reserves.

Case reserves are based on a subjective judgment of facts and circumstances and are established for the purposes of internal reserving only. Accordingly, they do not represent a commitment to any course of conduct or admission of liability on our behalf in relation to any specific claim.

IBNR Reserves. The need for IBNR reserves arises from time lags between when a loss occurs and when it is actually reported and settled. By definition, we do not have specific information on IBNR claims so they need to be estimated by actuarial methodologies. IBNR reserves are therefore generally calculated at an aggregate level and cannot generally be

identified as reserves for a particular loss or contract. We calculate IBNR reserves by class of business within each line of business. Where appropriate, analyses may be conducted on sub-sets of a class of business. IBNR reserves are calculated by projecting our ultimate losses on each class of business and subtracting paid losses and case reserves. IBNR reserves also cover the anticipated cost of claims incurred but not reported, within this we also include any potential development of reported claims. Over recent years, we have begun to place greater reliance on our actual actuarial experience for our long-tail lines of business that we have written since our inception in 2002. We believe that our earliest accident years are now capable of providing us with meaningful actuarial indications. Estimates and judgments for new insurance and reinsurance lines of business are more difficult to make than those made for more mature lines of business because we have more limited historical information through December 31, 2021.

Sources of Information. Claims information received typically includes the loss date, details of the claim, the recommended reserve and reports from the loss adjusters dealing with the claim. In respect of pro rata treaties and any business written through managing general agents, we receive regular statements (bordereaux) which provide paid and outstanding claims information, often with large losses separately identified. Following widely reported loss events, such as catastrophes, we adopt a proactive approach to establish our likely exposure to claims by reviewing policy listings and contacting brokers and policyholders as appropriate.

Actuarial Methodologies. The main projection methodologies that are used by our actuaries are as follows:

- *Initial expected loss ratio ("IELR") method:* This method calculates an estimate of ultimate losses by applying an estimated loss ratio to an estimate of ultimate earned premium for each accident year. The estimated loss ratio may be based on pricing information and/or industry data and/or historical claims experience revalued to the year under review.
- *Bornhuetter-Ferguson ("BF") method:* The BF method uses as a starting point an assumed IELR and blends in the loss ratio, which is implied by the claims experience to date using benchmark loss development patterns on paid claims data ("Paid BF") or reported claims data ("Reported BF"). Although the method tends to provide less volatile indications at early stages of development and reflects changes in the external environment, it can be slow to react to emerging loss development and can, if the IELR proves to be inaccurate, produce loss estimates which take longer to converge with the final settlement value of loss.
- *Loss development ("Chain Ladder") method:* This method uses actual loss data and the historical development profiles on older accident years to project more recent, less developed years to their ultimate position.
- *Exposure-based method:* This method is typically used for specific large catastrophic events such as a major hurricane. All exposure is identified and we work with known market information and information from our cedants to determine a percentage of the exposure to be taken as the ultimate loss.

In addition to these methodologies, our actuaries may use other approaches depending upon the characteristics of the class of business and available data.

In general terms, the IELR method is most appropriate for classes of business and/or accident years where the actual paid or reported loss experience is not yet mature enough to modify our initial expectations of the ultimate loss ratios. Typical examples would be recent accident years for classes of business in casualty reinsurance. The BF method is generally appropriate where there are few reported claims and a relatively less stable pattern of reported losses. Typical examples would be our treaty risk excess class of business in our reinsurance segment and marine hull class of business in our insurance segment. The Chain Ladder method is appropriate when there are relatively stable patterns of loss emergence and a relatively large number of reported claims. Typical examples are the U.K. commercial property and U.K. commercial liability classes of business in our international insurance business.

Reserving Procedures and Process. Our actuaries calculate the IELR, BF and Chain Ladder and, if appropriate, other methods for each class of business and each accident year. They then calculate a single point actuarial central estimate ("ultimate") for each class of business and provide a stochastic distribution around the mean for each line of business. The actuarial methodologies involve significant subjective judgments reflecting many factors, including but not limited to, changes in legislative conditions, changes in judicial interpretation of legal liability policy coverages and inflation. Our actuaries collaborate with our underwriting, claims, legal and finance teams in identifying factors which are incorporated in their range of ultimates in which management's best estimate is most likely to fall.

There are no differences between our year-end and our quarterly internal reserving procedures and processes because our actuaries perform the basic projections and analyses described above for each class of business quarterly.

Selection of Reported Gross Reserves. The Reserve Committee signs off on the group-level reserve margin, which reflects, amongst other matters, key areas of reserving uncertainty within the group actuarial central estimate. The reserve margin is

factored into the management best estimate, which provides the basis for management's recommendation to the Audit Committee and the Board regarding the reserve amounts to be recorded in the financial statements.

As at December 31, 2021, the Reserve Committee was chaired by the Group Chief Actuarial Officer and its membership includes members of senior management from various functions of the business.

Each significant class of business is reviewed in detail by management through its Reserve Committee at least once a year. The timing of such reviews varies throughout the year. Additionally, we review the emergence of actual losses relative to expectations every fiscal quarter for all classes of business. If warranted from this analysis, we may accelerate the timing of our detailed actuarial reviews.

Uncertainties. While the management selected reserves make a reasonable provision for unpaid loss and loss adjustment expense obligations, we note that the process of estimating required reserves, by its very nature, involves uncertainty and therefore the ultimate claims may fall outside the actuarial range. The level of uncertainty can be influenced by such factors as the existence of coverage with long duration reporting patterns and changes in claims handling practices, as well as the other factors described above.

Given many of the coverages underwritten involve claims that may not be ultimately settled for many years after they are incurred, subjective judgments as to the ultimate exposure to losses are an integral and necessary component of the loss reserving process. We review our reserves regularly, using a variety of statistical and actuarial techniques to analyze current claims costs, frequency and severity data, and prevailing economic, social and legal factors. Reserves established in prior periods are adjusted as claims experience develops and new information becomes available.

Estimates of IBNR are generally subject to a greater degree of uncertainty than estimates of the cost of settling claims already notified to us, where more information about the claim event is generally available. IBNR claims often may not be apparent to the insured until many years after the event giving rise to the claims has happened. Classes of business where the IBNR proportion of the total reserve is high, such as casualty insurance, will typically display greater variations between initial estimates and final outcomes because of the greater degree of difficulty of estimating these reserves.

Classes of business where claims are typically reported relatively quickly after the claim event tend to display lower levels of volatility between initial estimates and final outcomes. Reinsurance claims are subject to a longer time lag both in their reporting and in their time to final settlement. The time lag is a factor which is included in the projections to ultimate claims within the actuarial analyses and helps to explain why in general a higher proportion of the initial reinsurance reserves are represented by IBNR than for insurance reserves for business in the same class. Delays in receiving information from cedants are an expected part of normal business operations and are included within the statistical estimate of IBNR to the extent that current levels of backlog are consistent with historical data. Currently, there are no processing backlogs which would materially affect our financial statements.

Allowance is made, however, for changes or uncertainties which may create distortions in the underlying statistics or which might cause the cost of unsettled claims to increase or reduce when compared with the cost of previously settled claims, including:

- changes in our processes which might accelerate or slow down the development and/or recording of paid or incurred claims;
- changes in the legal environment (including challenges to tort reform);
- the effects of inflation;
- changes in the mix of business;
- the impact of large losses; and
- changes in our cedants' reserving methodologies.

These factors are incorporated in the recommended actuarial central estimate to which management overlays a margin. We take all reasonable steps to ensure that we utilize all appropriate information and actuarial techniques in establishing our IBNR reserves. However, given the uncertainty in establishing claims liabilities, it is likely that the final outcome will prove to be different from the original provision established at the balance sheet date. Changes to our previous estimates of prior period loss reserves impact the reported calendar year underwriting results by worsening our reported results if the prior year reserves prove to be deficient or improving our reported results if the prior year reserves prove to be redundant. As at December 31, 2021, a 5% change in the gross reserve for IBNR losses would have equated to a change of approximately \$198.1 million in loss reserves which would represent 564.4% of income before income tax for the twelve months ended December 31, 2021. As at December 31, 2020, a 5% change in the gross reserve for IBNR losses would have equated to a change of approximately

\$194.4 million in loss reserves which would represent 511.6% of loss before income tax for the twelve months ended December 31, 2020. A 5% change in our net loss reserves equates to \$215.7 million and represents 7.8% of shareholders' equity as at December 31, 2021.

There are specific areas of our selected reserves which have additional uncertainty associated with them. Refer to Item 3D, "Risk Factors — Insurance Risks — Our financial condition and operating results may be adversely affected if actual claims exceed our loss reserves" for a discussion of the specific areas of our selected reserves which have additional uncertainty. In each case, management believes they have selected an appropriate best estimate based on current information and current analyses.

Loss Reserving Sensitivity Analysis. The most significant key assumptions identified in the reserving process are that (i) the historic loss development and trend experience is assumed to be indicative of future loss development and trends, (ii) the information developed from internal and independent external sources can be used to develop meaningful estimates of the initial expected ultimate loss ratios, and (iii) no significant losses or types of losses will emerge that are not represented in either the initial expected loss ratios or the historical development patterns.

We believe that there is potentially significant risk in estimating loss reserves for long-tail lines of business and for immature accident years that may not be adequately captured through traditional actuarial projection methodologies. As discussed above, these methodologies usually rely heavily on projections of prior year trends into the future. In selecting our best estimate of future liabilities, we consider both the results of actuarial point estimates of loss reserves in addition to the stochastic distribution of reserves. In determining the appropriate best estimate, we review (i) the position of overall reserves within the actuarial distribution, (ii) the result of bottom up analysis by accident year reflecting the impact of parameter uncertainty in actuarial calculations, and (iii) specific qualitative information on events that may have an effect on future claims development but which may not have been adequately reflected in actuarial best estimates, such as the potential for outstanding litigation or claims practices of cedants to have an adverse impact.

Effect if Actual Results Differ From Assumptions. Given the risks and uncertainties associated with the process for estimating reserves for losses and loss expenses, management has performed an evaluation of the potential variability in loss reserves and the impact this variability may have on reported results, financial condition and liquidity. Because of the inherent uncertainties discussed above, we have developed a reserving philosophy which attempts to incorporate prudent assumptions and estimates.

Management's best estimate of the net reserve for losses and loss expenses as at December 31, 2021 was \$4,313.7 million. The following tables show the effect on estimated net reserves for losses and loss expenses as at December 31, 2021 of a change in two of the most critical assumptions in establishing reserves: (i) loss emergence patterns, accelerated or decelerated by three and six months; and (ii) expected loss ratios varied by plus or minus five and ten percent. Accelerated loss emergence patterns indicates a higher development percentage of losses, therefore requiring lower IBNR than previously expected and hence resulting in a lower ultimate.

Management believes that these scenarios present a reasonable range of variability around the booked reserves using standard actuarial techniques. Loss reserves may vary beyond these scenarios in periods of heightened or reduced claim activity. The reserves resulting from the changes in the assumptions are not additive and should be considered separately. The following tables vary the assumptions employed therein independently. In addition, the tables below do not adjust any parameters other than the ones described above.

Net reserve for losses and loss expenses as at December 31, 2021 — Sensitivity to loss emergence patterns

Change in assumption	Reserve for losses and loss expenses	
	(\$ in millions)	
Six month acceleration	\$	4,098.2
Three month acceleration	\$	4,197.9
No change (selected)		4,313.7
Three month deceleration	\$	4,447.9
Six month deceleration	\$	4,623.0

Net reserve for losses and loss expenses as at December 31, 2021 — Sensitivity to expected loss ratios

Change in assumption	Reserve for losses and loss expenses	
	(\$ in millions)	
10% favorable	\$	4,034.0
5% favorable	\$	4,173.9
No change (selected)		4,313.7
5% unfavorable	\$	4,453.5
10% unfavorable	\$	4,593.4

The most significant variance in the above scenarios (i.e., a 10% unfavorable movement in expected loss ratios) would have the effect of increasing losses and loss expenses by \$279.7 million.

Management believes that the reserve for losses and loss expenses are sufficient to cover expected claims incurred before the reporting date on the basis of the methodologies and judgments used to support its estimates. However, there can be no assurance that actual payments will not vary significantly from total reserves. The reserve for losses and loss expenses and the methodology of estimating such reserve are regularly reviewed and updated as new information becomes known. Any resulting adjustments are reflected in income in the period in which they become known.

Valuation of Investments Measured Using Significant Unobservable Inputs

The Company's estimates of fair value for financial assets and liabilities are based on the framework established in the fair value accounting guidance included in ASC Topic 820, "Fair Value Measurements and Disclosures." The framework prioritizes the inputs, which refer broadly to assumptions market participants would use in pricing an asset or liability.

The Company considers prices for actively traded securities to be derived based on quoted prices in an active market for identical assets.

The Company considers prices for other securities that may not be as actively traded which are priced via pricing services, vendors and broker-dealers, or with reference to interest rates and yield curves, to be derived based on inputs that are observable for the asset, either directly or indirectly.

The Company considers securities, other financial instruments, privately-held investments and derivative insurance contracts subject to fair value measurement whose valuation is derived by internal valuation models to be based largely on unobservable inputs. Unobservable inputs are assumptions used by the Company using the best available information at the time of making these valuation assumptions. Level 3 financial instruments have the least use of observable market inputs used to determine fair value. As at December 31, 2021, the Company classified privately-held investments of \$307.1 million as Level 3 as a result of significant unobservable inputs used to determine fair value.

Privately-held investments are initially valued at cost or transaction value which approximates fair value. In subsequent measurement periods, the fair values of these securities are determined using internally developed discounted cash flow models. These models include inputs that are specific to each investment. The inputs used in the fair value measurements include dividend or interest rates and appropriate discount rates. The selection of an appropriate discount rate is judgmental and is the most significant unobservable input used in the valuation of these securities. A significant increase (decrease) in this input in isolation could result in significantly lower (higher) fair value measurement for privately-held investments. In order to assess the reasonableness of the inputs the Company uses in the discounted cash flow models, the Company maintains an understanding of current market conditions, issuer specific information that may impact future cash flows as well as collaboration with independent vendors for most securities to assess the reasonableness of the discount rate being used.

The Company's other investments represent our investments in real estate funds. Adjustments to the fair values are made based on the net asset value of the investments. The net valuation criteria established by the manager of such investments are established in accordance with the governing documents and the asset manager's valuation guidelines, which include: the discounted cash flows method and the performance multiple approach, which uses a multiple derived from market data of comparable companies or assets to produce operating performance metrics. Alternative valuation methodologies may be employed for investments with unusual characteristics.

See also Quantitative and Qualitative disclosures about Market Risk in Item 11 of this report for further details on interest rate and credit spread risk and a sensitivity analysis of interest rate on the valuation of the Company's investment.

Tabular Disclosure of Contractual Obligations

The following table summarizes our contractual obligations (other than our obligations to employees and our Preference Shares) under long-term debt, operating leases (net of subleases) and reserves relating to insurance and reinsurance contracts as at December 31, 2021:

	2022	2023	2024	2025	2026	Later Years	Total
	(\$ in millions)						
Operating lease obligations	\$ 17.0	\$ 17.0	\$ 16.5	\$ 16.1	\$ 15.3	\$ 61.8	\$ 143.7
Long-term debt obligations ⁽¹⁾	—	300.0	—	—	—	—	300.0
Reserves for losses and LAE ⁽²⁾	2,055.2	1,446.2	989.5	761.2	532.8	1,826.9	7,611.8
Total	<u>\$ 2,072.2</u>	<u>\$ 1,763.2</u>	<u>\$ 1,006.0</u>	<u>\$ 777.3</u>	<u>\$ 548.1</u>	<u>\$ 1,888.7</u>	<u>\$ 8,055.5</u>

¹⁾ The long-term debt obligations disclosed above do not include the \$14.0 million annual interest payments on our outstanding senior notes or dividends payable to holders of our preference shares.

²⁾ In estimating the time intervals into which payments of our reserves for losses and loss adjustment expenses fall, as set out above, we have utilized actuarially assessed payment patterns. By the nature of the insurance and reinsurance contracts under which these liabilities are assumed, there can be no certainty that actual payments will fall in the periods shown and there could be a material acceleration or deceleration of claims payments depending on factors outside our control. The total amount of payments in respect of our reserves, as well as the timing of such payments, may differ materially from our current estimates for the reasons set out under Item 18, Note 2 of our consolidated financial statements, "Critical Accounting Policies — Reserves for Losses and Loss Expenses."

For a detailed description of our operating lease obligations, refer to Item 18, Note 18 of our consolidated financial statements, "Operating Leases."

Safe Harbor

Cautionary Statement Regarding Forward-Looking Statements

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are made pursuant to the "safe harbor" provisions of The Private Securities Litigation Reform Act of 1995. Forward-looking statements include all statements that do not relate solely to historical or current facts. In particular, statements that use the words such as "believe," "anticipate," "expect," "assume," "objective," "target," "plan," "estimate," "project," "seek," "will," "may," "aim," "likely," "continue," "intend," "guidance," "outlook," "trends," "future," "could," "would," "should," "target," "predict," "potential," "on track" or their negatives or variations and similar terminology and words of similar import generally involve forward-looking statements.

All forward-looking statements rely on a number of assumptions, estimates and data concerning future results and events that are subject to a number of risks, uncertainties, assumptions and other factors, many of which are outside our control that could cause actual results to differ materially from such forward-looking statements. Accordingly, there are important factors that could cause our actual results to differ materially from those anticipated in the forward-looking statements. We believe that these factors include, but are not limited to, those set forth in Item 3D under "Risk Factors" as those factors may be updated from time to time in our periodic filings with the United States Securities and Exchange Commission (the "SEC") which are accessible on the SEC's website at <http://www.sec.gov>.

The inclusion of forward-looking statements in this report should not be considered as a representation by us that current plans or expectations will be achieved. Forward-looking statements speak only as of the date on which they are made and we undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future developments or otherwise, except as required by law.

Effects of Inflation

Inflation may have a material effect on our consolidated results of operations by its effect on interest rates and on the cost of settling claims. The potential exists after a catastrophe or other large property loss, such as hurricanes, for the development of inflationary pressures in a local economy as the demand for services, such as construction, typically surges. The cost of settling claims may also be increased by global commodity price inflation. We seek to take both these factors into account when setting reserves for any events where we think they may be material.

Our calculation of reserves for losses and loss expenses in respect of casualty business includes assumptions about future payments for settlement of claims and claims-handling expenses, such as medical treatments and litigation costs. We write casualty business in the United States, the United Kingdom and Australia and certain other territories, where claims inflation has in many years run at higher rates than general inflation. To the extent inflation causes these costs to increase above reserves established for these claims, we will be required to increase our loss reserves with a corresponding reduction in earnings. The actual effects of inflation on our results cannot be accurately known until claims are ultimately settled.

In addition to general price inflation, we are exposed to a persisting long-term upwards trend in the cost of judicial awards for damages. We seek to take this into account in our pricing and reserving of casualty business.

We also seek to take into account the projected impact of inflation on the likely actions of central banks in the setting of short-term interest rates and consequent effects on the yields and prices of fixed interest securities. As at February 2022, general economic inflation has increased and there is a risk of inflation remaining elevated for an extended period, which may impact the performance of our investment portfolio or have other adverse effects. In particular, rising inflation, interest rates and bond yields may result in a decrease in the market value of certain of our fixed interest investments. Refer to Item 3D, “Risk Factors — Market and Liquidity Risks — Our results of operations and investment portfolio may be materially affected by conditions impacting the level of interest rates in the global capital markets and major economies, such as central bank policies in interest rates and the rate of inflation.”

Reconciliation of Non-U.S. GAAP Financial Measures

In presenting Aspen's results, management has included and discussed certain “non-GAAP financial measures”. Management believes that these non-GAAP financial measures, which may be defined differently by other companies, better explain Aspen's results of operations in a manner that allows for a more complete understanding of the underlying trends in Aspen's business. However, these measures should not be viewed as a substitute for those determined in accordance with GAAP.

Average equity, a non-U.S. GAAP financial measure, is used in calculating ordinary shareholders return on average equity. Average equity is calculated by taking the arithmetic average of total shareholders' equity on a monthly basis for the stated periods excluding (i) the average share of equity due to non-controlling interests and (ii) the average value of preference shares less issue expenses.

	As at December 31, 2021	As at December 31, 2020
	(\$ in millions)	
Total shareholders' equity ⁽¹⁾	\$ 2,774.8	\$ 2,887.2
Preference shares less issue expenses	(753.5)	(753.5)
Average adjustment	55.2	(260.3)
Average equity	\$ 2,076.5	\$ 1,873.4
Net income/(loss) after tax as reported ⁽¹⁾	29.8	(56.4)
Preference share dividends	(44.5)	(44.5)
Net (loss) available to ordinary shareholders	(14.7)	(100.9)
Net (loss), adjusted for preference share dividends, on average equity	(0.7)%	(5.4)%

⁽¹⁾ Net loss for the twelve months ended December 31, 2020 has been corrected downward by \$(16.3) million and total shareholders' equity has been corrected downward by \$(110.4) million as at December 31, 2020, split between retained earnings and accumulated other comprehensive income totaling \$(28.5) million and \$(81.9) million, respectively. Refer to Item 18, Note 26 of our consolidated financial statements, "Correction of Immaterial Errors" for more information.

Loss Ratio is the sum of current year net losses, catastrophe losses and prior year reserve strengthening/(releases) as a percentage of net earned premiums.

Adjusted loss ratio is a non-GAAP financial measure which includes the full economic benefit of the deferred gain on prior year reserve development for which we have ceded the risk under retroactive reinsurance agreements Aspen believes that the presentation of adjusted loss ratios supports the economic benefit of the adverse development covers on the underlying performance of the business. Adjusted loss ratio is calculated by adjusting the losses and loss adjustment expenses by the movement in deferred gain on retroactive contracts and dividing by net earned premiums.

Adjusted Accident year loss ratio is a non-GAAP financial measure and is calculated by dividing net losses, adjusted for the full economic benefit of the deferred gain and excluding prior year reserve movements, by net earned premiums.

Aspen has defined major 2021 catastrophe losses as losses associated with Texas winter storms, Hurricane Ida, European floods and other weather-related events. Catastrophe losses in 2020 were defined as losses associated with COVID-19, Hurricanes Isaias and Laura, wildfires in California and other weather-related events.

<u>Adjusted loss ratio</u>	Twelve Months Ended December 31, 2021					
	Reinsurance		Insurance		Total	
	(\$ in millions)	%	(\$ in millions)	%	(\$ in millions)	%
Net earned premium	\$ 1,118.8		\$ 1,291.7		\$ 2,410.5	
Losses excluding catastrophes and prior year reserve movements	584.6	52.2 %	736.9	57.0	1,321.5	54.7 %
Catastrophe losses	255.0	22.8	71.7	5.6	326.7	13.6
Prior year reserve movements	(134.4)	(12.0)	179.5	13.9	45.1	1.9
Losses and loss adjustment expenses/ Loss ratio (%)	\$ 705.2	63.0 %	\$ 988.1	76.5 %	\$ 1,693.3	70.2 %
Add: Movement in deferred gain on retroactive contracts ⁽¹⁾	(41.4)	(3.7)%	(16.9)	(1.3)%	(58.3)	(2.4)%
Adjusted losses and loss adjustment expenses/ Adjusted loss ratio (%)	\$ 663.8	59.3 %	\$ 971.2	75.2 %	\$ 1,635.0	67.8 %

⁽¹⁾ The ADC agreement has been allocated to segments in line with the agreement and premiums paid.

<u>Adjusted loss ratio</u>	Twelve Months Ended December 31, 2020					
	Reinsurance		Insurance		Total	
	(\$ in millions)	%	(\$ in millions)	%	(\$ in millions)	%
Net earned premium	\$ 1,287.7		\$ 1,239.8		\$ 2,527.5	
Losses excluding catastrophes and prior year reserve movements	750.7	58.3 %	730.2	58.9 %	1,480.9	58.6 %
Catastrophe losses (including COVID)	244.0	18.9	116.8	9.4	360.8	14.2
Prior year reserve movements	(36.1)	(2.8)	35.2	2.8 %	(0.9)	—
Losses and loss adjustment expenses Loss ratio (%)	\$ 958.6	74.4 %	\$ 882.2	71.1 %	\$ 1,840.8	72.8 %
Add: Movement in deferred gain on retroactive contracts	— %	— %	— %	— %	— %	— %
Adjusted losses and loss adjustment expenses Adjusted loss ratio (%)	\$ 958.6	74.4 %	\$ 882.2	71.1 %	\$ 1,840.8	72.8 %

Retention ratio is a non-GAAP financial measure and is calculated by dividing net written premiums by gross written premiums.

Retention ratio	Twelve Months Ended December 31, 2021			Twelve Months Ended December 31, 2020		
	Reinsurance	Insurance	Total	Reinsurance	Insurance	Total
	(\$ in millions)					
Gross written premium	\$ 1,597.0	\$ 2,341.4	\$ 3,938.4	\$ 1,656.4	\$ 2,042.1	\$ 3,698.5
Net written premium	\$ 1,199.0	\$ 1,388.7	\$ 2,587.7	\$ 1,297.7	\$ 1,280.1	\$ 2,577.8
Retention ratio	75.1 %	59.3 %	65.7 %	78.3 %	62.7 %	69.7 %

Book yield is a non-GAAP financial measure. Book yield is the interest rate earned, at the time of purchase of the fixed income instrument at market value, assuming the bond is held to maturity and all coupon and principal payments are made on schedule.

General Insurance:

Underwriting profit or loss/ gain or loss is a non-GAAP financial measure. Profit or loss for each of the business segments is measured by underwriting profit or loss. Underwriting profit or loss is the excess of net earned premiums over the underwriting expenses. Underwriting expenses is the sum of losses and loss adjustment expenses, amortization of deferred policy acquisition costs and general and administrative expenses. Underwriting profit or loss provides a basis for management to evaluate the segment's underwriting performance.

Adjusted underwriting profit or loss/gain or loss is the excess of net earned premiums over the adjusted underwriting expenses. Adjusted underwriting expenses is the sum of losses and loss adjustment expenses, including the deferred gain on prior year reserve development for which we have ceded the risk under retroactive reinsurance agreements, amortization of deferred policy acquisition costs and general and administrative expenses.

Along with most property and casualty insurance companies, we use the loss ratio, the expense ratio and the combined ratio as measures of underwriting performance. These ratios are relative measurements that describe, for every \$100 of net premiums earned, the amount of losses and loss adjustment expenses, and the amount of other underwriting expenses that would be incurred. A combined ratio of less than 100 indicates underwriting income and a combined ratio of over 100 indicates an underwriting loss.

Combined ratio is the sum of the loss ratio and general and administrative expense ratio. The loss ratio is calculated by dividing losses and loss adjustment expenses by net earned premiums. The expense ratio is calculated by dividing the sum of amortization and deferred policy acquisition costs and general and administrative expenses, by net earned premiums.

Accident year combined ratio is a non-GAAP financial measure and is calculated by dividing net losses excluding prior year reserve movements by net earned premiums and including the general and administrative expense ratio.

Adjusted combined ratio is the sum of the adjusted loss ratio and general and administrative expense ratio. The adjusted loss ratio is calculated by dividing the adjusted losses and loss adjustment expenses by net earned premiums. The expense ratio is calculated by dividing the sum of amortization and deferred policy acquisition costs and general and administrative expenses, by net earned premium.

Combined ratios differ from U.S. statutory combined ratios primarily due to the deferral of certain third-party acquisition expenses for GAAP reporting purposes and the use of net premiums earned rather than net premiums written in the denominator when calculating the acquisition expense and the general and administrative expense ratios.

Adjusted Combined Ratio

(in US\$ millions except where stated)

	Twelve Months Ended December 31, 2021		
	Reinsurance	Insurance	Total
Net earned premium	\$ 1,118.8	\$ 1,291.7	\$ 2,410.5
Losses and loss adjustment expenses	705.2	988.1	1,693.3
Amortization and deferred policy acquisition costs	221.6	192.5	414.1
General and administrative expenses	121.3	211.8	333.1
Underwriting expenses	1,048.1	1,392.4	2,440.5
Underwriting profit / (loss)	70.7	(100.7)	(30.0)
Combined ratio	93.6 %	107.8 %	101.2 %
Adjustments to underwriting expenses			
Add: movement in deferred gain on retroactive contracts	(41.4)	(16.9)	(58.3)
Adjusted underwriting expenses	1,006.7	1,375.5	2,382.2
Adjusted underwriting result	112.1	(83.8)	28.3
Adjusted combined ratio	90.0 %	106.5 %	98.8 %

Adjusted Combined Ratio

(in US\$ millions except where stated)

	Twelve Months Ended December 31, 2020		
	Reinsurance	Insurance	Total
Net earned premium	\$ 1,287.7	\$ 1,239.8	\$ 2,527.5
Losses and loss adjustment expenses	958.6	882.2	1,840.8
Amortization and deferred policy acquisition costs	246.0	219.7	465.7
General and administrative expenses	110.8	197.2	308.0
Underwriting expenses	1,315.4	1,299.1	2,614.5
Underwriting loss	(27.7)	(59.3)	(87.0)
Combined ratio	102.1 %	104.7 %	103.4 %
Adjustments to underwriting expenses			
Add: movement in deferred gain on retroactive contracts	—	—	—
Adjusted underwriting expenses	1,315.4	1,299.1	2,614.5
Adjusted underwriting loss	(27.7)	(59.3)	(87.0)
Adjusted combined ratio	102.1 %	104.7 %	103.4 %

The following tables present supplementary financial information regarding our two reporting segments, Reinsurance and Insurance, as at December 31, 2021 and December 31, 2020, to show the impact on our financial performance from the business which we have ceased underwriting and has been classified as “Legacy”. “Legacy” business in the 2020 table has been represented on a like for like basis, meaning all the same lines of business have been included as Legacy in both the 2021 and 2020 tables, notwithstanding that certain lines of business were not yet classified as Legacy as at December 31, 2020 (e.g. U.S. food and beverage product recall business). We believe this presentation provides for a more complete understanding of the impact that these lines of business have had on our underlying performance.

Twelve Months Ended December 31, 2021

	Reinsurance			Insurance			Group Total
	Ongoing Reinsurance	Legacy ⁽¹⁾	Reinsurance Total	Ongoing Insurance	Legacy ⁽²⁾	Insurance Total	
Net earned premiums	1,080.2	38.6	1,118.8	1,256.9	34.8	1,291.7	2,410.5
Losses and loss adjustment expenses	700.4	4.8	705.2	868.1	120.0	988.1	1,693.3
Amortization of deferred policy acquisition expenses	202.5	19.1	221.6	168.9	23.6	192.5	414.1
General and administrative expenses	118.6	2.7	121.3	210.2	1.6	211.8	333.1
Underwriting gain/(loss)	\$ 58.7	\$ 12.0	\$ 70.7	\$ 9.7	\$ (110.4)	\$ (100.7)	\$ (30.0)
Corporate expenses							(64.3)
Non-operating expenses ⁽³⁾							(20.6)
Net investment income							147.5
Realized and unrealized investment gains							56.2
Realized and unrealized investment losses							(47.4)
Change in fair value of derivatives							(35.9)
Interest expense on long term debt							(14.3)
Net realized and unrealized foreign exchange gains							40.0
Other income							14.7
Other expenses							(10.8)
Income before tax							35.1
Income tax (expense)							(5.3)
Net income							\$ 29.8
Ratios							
Loss ratio	64.8 %	12.4 %	63.0 %	69.1 %	344.8 %	76.5 %	70.2 %
Policy acquisition expense ratio	18.7 %	49.5 %	19.8 %	13.4 %	67.8 %	14.9 %	17.2 %
General and administrative expense ratio ⁽⁴⁾	11.0 %	7.0 %	10.8 %	16.7 %	4.6 %	16.4 %	13.8 %
Expense ratio	29.7 %	56.5 %	30.6 %	30.1 %	72.4 %	31.3 %	31.0 %
Combined ratio	94.5 %	68.9 %	93.6 %	99.2 %	417.2 %	107.8 %	101.2 %
Accident Year Combined Ratio							
Combined ratio	94.5 %	68.9 %	93.6 %	99.2 %	417.2 %	107.8 %	101.2 %
Prior year loss development	11.1 %	37.7 %	12.0 %	(6.3)%	(289.0)%	(13.9)%	(1.9)%
Accident year combined ratio	105.6 %	106.6 %	105.6 %	92.9 %	128.2 %	93.9 %	99.3 %

Legacy reflects business we have elected to cease underwriting following a series of strategic underwriting reviews.

⁽¹⁾ Legacy (reinsurance) represents:

- (i) U.S. crop insurance business which was previously written on a reinsurance basis through a strategic partnership until disposed of in Q4 2020;
- (ii) our global credit and surety reinsurance business that we ceased underwriting during Q3 2019; and
- (iii) and our U.S. Agricultural business written via AgriLogic which was sold in December 2017.

⁽²⁾ Legacy (insurance) represents:

- (i) U.S. food and beverage product recall business, the renewal rights to which was sold to a third party in December 2020;
- (ii) U.S. surety business, which in July 2020 was subject to a renewal rights transaction;
- (iii) includes international marine and energy liability products, and our global accident and health line of business, which, following a strategic review of our underwriting portfolio that began in December 2019, we determined to cease underwriting and started to wind down in February 2020 and March 2020, respectively;
- (iv) professional liability and property and casualty coverages for small to medium sized U.K.-based businesses that was bound through our managing general agent, Aspen Risk Management Limited that we placed into runoff during Q3 2019;
- (v) international cargo insurance that we ceased underwriting during Q4 2018;
- (vi) our aviation line of business, which we decided to cease underwriting during Q3 2018;
- (vii) marine hull insurance written through the Lloyd's platform that we ceased underwriting during Q3 2018;

(viii) international property insurance previously written via a joint underwriting initiative that we ceased underwriting during Q1 2017; and
(ix) employers and public liability lines previously written that we ceased underwriting during Q4 2015.

⁽³⁾ Non-operating expenses includes \$19.3 million of costs related to severance, retention awards, amortization of intangible assets and other costs, \$0.4 million of impairment charges related to lease assets and \$0.9 million of other non-operating expenses.

⁽⁴⁾ The general and administrative expense ratio in the total column excludes corporate and non-operating expenses.

Twelve Months Ended December 31, 2020							
	Reinsurance			Insurance			Group Total
	Ongoing Reinsurance	Legacy ⁽¹⁾	Reinsurance Total	Ongoing Insurance	Legacy ⁽²⁾	Insurance Total	
Net earned premiums	1,004.1	283.6	1,287.7	1,077.0	162.8	1,239.8	2,527.5
Losses and loss adjustment expenses	711.9	246.7	958.6	728.2	154.0	882.2	1,840.8
Amortization of deferred policy acquisition expenses	216.0	30.0	246.0	171.6	48.1	219.7	465.7
General and administrative expenses	107.3	3.5	110.8	178.1	19.1	197.2	308.0
Underwriting (loss)/gain	\$ (31.1)	\$ 3.4	\$ (27.7)	\$ (0.9)	\$ (58.4)	\$ (59.3)	\$ (87.0)
Corporate expenses							(70.2)
Non-operating expenses ⁽³⁾							(32.7)
Net investment income							154.6
Realized and unrealized investment gains							98.5
Realized and unrealized investment losses							(27.4)
Change in fair value of derivatives							(65.1)
Interest expense on long term debt							(33.9)
Net realized and unrealized foreign exchange (losses)							(13.8)
Other income							49.8
Other expenses							(10.8)
(Loss) before tax							(38.0)
Income tax (expense)							(18.4)
Net (loss)							\$ (56.4)
Ratios							
Loss ratio	70.9 %	87.0 %	74.4 %	67.6 %	94.6 %	71.1 %	72.8 %
Policy acquisition expense ratio	21.5 %	10.6 %	19.1 %	15.9 %	29.5 %	17.7 %	18.4 %
General and administrative expense ratio ⁽⁴⁾	10.7 %	1.2 %	8.6 %	16.5 %	11.7 %	15.9 %	12.2 %
Expense ratio	32.2 %	11.8 %	27.7 %	32.4 %	41.2 %	33.6 %	30.6 %
Combined ratio	103.1 %	98.8 %	102.1 %	100.0 %	135.8 %	104.7 %	103.4 %
Accident Year Combined Ratio							
Combined ratio	103.1 %	98.8 %	102.1 %	100.0 %	135.8 %	104.7 %	103.4 %
Prior year loss development	3.4 %	0.8 %	(2.8)%	(0.5)%	(18.3)%	2.8 %	0.0 %
Accident year combined ratio	106.5 %	99.6 %	99.3 %	99.5 %	117.5 %	107.5 %	103.4 %

Legacy reflects business we have elected to cease underwriting following a series of strategic underwriting reviews.

⁽¹⁾ Legacy (reinsurance) represents:

- (i) U.S. crop insurance business which was previously written on a reinsurance basis through a strategic partnership until disposed of in Q4 2020;
- (ii) our global credit and surety reinsurance business that we ceased underwriting during Q3 2019; and
- (iii) and our U.S. Agricultural business written via AgriLogic which was sold in December 2017.

⁽²⁾ Legacy (insurance) represents:

- (i) U.S. food and beverage product recall business, the renewal rights to which was sold to a third party in December 2020;
- (ii) U.S. surety business, which in July 2020 was subject to a renewal rights transaction;
- (iii) includes international marine and energy liability products, and our global accident and health line of business, which, following a strategic review of our underwriting portfolio that began in December 2019, we determined to cease underwriting and started to wind down in February 2020 and March 2020, respectively;
- (iv) professional liability and property and casualty coverages for small to medium sized U.K.-based businesses that was bound through our managing general agent, Aspen Risk Management Limited that we placed into runoff during Q3 2019;
- (v) international cargo insurance that we ceased underwriting during Q4 2018;
- (vi) our aviation line of business, which we decided to cease underwriting during Q3 2018;
- (vii) marine hull insurance written through the Lloyd's platform that we ceased underwriting during Q3 2018;
- (viii) international property insurance previously written via a joint underwriting initiative that we ceased underwriting during Q1 2017; and
- (ix) employers and public liability lines previously written that we ceased underwriting during Q4 2015.

⁽³⁾ Non-operating expenses includes \$18.2 million of costs related to severance, retention awards, amortization of intangible assets and other costs, \$12.9 million of impairment charges related to lease assets as a result of sub-leasing certain office space and \$1.6 million of other non-operating expenses.

⁽⁴⁾ The general and administrative expense ratio in the total column excludes corporate and non-operating expenses.

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

The following are the directors and senior management of the Company as of the date of this report.

<u>Name</u>	<u>Position with the Company</u>	<u>Date Appointed</u>
Directors		
Mark Cloutier	Group Chief Executive Officer, Executive Chairman of the Board and Chair of the Risk Committee	February 2019
Albert J. Beer	Director, Member of Audit, Conflicts and Risk Committees	July 2019 ⁽¹⁾
Joshua Black	Director, Member of Risk Committee	February 2019
Theresa Froehlich	Director, Chair of Conflicts Committee and Member of Investment Committee	June 2020
Alex Humphreys	Director, Member of Risk and Investment Committees	February 2019
Richard Lightowler	Director, Chair of Audit Committee	December 2020
Gernot Lohr	Director	February 2019
Tammy L. Richardson-Augustus	Director, Chair of Investment Committee and Member of Conflicts Committee	March 2021
Michael Saffer	Director, Member of Risk Committee	February 2019
Senior Management		
Mark Cloutier	Group Chief Executive Officer and Executive Chairman of the Board	February 2019
Christopher Coleman	Group Chief Financial Officer	October 2021
Christian Dunleavy	Group Chief Underwriting Officer	January 2022
Bruce Eisler	Chief Underwriting Officer - Insurance	June 2020
Aileen Mathieson	Group Chief Investment Officer	November 2021
Andrew Rippert	Chief Underwriting Officer - Reinsurance	January 2022
Brian Tobben	Chief Executive Officer of Aspen Capital Partners	June 2020

(1) Mr. Beer previously served as a Director of the Company from February 4, 2011 until February 15, 2019.

Biographical information**Directors:**

- **Mark Cloutier, Group Chief Executive Officer, Executive Chairman of the Board and Chair of the Risk Committee**

Mr. Cloutier was appointed Executive Chairman and Group Chief Executive Officer of Aspen on February 15, 2019. Mark had previously been Executive Chairman of the Brit Group, a Lloyd's of London insurer, since January 2017 and prior to this, he was Chief Executive Officer of the Group from October 2011 following its acquisition by Apollo and certain other private equity firms. As Chief Executive Officer of the Brit Group, Mark led a major restructuring of the Brits' global business, the successful listing on the London stock exchange through an initial public offering in 2014 as well as the subsequent acquisition of the business by Fairfax Financial Holdings in 2015.

With over 35 years' experience working in the international insurance and reinsurance sector in multiple jurisdictions including Canada, the United States, the United Kingdom, Bermuda, Continental Europe, Asia, China and South Africa, Mark has held a number of CEO and senior executive positions, including Chief Executive Officer of the Alea Group, Chief Executive Officer of Overseas Partners Re and President of E.W. Blanch Insurance Services Inc. He had been a member of the Franchise Board and Audit Committee of the Society of Lloyd's between February 2015 and June 2020 and was appointed to the Nomination and Governance Committee in February 2017.

Mark has worked with a variety of private equity investors including Apollo Management International LLP, CVC Capital Partners, Kohlberg Kravis Roberts (KKR) and Fortress. He started his career in British Columbia Canada with Brouwer and company independent loss adjusters before moving on to form his own firm, Maxwell Cloutier Adjusters Ltd. Mark also serves as a member of the Board of Overseers of The Greenberg School of Risk Management, Insurance and Actuarial Science, at St. John's University.

- **Albert J. Beer, Independent Director and Member of the Audit, Conflicts and Risk Committees**

Mr. Beer has been a director of the Company since July 2019, after having previously served on the board from February 2011 until February 2019, and participates as a member of its Risk Committee, Audit Committee and Conflicts Committee. Mr. Beer is also a director of the Company's wholly-owned subsidiary, Aspen Bermuda Limited, where he also serves as the chair of the Audit Committee of that entity. Mr. Beer serves as The Michael J. Kevany/XL Chair, The Greenberg School of Risk Management, Insurance and Actuarial Science at St. John's University, having joined St. John's in 2006. Mr. Beer has over 40 years of actuarial and management experience, having held various senior executive positions at American Re-Insurance Corporation (Munich Re America) and, prior to that, at Skandia America Reinsurance Corporation. He has been a board member of United Educators Insurance Company since 2006, and currently chairs its audit committee. Since 2009, Mr. Beer has been a Trustee Emeritus for the Actuarial Foundation. Mr. Beer graduated Phi Beta Kappa from Manhattan College with a B.S. in Mathematics and holds an M.A. in Mathematics from the University of Colorado. He is also a fellow of the Casualty Actuarial Society.

- **Joshua Black, Director and Member of the Risk Committee**

Mr. Black is a Partner in the Private Equity and Financial Institutions Groups at Apollo. Mr. Black focuses on a wide range of financial service industries, including insurance, asset management, and yield. Prior to joining Apollo, Mr. Black was a member of the Leveraged Finance Product Group at Goldman Sachs & Co., having worked previously in the Financial Institutions Industry Group. Mr. Black currently sits on the board of Sun Country Airlines, Tegra, Huddle House, Ambrosia, Somerset Partners, Pacific Quick Serve (BK Franchisee), ESW, Volotea, and Augustus Specialty. He also sits on the boards of MOMA PS1 and The Juilliard School. Mr. Black previously served on the boards of Exela Technologies, Tegra Topco, L.P. and Sun Country Airlines. Mr. Black graduated cum laude from Princeton University with a B.A. in Religion.

- **Theresa Froehlich, Independent Director and Chair of the Conflicts Committee**

Ms. Froehlich has been a director of the Company since June 11, 2020. In addition, Ms. Froehlich serves as chair of the boards of directors of both Aspen U.K. and AMAL, as well as interim chair of the Risk Committee of AMAL and a member of the Audit Committees and Governance and Nomination Committees of both Aspen U.K. and AMAL. She has over 25 years of management experience in the financial services industry. From 2010 to 2016, Ms. Froehlich held senior roles at the specialist Lloyd's of London insurance and reinsurance marketplace, including interim director of performance management, where she was responsible for all commercial aspects of oversight of the marketplace and setting underwriting standards, and also head of underwriting performance. Before Lloyd's, she worked in Zurich as a Managing Director for Swiss Re in various roles. Having started there in private equity, she later took on senior management roles which included portfolio management of structured reinsurance products, driving transformation and strategic initiatives and serving as the Head of Transactions UK at Admin Re. She currently serves as the Senior Non-Executive Director of

Scottish Equitable Plc, and as a Non-Executive Director and Chair of the Audit Committee of Managing Agency Partners Ltd. since 2017 and served a Non-Executive Director of Starr International Europe Limited and Starr Managing Agents Limited from 2017-2020 where she chaired the Remuneration Committee and was a member of the Audit and Risk Committees. Ms. Froehlich started her career as a commercial solicitor in Scotland before moving into M&A and structured finance.

- **Alex Humphreys, Director and Member of the Risk Committee**

Mr. Humphreys is a Partner at Apollo, which he joined in 2008. Prior to this, Mr. Humphreys worked at Goldman Sachs in its financial institutions M&A team. Mr. Humphreys also currently serves on the boards of various Apollo portfolio companies including Athora Holding, Ltd, Catalina Holdings (Bermuda) Ltd., and Amissima Holdings, S.r.l. He previously served on the board of directors of Luminescence Cooperatief U.A., HD Finance Holdings Limited (parent of Haydock Finance Holdings Limited), Latecoere S.A., and Seguradoras Unidas S.A. (parent of Tranquilidade). He was appointed as a Director of the Board on February 15, 2019 and, in addition to being a member of the Compensation and Risk Committees, he is also a member of the board of Highlands Bermuda Holdco, Ltd., Highlands Manco, Ltd. and Highlands Holdings Bond Issuer, Ltd.

- **Richard Lightowler, Independent Director and Chair of the Audit Committee**

Mr. Lightowler has over 25 years' experience in financial services public accounting focused on reinsurance and insurance clients, including non-life and life, primary and reinsurance, run-off as well as specialized risk vehicles, including ILS structures and segregated cell companies. He was a Partner with KPMG from 1998 to 2016, where he spent over 16 years serving as global lead audit partner for SEC registrants and as well as reinsurance groups listed on the London Stock Exchange. He also served as Head of the KPMG Bermuda Insurance Practice. He has significant private and public equity and debt offering experience and has worked on a number of cross-border mergers and acquisitions including Buy-side/Sell-side due diligence, structuring and post-acquisition integration. Mr. Lightowler is currently a Non-Executive Director of Hansa Investment Company Limited, Geneva Re Limited and Oakley Capital Investments Limited. Mr. Lightowler was appointed as a Director of the Board on December 10, 2020.

- **Gernot Lohr, Director**

Mr. Lohr is a Senior Partner and Global Head of the Financial Institutions Group at Apollo, which he joined in May 2007. Prior to joining Apollo, Mr. Lohr was a founding partner at Infinity Point LLC, Apollo's joint venture partner for the financial services industry, since 2005. Before that time, Mr. Lohr spent eight years in financial services investment banking at Goldman Sachs & Co in New York and also worked at McKinsey & Company and B. Metzler Corporate Finance in Frankfurt. Currently, Mr. Lohr serves on the board of directors of Athora Holding, Ltd. and Catalina Holdings. Mr. Lohr has previously served on the board of directors of Tranquilidade, Amissima Vita S.p.A., Amissima Assicurazioni S.p.A., Bremer Kreditbank Aktiengesellschaft, Nova Kreditna banka Maribor d.d., Oldenburgische Landesbank and KBS Banka d.d. Mr. Lohr has a joint Master's Degree in Economics and Engineering from the University of Karlsruhe, Germany, and received a Masters in Business Administration from the MIT Sloan School of Management.

- **Tammy L. Richardson-Augustus, Independent Director and Member of the Conflicts Committee**

Ms. Richardson-Augustus has over 20 years of legal experience and since 2007 has been a partner and a member of the Bermuda corporate department of Appleby, a leading global provider of offshore legal and fiduciary services. Ms. Richardson-Augustus provides transactional and corporate governance advice to corporate clients (including but not limited to developing a framework of prudent and effective policies for board committees). Ms. Richardson-Augustus maintains a diversified business transactions practice, with emphasis on domestic and international mergers and acquisitions, joint ventures, capital markets and securities, secured and unsecured lending transactions and general corporate governance matters. She has extensive experience working with clients in a wide range of industries, including in energy, oil and gas exploration, and maritime shipping. Ms. Richardson-Augustus currently serves on numerous boards including, inter alia, on the regulatory board (Bermuda Monetary Authority), statutory board (Bermuda Deposit Insurance Corporation) and on the board of Polaris (a company listed on the Bermuda stock exchange) and is a member of the Bermuda Bar Association and is a justice of the peace. In addition to being a member of the Board as a Non-Executive Director, Ms. Richardson-Augustus is a member of the Conflicts Committee.

- **Michael Saffer, Director and Member of the Risk Committee**

Mr. Saffer is a Principal in the London Private Equity team at Apollo, having joined in 2015. Prior to joining Apollo, he was a member of the M&A group at Credit Suisse in London. Mr. Saffer has been involved in various private equity transactions including Apollo's acquisition of Oldenburgische Landesbank (formerly known as Bremer Kreditbank AG),

Catalina Holdings (Bermuda) Ltd., Aspen Insurance Holdings Limited and Covis Group S.a.r.l. Mr. Saffer was appointed as a Director of the Board on February 15, 2019 and is also a member of the boards of Highlands Bermuda Holdco, Ltd., Highlands Manco, Ltd., Highlands Holdings Bond Issuer, Ltd., Covis Group S.a.r.l. and Lottomatica S.p.a (f/k/a Gamenet Group S.p.A. Mr. Saffer graduated from the University of Nottingham with a BSc in Economics.

Senior Management

- **Mark Cloutier, Group Chief Executive Officer and Executive Chairman of the Board**

See Mr. Cloutier's Biographical Information under Directors above.

- **Christopher Coleman, Group Chief Financial Officer**

Mr. Coleman was appointed Group Chief Financial Officer, effective October 19, 2021. Chris was most recently CFO of Third Point Re until its merger with Sirius Group. Chris has strong transaction and capital markets experience, including the recent acquisition of Sirius Group by Third Point Re, Third Point Re's IPO as well as having had key roles in a number of other merger, debt and equity transactions during his career. Chris also served as CFO of Alterra Bermuda Limited, was Chief Accounting Officer for Harbor Point Limited and held a senior audit manager role with PwC.

- **Christian Dunleavy, Group Chief Underwriting Officer**

Mr. Dunleavy joined Aspen in 2015 as Head of Global Property Catastrophe. Mr. Dunleavy assumed the role of Group Chief Underwriting Officer in January 2022, while retaining his responsibilities as Chief Underwriting Officer of Aspen Bermuda, to which he was appointed in May 2017. He serves as a director of Aspen Bermuda. Mr. Dunleavy also previously served as Chief Underwriting Officer of Aspen Re and CEO of Aspen Bermuda. He had previously been at Axis Reinsurance where he was a Senior Vice President, responsible for U.S. Property Treaty, Caribbean Property and Workers Compensation Catastrophe business. Prior to joining Axis in 2002, Mr. Dunleavy was a Senior Analyst at RenaissanceRe, responsible for multi-peril modeling, pricing and portfolio analysis. Mr. Dunleavy is also a Director of the Association of Bermuda International Companies, the Association of Bermuda Insurers and Reinsurers and an Independent Director of Coralisle Group Ltd. (f/k/a Colonial Group International).

- **Bruce Eisler, Chief Underwriting Officer, Aspen Insurance**

Mr. Eisler was appointed Chief Underwriting Officer, Aspen Insurance in June 2020, and also serves as Chief Executive Officer of Aspen U.S. Mr. Eisler has held various senior level roles with Reliance National, ACE USA and Liberty International Underwriters — part of Liberty Mutual Group — where he was the Senior Vice President of Professional Liability Underwriting before joining Aspen in January 2010.

- **Aileen Mathieson, Group Chief Investment Officer**

Aileen Mathieson joined Aspen in November 2021 as Group Chief Investment Officer and is based in the London office. She brings more than 15 years of investment and financial experience, and previously served at Abnrdn plc where she was Global Head of Insurance. Prior to this, Aileen was Chief Investment Officer UK Life for Zurich Insurance Group Ltd and during her career also held senior finance roles at Nucleus Financial Group plc, Standard Life Group plc, Diageo plc and EMI Music plc. Aileen started her career at KPMG.

- **Andrew Rippert, Chief Underwriting Officer, Aspen Reinsurance**

Andrew Rippert was appointed Chief Underwriting Officer for Aspen Reinsurance in January 2022, after joining Aspen as EVP – Head of Mortgage in June 2021. Before Aspen, Mr. Rippert was the Chief Executive Officer of the Global Mortgage Group at Arch Capital Group Ltd. (Arch) from 2010. Mr. Rippert's experience at Arch Capital saw him build and lead a mortgage credit business that was preeminent in the market. Mr. Rippert has over 30 years' experience in shaping and building global mortgage insurance and reinsurance businesses and portfolios. Mr. Rippert is a Fellow of the Casualty Actuarial Society and a member of the American Academy of Actuaries. He has a Master of Business Administration in finance from the Wharton School of the University of Pennsylvania and a Bachelor of Science in physics and mathematics from Drexel University.

- **Brian Tobben, Chief Executive Officer, Aspen Capital Partners**

Mr. Tobben was appointed Chief Executive Officer of Aspen Capital Partners, a division of Aspen, in June 2020. Prior to this, he served as the Managing Director for Aspen Capital Markets since he joined Aspen in April 2013. Before joining Aspen, Mr. Tobben was at Partner Reinsurance for almost 10 years, most recently as Head of Insurance Linked Securities where he managed a portfolio of catastrophe ILS, life ILS, weather and commodity investments and before that, as Vice

President, Weather. Prior to this, Mr. Tobben was at Aquila Energy where he held a number of roles including Vice President, Business Development, Weather.

B. Compensation

Director Compensation

The Company paid approximately \$1.26 million as aggregate compensation to non-executive directors for their services to the Company during 2021. This includes pro-rata compensation paid to Mr. Gordon Ireland, who resigned from the Board effective, June 10, 2021 and Mr. Bruce Hemphill who resigned from the Board effective February 5, 2021. In the case of Gordon Ireland, Albert Beer and Ms. Froehlich, this also includes fees paid for their services as directors of certain of the Company's subsidiaries.

Mr. Cloutier, our Group Chief Executive Officer and Executive Chairman of the Board and Chair of the Risk Committee, did not receive any compensation for his services as a director or committee chair in 2021. Likewise, Messrs. Black, Humphreys, Lohr, and Saffer did not receive any compensation for their services as a director. All directors are reimbursed for travel and other related expenses incurred while attending Board meetings.

Senior Management Compensation

During 2021, the members of senior management identified in Item 6A (including Mr. Cloutier) received approximately \$11.5 million in aggregate compensation. This is comprised of: (i) base salary of approximately \$4.5 million; (ii) discretionary bonuses, which include annual bonuses paid in 2022 for service during 2021 of approximately \$6.1 million; and (iii) pension, retirement, and other benefits of approximately \$0.9 million.

There are currently no equity compensation plans under which equity securities of the Company are authorized for issuance.

C. Board Practices

The Board currently consists of nine directors (see Item 6A above). The current directors on the Board have been elected to serve until the next Annual General Meeting of the Company or until their appointment is terminated in accordance with the Bye-Laws of the Company.

There are no service contracts between the Company and any of the Company's non-executive directors providing for benefits upon termination of their service.

Audit Committee

The Audit Committee is comprised of Messrs. Lightowler (Chair) and Beer. Pursuant to its Charter, the Audit Committee has general responsibility to assist the Board in its oversight of: (i) the integrity of the Company's financial statements, including the accounting and financial reporting process of the Company and audits of the Company's financial statements; (ii) the Company's compliance with legal and regulatory requirements; (iii) the external independent auditors' qualifications, performance and independence; and (iv) the performance of the Company's internal audit functions. Among other things, the Audit Committee annually reviews and makes recommendations to the Board as to their selection and reviews the plan, fees and results of the audit of the independent auditors.

The Board determined that each of the members of the Audit Committee are financially literate as such term is defined by applicable NYSE and SEC requirements. In addition, the Board has determined that Mr. Lightowler qualifies as having accounting or related financial management expertise pursuant to NYSE requirements and is an "audit committee financial expert" pursuant to the rules and regulations of the SEC.

Other Committees

The Board currently has a Risk Committee as well as a Conflicts Committee. See "Item 4B - Business Overview - Risk Management" for more information regarding these committees. In addition, in March 2022, the Board determined to re-constitute an Investment Committee as a standing sub-committee of the Board, to ensure streamlined oversight and monitoring of the management and performance of the investment function of the Company.

D. Employees

As at December 31, 2021, we employed 910 persons in the following countries:

Country	As at December 31, 2021	As at December 31, 2020	December 31, 2019
United Kingdom	440	448	461
United States	377	366	406
Bermuda	57	49	48
Switzerland	17	19	18
Singapore	15	22	22
United Arab Emirates	—	—	5
Australia	4	3	3
Total	910	907	963

The increase in the number of employees in 2021 compared to 2020 was primarily in the United States driven by the increased business growth within the insurance segment. We believe that relations with our employees, none of which are subject to collective bargaining agreements, are good.

E. Share Ownership

Not applicable. 100% of the Company's ordinary shares are owned by Parent and there are no other ordinary shares or classes of ordinary shares issued and no share-based compensation plans as at December 31, 2021.

Item 7. Major Shareholders and Related Party Transactions

A. Major Shareholders

As more fully described in Item 18, Note 1 to our consolidated financial statements, "History, Organization and Business Combination," following the Merger, Parent owns 100% of the Company's issued and outstanding ordinary shares. Parent is an affiliate of certain investment funds managed by affiliates of Apollo.

B. Related Party Transactions

Relationships and Related Party Transactions with Apollo or its Affiliates

Parent, an affiliate of certain investment funds managed by Apollo, owns all of the Company's ordinary shares. Additionally, certain of our directors are employees of Apollo and its affiliates. Namely, Messrs. Black, Humphreys, Lohr, and Saffer are employees of Apollo.

For a disclosure of other related party transactions, refer to Item 18, Note 19 of our consolidated financial accounts, "Related Party Transactions."

C. Interests of Experts and Counsel

Not applicable.

Item 8. Financial Information

A. Consolidated Statements and Other Financial Information

Reference is made to Item 18 of this report, for the consolidated financial statements and reports of the Company and the Notes thereto, as well as the schedules to the consolidated financial statements.

B. Significant Changes

Refer to Item 18, Note 25 to the consolidated financial statements "Subsequent Events" for a disclosure of events subsequent to the balance sheet date.

Item 9. The Offer and Listing**A. Offer and Listing Details**

As a result of the Merger, all of the Company's publicly traded ordinary shares were automatically canceled. The ordinary shares of the Company ceased trading on the NYSE prior to the opening of trading on February 15, 2019. The Company's preference shares and depositary shares continue to be listed on the NYSE under the following symbols: AHL PRC, AHL PRD and AHL PRE. For additional detail, refer to Note 12 to the consolidated financial statements, "Capital Structure" in Item 18 of this report.

B. Plan of Distribution

Not applicable.

C. Markets

The Company's preference shares and the depositary shares are listed and traded on the NYSE. The 5.950% Fixed-to-Floating Perpetual Non-Cumulative Preference Shares (NYSE:AHL PRC) began trading on May 7, 2013. The 5.625% Perpetual Non-Cumulative Preference Shares (NYSE: AHL PRD) began trading on September 21, 2016, and the depositary shares (NYSE: AHL PRE), each representing a 1/1000th interest in a share of the Company's 5.625% Perpetual Non-Cumulative Preference Shares, began trading on August 13, 2019.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

Item 10. Additional Information**A. Share Capital**

Not applicable.

B. Memorandum and Articles of Association

The information required by this section, including a summary of certain key provisions of the Company's Memorandum of Association and Amended and Restated Bye-laws were included in our Form S-3 (Registration No. 333-231937) filed with the SEC on June 4, 2019 (the "Registration Statement"), which summary is incorporated herein by reference. Our Memorandum of Association was filed as Exhibit 3.1 to a Form 6-K filed with the SEC on July 29, 2019, which Form 6-K was incorporated by reference into the Registration Statement. Our Amended and Restated Bye-laws were filed as Exhibit 3.4 to the Registration Statement.

C. Material Contracts*Merger Agreement:*

On August 28, 2018, the Company entered into the Merger Agreement with Parent and Merger Sub. Pursuant to the Merger Agreement, Parent acquired all of the outstanding ordinary shares of the Company for an all-cash consideration of \$42.75 per share. The transaction was completed by a merger of Merger Sub with and into the Company, with the Company continuing as the surviving entity. Pursuant to the terms of the Merger Agreement, (i) each issued and outstanding ordinary share, par value \$0.015144558 per ordinary share, of the Company (each, an "Ordinary Share") (other than any Ordinary Shares that are owned by the Company as treasury shares, owned by any subsidiary of the Company or owned by Parent or Merger Sub or any subsidiary thereof) was automatically canceled and converted into the right to receive \$42.75 in cash, without interest and less any required tax withholdings and (ii) each issued and outstanding 5.95% Fixed-to-Floating Rate Perpetual Non-Cumulative Preference Share of the Company and each issued and outstanding 5.625% Perpetual Non-Cumulative Preference Share of the Company remained issued and outstanding as a preference share of the Surviving Company, in each case, entitled to the same dividend and all other preferences and privileges, rights, qualifications, limitations, and restrictions set forth in the applicable certificate of designation.

The Merger was approved by the Company's shareholders on December 10, 2018. On February 15, 2019, the Company announced completion of the acquisition following regulatory clearance and completion of other customary closing conditions.

Management Consulting Agreement with Apollo Management

On March 28, 2019, the Company entered into a Management Consulting Agreement (the "Management Consulting Agreement"), by and between the Company and Apollo Management Holdings, L.P., a Delaware limited partnership ("Apollo Management"). Pursuant to the Management Consulting Agreement, Apollo Management will provide the Aspen Group with management consulting and advisory services related to the business and affairs of the Aspen Group and Aspen will pay to Apollo Management in consideration for its services under the Agreement an annual management consulting fee equal to the greater of (i) 1% of the consolidated net income of the Aspen Group for the applicable fiscal year, and (ii) \$5 million.

For more information about the Management Consulting Agreement, refer to Note 19 to the consolidated financial statements, "Related Party Transactions" in Item 18 of this report.

Information Technology Outsourcing Agreement:

On August 31, 2018, Aspen Insurance UK Services Limited, Aspen Insurance U.S. Services Inc. and Aspen Bermuda entered into an Outsourcing Agreement (the "Original IT Outsourcing Agreement") with Cognizant Worldwide Limited, a company registered in England ("Cognizant"). Pursuant to the Original IT Outsourcing Agreement, Cognizant provided the Company with information technology services to enable us to deliver greater operating effectiveness and efficiencies. The Original IT Outsourcing Agreement became effective August 31, 2018 and had an initial term period of five years from October 1, 2018. The Company had the right to extend the IT Outsourcing Agreement for an additional two year term. In 2021, the Company paid Cognizant approximately \$11.6 million for services rendered under the Original IT Outsourcing Agreement.

On December 31, 2020, Aspen Insurance UK Services Limited, Aspen Insurance U.S. Services Inc. and Aspen Bermuda entered into a new Outsourcing Agreement (the "IT Outsourcing Agreement") with Cognizant, which replaced and superseded the Original IT Outsourcing Agreement and significantly reduced the information technology services provided thereunder. The IT Outsourcing Agreement became effective on December 31, 2020 and has an initial term of four years. The Company has the right to extend the IT Outsourcing Agreement for an additional two year term.

The IT Outsourcing Agreement contains customary representations and warranties and indemnity, termination and default provisions. We may terminate the IT Outsourcing Agreement for any reason by providing ninety days' prior written notice. In addition, we may terminate the IT Outsourcing Agreement on shorter notice as a result of, among other things, a material breach if not cured within a specified time, insolvency, persistent breaches, failure to meet key milestones, material adverse change as defined in the IT Outsourcing Agreement or particular circumstances constituting a change in control.

Business Process Outsourcing Agreement:

On April 20, 2018, Aspen Insurance UK Services Limited, Aspen Insurance U.S. Services, Inc. and Aspen Bermuda entered into an Outsourcing Agreement (the "BPO Outsourcing Agreement") with Genpact International, Inc., a company incorporated in Delaware, United States ("Genpact"). Pursuant to the Agreement, Genpact will provide us with a range of operational business processes, primarily from their offshore service center in Gurgaon, India, to enable us to deliver greater operating effectiveness and efficiencies. The BPO Outsourcing Agreement became effective April 1, 2018 and has an initial term period of five years. We have the right to extend the BPO Outsourcing Agreement for three additional one year terms.

Under the terms of the BPO Outsourcing Agreement, Genpact will provide support function services to the Company. The BPO Outsourcing Agreement has minimum service levels that Genpact must meet or exceed. The compensation structure under the BPO Outsourcing Agreement includes a combination of fixed and variable fees which may fluctuate, as set forth in the BPO Outsourcing Agreement, based on our actual use of Genpact's services. In 2021, the Company paid Genpact approximately \$9.1 million for services rendered under the BPO Outsourcing Agreement. Additionally, we have the right to periodically compare the charges under the BPO Outsourcing Agreement to the market prices for comparable services.

The BPO Outsourcing Agreement contains customary representations and warranties and indemnity, termination and default provisions. We may terminate the BPO Outsourcing Agreement for any reason by providing ninety (90) days' prior written notice and paying a fee ranging from \$125,000 to \$3.5 million, depending on the circumstances. In addition, we may terminate the BPO Outsourcing Agreement as a result of, among other things, a material breach if not cured within a specified time, persistent breaches, insolvency, change of control, failure to meet key milestones or material adverse change as defined in the BPO Outsourcing Agreement.

On June 29, 2018, we entered into a novation agreement, effective April 1, 2018 (the "Novation Agreement"), with Genpact U.S. and Genpact (UK) Limited, a company registered in England and Wales ("Genpact U.K."). Under the terms of the

Novation Agreement, the rights and obligations of Genpact U.S. under the BPO Outsourcing Agreement, were transferred to and undertaken by Genpact U.K.

Loss Portfolio Transfer (“LPT”) Agreement:

On January 10, 2022, Aspen Insurance Holdings Limited and certain of its subsidiaries (“Aspen”) entered into an Amended and Restated Reinsurance Agreement (the “Agreement”) with a subsidiary of Enstar Group Limited (“Enstar”), which amends and restates the Adverse Development Cover Agreement, dated as of March 2, 2020 (the “Original Agreement”), previously entered into between the parties.

Under the Original Agreement, Enstar reinsured losses incurred on or prior December 31, 2019, by providing \$770.0 million cover in excess of \$3.805 billion retention up to an aggregate limit of \$4.575 billion, and an additional \$250.0 million of cover in excess of \$4.815 billion.

Under the terms of the Agreement, Enstar’s subsidiary will reinsure net losses incurred on or prior to December 31, 2019 on Aspen’s diverse mix of property, liability and specialty lines across the U.S., U.K. and other jurisdictions (the “Subject Business”) having net loss reserves of \$3.12 billion as of September 30, 2021. The Agreement provides for a limit of \$3.57 billion in consideration for a premium of \$3.16 billion, which includes \$770.0 million of premium previously paid with respect to reserves ceded under the Original Agreement. This transaction will further positively impact our capital position, freeing up capital and enabling us to further deploy this into the continued attractive market environment.

Completion of the transaction is subject to regulatory approvals and satisfaction of various other closing conditions. The transaction is expected to close in the first half of 2022. If the transaction cannot be completed, the Original Agreement would remain in effect.

D. Exchange Controls

Securities may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003, and the Exchange Control Act 1972, and related regulations of Bermuda that regulate the sale of securities in Bermuda. In addition, specific permission is required from the BMA, pursuant to the provisions of the Exchange Control Act 1972 and related regulations, for all issuances and transfers of securities of Bermuda companies, other than in cases where the BMA has granted a general permission. The BMA in its policy dated June 1, 2005 provides that where any equity securities of a Bermuda company are listed on an appointed stock exchange (the NYSE is such an exchange), general permission is given for the issue and subsequent transfer of any securities of the company from and/or to a non-resident of Bermuda, for as long as any equity securities of the company remain so listed.

E. Taxation

Bermuda Taxation

Currently, there is no Bermuda income, corporate or profits tax or withholding tax, capital gains tax or capital transfer tax, estate or inheritance tax payable by holders of our shares, other than shareholders ordinarily resident in Bermuda, if any.

United States Taxation

The following summary sets forth the material U.S. federal income tax considerations related to the purchase, ownership and disposition of the Company's preference shares, including the preference shares represented by the depositary shares (collectively, the "Preference Shares"). Unless otherwise stated, this summary deals only with shareholders who are U.S. Persons (as defined below) who purchase Preference Shares. The following discussion is only a discussion of the material U.S. federal income tax matters as described herein and does not purport to address all of the U.S. federal income tax consequences that may be relevant to a particular shareholder in light of such shareholder's specific circumstances. In addition, the following summary does not address the U.S. federal income tax consequences that may be relevant to special classes of shareholders, such as financial institutions, insurance companies, regulated investment companies, real estate investment trusts, financial asset securitization investment trusts, dealers or traders in securities or currencies, tax-exempt organizations, U.S. expatriates, partnerships or other pass-through entities (or investors in such entities), persons whose functional currency is not the U.S. dollar, persons subject to the alternative minimum tax, accrual basis taxpayers subject to special tax accounting rules under Section 451(b) of the Code, persons who are 10% U.S. Shareholders, or persons who hold their shares as part of a hedging or conversion transaction or as part of a short-sale or straddle, who may be subject to special rules or treatment under the Code. This discussion is based upon the Code, the Treasury Regulations promulgated thereunder and any relevant administrative rulings or pronouncements or judicial decisions, all as in effect on the date hereof and as currently interpreted, and does not take into account possible changes in such tax laws or interpretations thereof, which may apply retroactively. This discussion does not include any description of the tax laws of any state or local governments within the United States or of any non-U.S. government. Persons owning or considering making an investment in the Preference Shares should consult their own tax advisors concerning the application of the U.S. federal tax laws to their particular situations as well as any tax consequences arising under the laws of any state, local or foreign taxing jurisdiction prior to making such investment.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) holds the Preference Shares, the tax treatment of the partners will generally depend on the status of the partner, the activities of the partnership, and certain determinations made at the partner level. If you are a partner in a partnership owning our shares, you should consult your tax advisor.

For purposes of this discussion, the term "U.S. Person" means: (i) an individual citizen or resident of the United States, (ii) a partnership or corporation created in or organized under the laws of the United States, or organized under the laws of any political subdivision thereof, (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source, (iv) a trust if either (x) a court within the United States is able to exercise primary supervision over the administration of such trust and one or more U.S. Persons have the authority to control all substantial decisions of such trust or (y) the trust has a valid election in effect to be treated as a U.S. Person for U.S. federal income tax purposes or (v) any other person or entity that is treated for U.S. federal income tax purposes as if it were one of the foregoing.

Treatment of Depositary Shares. A holder of depositary shares evidenced by depositary receipts generally should be treated for U.S. federal income tax purposes as the owner of such holder's proportionate interest in the Preference Shares held by the depositary (or its custodian) that are represented and evidenced by such depositary receipts and the discussion herein assumes such treatment. Accordingly, any deposit or withdrawal of the Preference Shares by a U.S. Person in exchange for depositary shares generally will not result in the realization of gain or loss to such U.S. Person for U.S. federal income tax purposes.

Taxation of Distributions. Subject to the discussions below relating to the potential application of the CFC, RPII and PFIC rules, and the discussion below relating to redemptions of Preference Shares, cash distributions, if any, made with respect to the Preference Shares will constitute dividends for U.S. federal income tax purposes to the extent paid out of current or accumulated earnings and profits of Aspen Holdings (as computed using U.S. tax principles). To the extent such distributions exceed Aspen Holdings' earnings and profits, they will be treated first as a return of the shareholder's basis in their shares to the extent thereof, and then as gain from the sale of a capital asset. If, as expected, Aspen Holdings does not compute its earnings and profits under U.S. tax principles, all distributions generally will be treated as dividends for U.S. federal income tax purposes. Dividends paid by us to U.S. Persons who are corporations generally will not be eligible for a dividends received deduction. We believe dividends paid by us on our Preference Shares to non-corporate holders should be eligible for reduced rates of taxation as "qualified dividend income" if, as is intended, the Preference Shares remain listed on the NYSE and provided certain requirements, including stock holding period requirements, are satisfied. Qualified dividend income is subject to tax at long-term capital gains rates rather than the higher rates applicable to ordinary income.

Dividends that exceed certain thresholds in relation to a shareholder's tax basis in the Preference Shares could be characterized as an "extraordinary dividend" under the Code. A non-corporate holder of our Preference Shares that receives an extraordinary dividend will be required to treat any losses on the sale of our Preference Shares as long-term capital losses to the extent of the extraordinary dividends such shareholder receives that are treated as qualified dividend income.

Classification of Aspen Holdings or Its Non-U.S. Subsidiaries as CFCs. Each 10% U.S. Shareholder of a non-U.S. corporation that is a CFC at any time during a taxable year must include in its gross income for U.S. federal income tax purposes its pro rata share of the CFC's subpart F income and tested income (with various adjustments) with respect to any shares that such 10% U.S. Shareholder owns in such non-U.S. corporation (directly or indirectly through certain entities) on the last day in the non-U.S. corporation's taxable year on which it is a CFC, even if the subpart F income or tested income is not distributed. Subpart F income of a CFC generally includes "foreign personal holding company income" (such as interest, dividends and other types of passive income), as well as insurance and reinsurance income (including underwriting and investment income), and tested income is generally any income of the CFC other than subpart F income and certain other categories of income. An entity treated as a foreign corporation for U.S. federal income tax purposes is generally considered a CFC if "10% U.S. Shareholders" own (directly, indirectly through non-U.S. entities or constructively), in the aggregate, more than 50% of the total combined voting power of all classes of stock of that non-U.S. corporation or more than 50% of the total value of all stock of that non-U.S. corporation. However, for purposes of taking into account insurance income, these 50% thresholds are generally reduced to 25%. Further, special rules apply for purposes of taking into account any RPII of a non-U.S. corporation, as described below

Whether Aspen Holdings is a CFC for a taxable year will depend upon facts regarding our direct and indirect shareholders, about which we have limited information. Accordingly, no assurance can be provided that Aspen Holdings will not be a CFC. Further, regardless of whether Aspen Holdings is a CFC, most or all of our non-U.S. subsidiaries are generally treated as CFCs by reason of certain changes in the constructive ownership rules under the 2017 Act that resulted in our U.S. subsidiaries generally being treated as constructively owning the stock of our non-U.S. subsidiaries. Accordingly, any 10% U.S. Shareholders of Aspen Holdings may be required to include in gross income for U.S. federal income tax purposes for each taxable year their pro rata shares of all or a portion of the subpart F and tested income generated by our non-U.S. companies (with various adjustments), regardless of whether any distributions are made to them. Any such 10% U.S. Shareholders should consult their own tax advisors regarding the application of these rules to them.

The RPII CFC Provisions. In general, if a non-U.S. corporation is a RPII CFC at any time during a taxable year, a U.S. RPII Shareholder must include in its gross income for U.S. federal income tax purposes its pro rata share of the non-U.S. corporation's RPII with respect to any shares that such U.S. RPII Shareholder owns (directly or indirectly through certain entities) on the last day in the non-U.S. corporation's taxable year, even if the RPII is not distributed. Further, a U.S. RPII Shareholder's pro rata share of any RPII is determined as if all RPII for the taxable year were distributed proportionately only to U.S. RPII Shareholders on that date. In addition, a U.S. RPII Shareholder is required to comply with certain reporting requirements, regardless of the number of shares owned by the U.S. RPII Shareholder.

For these purposes, RPII is any "insurance income" (as described below) attributable to policies of insurance or reinsurance with respect to which the person (directly or indirectly) insured is a U.S. RPII Shareholder or a "related person" (as defined below) to such U.S. RPII Shareholder. In general, and subject to certain limitations, "insurance income" is income (including premium and investment income) attributable to the issuing of any insurance or reinsurance contract which would be taxed under the portions of the Code relating to insurance companies if the income were the income of a U.S. insurance company. Generally, the term "related person" for this purpose means someone who controls or is controlled by the U.S. RPII Shareholder or someone who is controlled by the same person or persons who control the U.S. RPII Shareholder. Control generally is measured by a greater than 50% ownership interest, applying certain constructive ownership principles. However, the RPII rules generally do not apply with respect to a non-U.S. corporation if either (i) at all times during its taxable year less than 20% of the total combined voting power of all classes of stock of the corporation entitled to vote and less than 20% of the total value of the corporation is owned (directly or indirectly) by persons who are (directly or indirectly) insured under any policy of insurance or reinsurance issued by the corporation or who are related persons to any such person (the "ownership exception"), or (ii) the RPII (determined on a gross basis) of the corporation for the taxable year is less than 20% of its gross insurance income for the taxable year (the "de minimis exception").

We believe that each of our non-U.S. Operating Subsidiaries and each of Peregrine and APJ Jersey is a RPII CFC. Nonetheless, we expect that each such company will qualify for one or both of the ownership exception and the de minimis exception in the current taxable year and for the foreseeable future. However, no assurances can be provided that any of our companies will satisfy either exception.

Computation of RPII. In order to determine how much RPII, if any, a non-U.S. insurance subsidiary has earned in each taxable year, our non-U.S. insurance subsidiaries may obtain and rely upon information from their insureds and reinsureds to determine whether any of the insureds, reinsureds or persons related thereto own (directly or indirectly through non-U.S. entities) shares of Aspen Holdings and are U.S. Persons. Aspen Holdings may not be able to determine whether any of the underlying direct or indirect insureds to which our non-U.S. insurance subsidiaries provide insurance or reinsurance are direct or indirect shareholders or related persons to such shareholders. Consequently, Aspen Holdings may not be able to determine accurately the gross amount of RPII earned by each of our non-U.S. insurance subsidiaries in a given taxable year. For any year in which the special RPII CFC inclusion rules apply, Aspen Holdings may also seek information from its shareholders as to whether beneficial owners of shares at the end of the year are U.S. Persons so that the RPII may be determined and apportioned

among such persons; to the extent Aspen Holdings is unable to determine whether a beneficial owner of shares is a U.S. Person, Aspen Holdings may assume that such owner is not a U.S. Person, thereby increasing the per share RPII amount for all known U.S. RPII Shareholders.

Basis Adjustments. A U.S. RPII Shareholder's tax basis in its shares will be increased by the amount of any RPII that the shareholder includes in income. The U.S. RPII Shareholder may exclude from income the amount of any distributions by Aspen Holdings out of previously taxed RPII income. The U.S. RPII shareholder's tax basis in its shares will be reduced by the amount of such distributions that are excluded from income.

Uncertainty as to Application of RPII Provisions. The RPII provisions have never been interpreted by the courts, and regulations interpreting the RPII provisions exist only in proposed form. It is not certain whether these regulations will be adopted in their proposed form or what changes or clarifications might ultimately be made thereto or whether any such changes, as well as any interpretation or application of the RPII provisions by the IRS, the courts or otherwise, might have retroactive effect. The U.S. Treasury Department has authority to impose, among other things, additional reporting requirements with respect to RPII. Accordingly, the meaning of the RPII provisions and the application thereof to us is uncertain. Further, the applicability of the ownership and de minimis exceptions and the RPII rules more generally depends upon facts regarding our direct and indirect shareholders and insureds, about which we have limited information. Accordingly, no assurances can be provided that any of our companies will satisfy either exception. Moreover, to the extent the exceptions do not apply, we may be unable to correctly determine the amount of RPII that any U.S. RPII Shareholder is required to take into account. Any prospective investors considering an investment in our shares should consult their tax advisors as to the effects of these uncertainties.

Information Reporting. Under certain circumstances, U.S. Persons owning stock in a non-U.S. corporation are required to file IRS Form 5471 with their U.S. federal income tax returns. Generally, information reporting on IRS Form 5471 is required by (i) a person who is treated as a U.S. RPII Shareholder, (ii) a 10% U.S. Shareholder of a non-U.S. corporation that is a CFC at any time during the taxable year and who owned the stock on the last day of that year on which it was a CFC and (iii) under certain circumstances, a U.S. Person who acquires stock in a non-U.S. corporation and as a result thereof owns 10% or more of the voting power or value of such non-U.S. corporation, whether or not such non-U.S. corporation is a CFC. Aspen Holdings will, upon request, provide to all U.S. Persons registered as shareholders of its shares the relevant information necessary to complete Form 5471 in the event Aspen Holdings determines this is necessary. Failure to file IRS Form 5471 may result in penalties.

Tax-Exempt Shareholders. A U.S. tax-exempt organization generally will recognize unrelated business taxable income if the organization is required to include in gross income any of our insurance income under the CFC rules described above (including the RPII provisions). Prospective investors that are tax-exempt entities are urged to consult their tax advisors as to the potential impact of the unrelated business taxable income provisions of the Code. A tax-exempt organization that is treated as a 10% U.S. Shareholder or a U.S. RPII Shareholder also must file IRS Form 5471 in the circumstances described above.

Redemption of Preference Shares. A redemption of the Preference Shares will be treated under Section 302 of the Code as a distribution with respect to our shares, unless the redemption satisfies one of the tests set forth in Section 302(b) of the Code enabling the redemption to be treated as a disposition (as discussed below), subject to the discussion herein relating to the potential application of the CFC, RPII and PFIC rules. Under the relevant Code Section 302(b) tests, the redemption generally will be treated as a sale or exchange only if it (1) is substantially disproportionate, (2) constitutes a complete termination of the holder's stock interest in us or (3) is "not essentially equivalent to a dividend." In determining whether any of these tests are met, shares considered to be owned by the holder by reason of certain constructive ownership rules set forth in the Code, as well as shares actually owned, must generally be taken into account. It may be more difficult for a U.S. Person who owns, actually or constructively by operation of certain attribution rules, any of our other shares to satisfy any of the above requirements. The determination as to whether any of the alternative tests of Section 302(b) of the Code is satisfied with respect to a particular holder of the Preference Shares depends on the facts and circumstances as of the time the determination is made.

Dispositions of Preference Shares. Subject to the discussion above relating to redemptions and the discussions below relating to the potential application of the Code Section 1248 and PFIC rules, U.S. Persons that hold Preference Shares generally should recognize capital gain or loss for U.S. federal income tax purposes on the sale, exchange, redemption or other disposition of the Preference Shares in the same manner as on the sale, exchange, redemption or other disposition of any other shares held as capital assets. If the holding period for these shares exceeds one year, under current law any gain will be subject to tax at the rates applicable to long-term capital gain. Moreover, gain, if any, generally will be U.S. source gain and generally will constitute "passive category income" for foreign tax credit limitation purposes.

Code Section 1248 provides that if a U.S. Person sells or exchanges stock in a non-U.S. corporation and such person owned, directly, indirectly through certain non-U.S. entities or constructively, 10% or more of the voting power of the corporation at any time during the five-year period ending on the date of disposition when the corporation was a CFC, any gain from the sale

or exchange of the shares will be treated as a dividend to the extent of the CFC's earnings and profits (determined under U.S. federal income tax principles) during the period that the shareholder held the shares and while the corporation was a CFC (with certain adjustments). A U.S. Person who owns or owned, directly, indirectly through certain non-U.S. entities or constructively, 10% or more of the voting power of Aspen Holdings may be subject to these rules if Aspen Holdings is or was treated as a CFC.

A 10% U.S. Shareholder may in certain circumstances be required to report a disposition of shares of a CFC by attaching IRS Form 5471 to the U.S. federal income tax or information return that it would normally file for the taxable year in which the disposition occurs. In the event this is determined necessary, Aspen Holdings will provide the relevant information necessary to complete the Form.

Pursuant to the RPII provisions, Section 1248 of the Code also generally applies if a U.S. Person disposes of shares in a RPII CFC (determined without regard to the ownership or de minimis exceptions) that would be taxable as an insurance company under the Code if it were a U.S. corporation, in which case any gain from the disposition generally will be treated as a dividend to the extent of the holder's share of the corporation's undistributed earnings and profits that were accumulated during the period that the holder owned the shares (whether or not such earnings and profits are attributable to RPII). In addition, such a holder will be required to comply with certain reporting requirements, regardless of the number of shares owned by the holder. Existing proposed regulations do not address whether Section 1248 of the Code would apply if a non-U.S. corporation is not an insurance company but the non-U.S. corporation has a subsidiary that is a CFC and that would be taxed as an insurance company if it were a domestic corporation. We believe that these rules should not apply to dispositions of our shares because Aspen Holdings will not itself be directly engaged in the insurance business. We cannot be certain, however, that the IRS will not interpret the RPII provisions in a contrary manner or that the U.S. Treasury Department will not adopt regulations that provide that these rules will apply to dispositions of Preference Shares. Prospective investors should consult their tax advisors regarding the effects of these rules on a disposition of Preference Shares.

Tax on Net Investment Income. A U.S. Person that is an individual, estate or a trust that does not fall into a special class of trusts that is exempt from such tax, will be subject to a 3.8% tax on the lesser of (1) the U.S. Person's "net investment income" (or "undistributed net investment income" in the case of estates and trusts) for the relevant taxable year and (2) the excess of the U.S. Person's modified adjusted gross income for the taxable year over a certain threshold (which in the case of an individual will be between \$125,000 and \$250,000, depending on the individual's circumstances). A U.S. Person's net investment income will generally include its dividend income and its net gains from the disposition of Preference Shares, unless such dividend income or net gains are derived in the ordinary course of the conduct of a trade or business (other than a trade or business that consists of certain passive or trading activities). Unless a U.S. Person elects otherwise or holds Preference Shares in connection with certain trades or businesses, the CFC and PFIC provisions generally will not apply for purposes of determining a U.S. Person's net investment income with respect to the Preference Shares.

Passive Foreign Investment Companies. In general, a non-U.S. corporation will be a PFIC during a given year if (i) 75% or more of its gross income constitutes "passive income" (the "75% test") or (ii) 50% or more of its assets produce (or are held for the production of) passive income (the "50% test"). For these purposes, passive income generally includes interest, dividends, annuities and other investment income. However, the PFIC provisions contain a look-through rule under which a non-U.S. corporation that directly or indirectly owns at least 25% of the value of the stock of another corporation generally is treated, for purposes of determining whether it is a PFIC, as if it received directly its proportionate share of the income, and held its proportionate share of the assets, of the other corporation (the "look-through rule"). In addition, pursuant to an insurance exception that was amended by the 2017 Act, (a) passive income does not include income that a QIC derives in the active conduct of an insurance business or income of a QDIC, and (b) passive assets do not include assets of a QIC available to satisfy liabilities of the QIC related to its insurance business, if the QIC is engaged in the active conduct of an insurance business, or assets of a QDIC.

Generally, a non-U.S. corporation will be a QIC for a taxable year if it would be taxable as an insurance company if it were a U.S. corporation and its applicable insurance liabilities constitute more than 25% of its total assets for a taxable year. Further, under the 2021 Proposed Regulations, a QIC is in the "active conduct" of an insurance business only if it satisfies either a "factual requirements test" or an "active conduct percentage test." The factual requirements test requires that the officers and employees of the QIC carry out substantial managerial and operational activities on a regular and continuous basis with respect to its core functions and that they perform virtually all of the active decision-making functions relevant to underwriting functions. The active conduct percentage test generally requires that (i) the total costs incurred by the QIC with respect to its officers and employees for services rendered with respect to its core functions (other than investment activities) equal or exceed 50% of the total costs incurred by the QIC with respect to its officers and employees and any other person or entities for services rendered with respect to its core functions (other than investment activities) and (ii) to the extent the QIC outsources any part of its core functions to unrelated entities, officers and employees of the QIC with experience and relevant expertise must select and supervise the person that performs the outsourced functions, establish objectives for performance of the outsourced functions and prescribe rigorous guidelines relating to the outsourced functions which are routinely evaluated and

updated. Under certain exceptions, however, a QIC that has no or only a nominal number of employees or that is a vehicle that has the effect of securitizing or collateralizing insurance risks underwritten by other insurance or reinsurance companies or is an insurance linked securities fund that invests in securitization vehicles generally is deemed not engaged in the active conduct of an insurance business. The officers and employees of certain related entities generally may be taken into account for these purposes, provided that the QIC exercises regular oversight and supervision over the services performed by the related entity's officers and employees. The 2021 Proposed Regulations will not be effective unless and until adopted in final form, but taxpayers may rely on them for taxable years beginning after December 31, 2017 if they are consistently followed.

We believe that, based on the implementation of our current business plan and the application of the insurance exception, our non-U.S. insurance subsidiaries should be considered QICs engaged in the active conduct of an insurance business under one or both of the "factual requirements test" or the "active conduct percentage test," our U.S. insurance subsidiaries should be considered QDICS and none of the income or assets of such insurance subsidiaries should be treated as passive. As a result, based on the application of the look-through rule, we believe that Aspen Holdings should not be characterized as a PFIC for the current year or the foreseeable future. However, because of legal uncertainties with respect to the interpretation of the PFIC rules and whether the 2021 Proposed Regulations will be adopted as final regulations in their current form, and factual uncertainties with respect to our planned operations, there is a risk that Aspen Holdings will be characterized as a PFIC in one or more years.

If Aspen Holdings is characterized as a PFIC for any year during which a U.S. Person holds shares of Aspen Holdings, it generally will continue to be treated as a PFIC for the years during which such U.S. Person holds such shares unless the U.S. Person has made a "qualified electing fund" election, described below.

If Aspen Holdings were characterized as a PFIC during a given year, each U.S. Person holding shares of Aspen Holdings generally would be subject to a penalty tax at the time of the sale at a gain of, or receipt of an "excess distribution" with respect to, their shares, unless such person is a 10% U.S. Shareholder subject to tax under the CFC rules or such person made a "qualified electing fund" election or "mark-to-market" election (which mark-to-market election would generally require the shareholder to include as ordinary income any appreciation in the value of its shares at the end of a taxable year and allow a shareholder to deduct any depreciation in the value of its shares (up to the amount of prior gain inclusions) at the close of the taxable year). It is uncertain whether Aspen Holdings would be able to provide its shareholders with the information necessary for a U.S. Person to make a "qualified electing fund" election. In addition, if Aspen Holdings were considered a PFIC, upon the death of any U.S. individual owning shares, such individual's heirs or estate would not be entitled to a "step-up" in the basis of the shares that might otherwise be available under U.S. federal income tax laws. In general, a shareholder receives an "excess distribution" if the amount of the distribution is more than 125% of the average distribution with respect to the shares during the three preceding taxable years (or shorter period during which the taxpayer held the shares). In general, the penalty tax is equivalent to the taxes that are deemed due during the period the shareholder owned the shares, computed by assuming that the excess distribution or gain (in the case of a sale) with respect to the shares was earned in equal portions and taxable at the highest applicable tax rate on ordinary income throughout the shareholder's period of ownership, and an interest charge for the failure to pay such taxes for prior periods. The interest charge is equal to the applicable rate imposed on underpayments of U.S. federal income tax for such periods. In addition, a distribution paid by Aspen Holdings to U.S. shareholders that is characterized as a dividend and is not characterized as an excess distribution would not be eligible for reduced rates of tax as qualified dividend income if Aspen Holdings were considered a PFIC in the taxable year in which such dividend is paid or in the preceding taxable year. A U.S. Person that is a shareholder in a PFIC may also be subject to additional information reporting requirements, including the filing of an IRS Form 8621.

U.S. investors are urged to consult with their tax advisors and to consider making a "protective" QEF election with respect to the Preference Shares to preserve the possibility of making a retroactive QEF election. A U.S. Person that makes a QEF election with respect to a PFIC is currently taxable on its pro rata share of the ordinary earnings and net capital gain of such company during the years it is a PFIC (at ordinary income and capital gain rates, respectively), regardless of whether or not distributions were received. In addition, any of the PFIC's losses for a taxable year will not be available to U.S. Persons and may not be carried back or forward in computing the PFIC's ordinary earnings and net capital gain in other taxable years. A U.S. Person generally increases the basis of its PFIC shares, and the basis of any other property of the U.S. Person by reason of which such U.S. Person is considered to indirectly own PFIC shares, by amounts included in such U.S. Person's gross income pursuant to the QEF election. Therefore, an electing U.S. Person will generally increase the basis of its Preference Shares by amounts included in the U.S. Person's gross income pursuant to the QEF election. Distributions of income that had previously been taxed pursuant to the QEF election will result in a corresponding reduction of basis in the Preference Shares and will not be taxed again as a distribution to the U.S. Person. A U.S. Person holding Preference Shares will generally be required to file an IRS Form 8621 (which is a form that is required to be filed by holders of equity in a PFIC) for each tax year that it holds Preference Shares and we are characterized as a PFIC, regardless of whether such U.S. Person has a QEF election in effect or receives an excess distribution.

If Aspen Holdings is a PFIC for any taxable year, a U.S. Person who holds our shares would be treated as owning a proportionate amount of the shares of any PFICs in which Aspen Holdings directly, or in certain cases indirectly, owns an interest, and the PFIC rules described above generally would apply with respect to the U.S. Person's indirect ownership of such PFICs.

Foreign Tax Credit. If U.S. Persons own a majority of our shares, only a portion of the current income inclusions, if any, under the CFC, RPII and PFIC rules and of dividends paid by us (including any gain from the sale of shares that is treated as a dividend under Section 1248 of the Code) will be treated as foreign source income for purposes of computing a shareholder's U.S. foreign tax credit limitations. We will consider providing shareholders with information regarding the portion of such amounts constituting foreign source income to the extent such information is reasonably available. It is also likely that substantially all of the "subpart F income," RPII and dividends that are foreign source income will constitute "passive category income" for foreign tax credit limitation purposes. Additionally, tested income will constitute a separate basket for foreign tax credit purposes. Thus, it may not be possible for most shareholders to utilize excess foreign tax credits to reduce U.S. tax on such income.

Information Reporting and Backup Withholding on Distributions and Disposition Proceeds. Information returns may be filed with the IRS in connection with distributions on our shares and the proceeds from a sale or other disposition of our shares unless the holder of our shares establishes an exemption from the information reporting rules. A holder of shares that does not establish such an exemption may be subject to U.S. backup withholding tax on these payments if the holder is not a corporation or other exempt recipient or fails to provide its taxpayer identification number or otherwise comply with the backup withholding rules. The amount of any backup withholding from a payment to a U.S. Person will be allowed as a credit against the U.S. Person's U.S. federal income tax liability and may entitle the U.S. Person to a refund, provided that the required information is furnished to the IRS.

Under Section 6038D of the Code, certain U.S. Persons who are individuals may be required to report information relating to an interest in Preference Shares, subject to certain exceptions (including an exception for Preference Shares held in accounts maintained by certain financial institutions). U.S. Persons should consult their tax advisors regarding the potential application of this and any other applicable information reporting requirements to their ownership of Preference Shares.

Interpretation of the 2017 Act and Possible Changes in U.S. Tax Law. It is possible that future regulatory and judicial interpretations of the 2017 Act, as well as any new legislation that may be introduced and enacted by the current Congress or future Congresses, could have an adverse impact on us or holders of Preference Shares. Any such legislation or interpretations could have a retroactive effect.

Additionally, the U.S. federal income tax laws and interpretations regarding whether a company is engaged in a trade or business within the United States or is a PFIC, or whether U.S. Persons would be required to include in their gross income the "subpart F income," "tested income" or RPII of a CFC, are subject to change, possibly on a retroactive basis. Certain of the regulations regarding the application of the PFIC rules to insurance companies and the regulations regarding RPII are still in proposed form. New regulations or pronouncements interpreting or clarifying such rules may be forthcoming. We cannot be certain if, when or in what form such regulations or pronouncements may be provided and whether such guidance will have a retroactive effect.

Common Reporting Standard. The CRS has been introduced as an initiative by the OECD and is imposed on members of the European Union by the European Directive on Administrative Co-operation. Similar to the legislation commonly known as the Foreign Account Tax Compliance Act introduced by the United States, the CRS requires financial institutions which are subject to the rules to report certain financial information in respect of account holders. The CRS became effective as of January 1, 2016 and E.U. member states generally began to exchange the required information pursuant to the CRS from the end of September 2017 onwards. We intend to operate in compliance with CRS.

F. Dividends and paying agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

The Company maintains an internet site at www.aspen.co that contains Annual Reports on Form 20-F and Current Reports on Form 6-K filed or furnished with the U.S. Securities and Exchange Commission ("SEC"). Reports and other information we file with the SEC are also available on the internet site maintained by the SEC at www.sec.gov. Registration statements, reports and other information we file may be reviewed and copied at the SEC's Public Reference Room at 100 F Street, N.E., Washington, DC 20549. Copies of these documents may also be requested upon payment of a duplicating fee by writing to the SEC.

I. Subsidiary Information

Not applicable.

Item 11. Quantitative and Qualitative Disclosures about Market Risk

We believe we are principally exposed to three types of market risk: interest rate risk, foreign currency risk and credit risk.

Interest rate risk. Our investment portfolio consists primarily of fixed income securities. Fluctuations in interest rates have a direct impact on the market valuation of these securities. Accordingly, our primary market risk exposure is to changes in interest rates. As interest rates rise, the market value of our fixed-income portfolio falls and the converse is also true. We manage interest rate risk by maintaining a short to medium duration to reduce the effect of interest rate changes on book value. On January 16, 2019, Aspen Bermuda entered into a number of standard fixed for floating interest rate swaps with a total notional amount of \$3,138.0 million which were due to mature between January 18, 2021 and January 18, 2034, all of which have since been unwound. In September 2020, we decided to unwind our remaining interest rate swap positions. Aspen Bermuda entered into the swaps in the ordinary course of its investment activities to partially mitigate any negative impact of rises in interest rates on the market value of our fixed income portfolio. For the twelve months ended December 31, 2020, there was a loss of \$81.1 million.

As at December 31, 2021, no initial and variation margin was posted to a Futures Commission Merchant as the interest rate swap had been wound up in the prior year (December 31, 2020 — \$Nil). As at December 31, 2021, no non-cash collateral was transferred to the Company by its counterparties (December 31, 2020 — \$Nil). Transfers of margin are recorded on the consolidated balance sheet within Derivatives at Fair Value, while transfers in respect of non-cash collateral are disclosed but not recorded. As at December 31, 2021, no amount was recorded in the consolidated balance sheet for the pledged assets.

As at December 31, 2021, our fixed income portfolio had an approximate duration of 3.07 years. The table below depicts interest rate change scenarios and the effect on our interest rate sensitive invested assets:

Movement in Rates in Basis Points	Effect of Changes in Interest Rates on Portfolio Given a Parallel Shift in the Yield Curve				
	-100	-50	0	50	100
	(\$ in millions, except percentages)				
Market Value ⁽¹⁾	6,554.1	6,456.2	6,358.3	6,260.4	6,162.4
Gain/Loss	196.0	98.0	—	(98.0)	(196.0)
Percentage of Portfolio	3.1 %	1.5 %	—	(1.5)%	(3.1)%
Corresponding percentage at December 31, 2020	2.7 %	1.4 %	—	(1.4)%	(2.7)%

(1) Market value includes our fixed income portfolio, short term investments and privately held investments.

Foreign currency risk. Our reporting currency is the U.S. Dollar. The functional currencies of our operations are U.S. Dollars, British Pounds, Euros, Swiss Francs, Australian Dollars, Canadian Dollars and Singaporean Dollars. As at December 31, 2021, approximately 91.1% of our cash and investments was held in U.S. Dollars (2020 — 88.1%), approximately 1.3% were in British Pounds (2020 — 2.1%) and approximately 7.7% were in currencies other than the U.S. Dollar and the British Pound (2020 — 9.8%). For the twelve months ended December 31, 2021, 42.5% of our gross premiums were written in currencies other than the U.S. Dollar and the British Pound (2020 — 14.7%) and we expect that a similar proportion will be written in currencies other than the U.S. Dollar and the British Pound in 2022.

Other foreign currency amounts are remeasured to the appropriate functional currency and the resulting foreign exchange gains or losses are reflected in the statement of operations. Functional currency amounts of assets and liabilities are then translated into U.S. Dollars. The unrealized gain or loss from this translation, net of tax, is recorded as part of ordinary shareholders' equity. The change in unrealized foreign currency translation gain or loss during the year, net of tax, is a component of comprehensive income. Both the remeasurement and translation are calculated using current exchange rates for the balance sheets and average exchange rates for the statement of operations. We may experience exchange losses to the extent that our foreign currency exposure is not properly managed or otherwise hedged which would in turn adversely affect our results of operations and financial condition. Management estimates that a 10% change in the exchange rate between British

Pounds and U.S. Dollars as at December 31, 2021 would have impacted reported net comprehensive income by approximately \$27.6 million (2020 — \$20.5 million).

We will continue to manage our foreign currency risk by seeking to match our liabilities under insurance and reinsurance policies that are payable in foreign currencies with investments that are denominated in those currencies. This may involve the use of forward exchange contracts from time to time. A foreign exchange contract involves an obligation to purchase or sell a specified currency at a future date at a price set at the time of the contract. Foreign exchange contracts will not eliminate fluctuations in the value of our assets and liabilities denominated in foreign currencies but rather allow us to establish a rate of exchange for a future point in time.

As at December 31, 2021, we held foreign exchange contracts that were not designated as hedging under ASC 815, “*Derivatives and Hedging*” with an aggregate notional value of \$1,545.7 million (2020 — \$1,402.3 million). The foreign exchange contracts are recorded as derivatives at fair value in the balance sheet with changes recorded as a change in fair value of derivatives in the statement of operations. For the twelve months ended December 31, 2021, the impact of foreign exchange contracts on net income was a loss of \$35.9 million (December 31, 2020 — gain of \$16.0 million).

As at December 31, 2021, we held foreign exchange contracts that were designated as hedging under ASC 815 with an aggregate notional value of \$0 million (2020 — \$90.6 million). The foreign exchange contracts are recorded as derivatives at fair value in the balance sheet with the effective portion recorded in other comprehensive income and the ineffective portion recorded as a change in fair value of derivatives in the statement of operations. The contracts are considered to be effective and the movement in other comprehensive income representing the effective portion was a loss of \$6.2 million for the twelve months ended December 31, 2021 (December 31, 2020 — gain of \$0.3 million).

As the foreign exchange contracts settle, the realized gain or loss is reclassified from other comprehensive income into general, administration and corporate expenses of the statement of operations and other comprehensive income. For the twelve months ended December 31, 2021, the amount recognized within general, administration and corporate expenses for settled foreign exchange contracts was a realized loss of \$5.7 million (December 31, 2020 — loss of \$3.2 million).

Credit risk. We have exposure to credit risk primarily as a holder of fixed income securities and private securities. Our risk management strategy and investment policy is to invest mainly in debt instruments of high credit quality issuers. We also invest a portion of the portfolio in securities that are below investment grade or in unrated private securities and other specialty asset classes. We reduce the amount of credit exposure by setting limits with respect to particular ratings categories, business sectors and any one issuer. As at December 31, 2021, the average rating of fixed income maturities in our investment portfolio was “AA-” (December 31, 2020 — “AA-”).

In addition, we are exposed to the credit risk of our insurance and reinsurance brokers to whom we make claims payments for our policyholders, as well as to the credit risk of our reinsurers and retrocessionaires who assume business from us. Other than fully collateralized reinsurance, the substantial majority of our reinsurers have a rating of “A” (Excellent), the third highest of fifteen rating levels, or better by A.M. Best and the minimum rating of any of our material reinsurers is “A-” (Excellent), the fourth highest of fifteen rating levels, by A.M. Best. The total amount recoverable by the Company from reinsurers as at December 31, 2021 was \$3,298.1 million (2020 — \$3,195.2 million) of which \$1,981.4 million was uncollateralized (2020 — \$2,010.0 million). As at December 31, 2021, of the Company’s uncollateralized reinsurance recoverables, 10.8% (2020 — 11.0%) were with Munich Re which is rated A+ by A.M. Best and AA- by S&P, 15.9% (2020 — 13.4%) were with Everest Re which is rated A+ by A.M. Best and A+ by S&P, and 9.3% (2020 — 9.2%) were with Lloyd’s which is rated A by A.M. Best and A+ by S&P. These are the Company’s largest exposures to individual reinsurers. The Company has made no provision for doubtful debts from any of its reinsurers as at December 31, 2021.

Item 12. Description of Securities Other Than Equity Securities.

Not applicable.

PART II

Item 13. Defaults, Dividends Arrearages and Delinquencies

None.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

None.

Item 15. Controls and Procedures

A. Disclosure Controls and Procedures

The Company, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the design and operation of the Company's disclosure controls and procedures as of the end of the period of this report. Our management does not expect that our disclosure controls will prevent all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. As a result of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of persons or by collusion of two or more people. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. As a result of the inherent limitations in a cost-effective control system, misstatement due to error or fraud may occur and not be detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the disclosure requirements are met.

Based on the evaluation of the disclosure controls and procedures, the Company's Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2021, the Company's disclosure controls and procedures were ineffective in ensuring that information required to be disclosed in the reports filed or submitted to the SEC under the Exchange Act by the Company were recorded, processed, summarized and reported in a timely fashion, and were accumulated and communicated to management, including the Company's Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

B. Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is designed to provide reasonable assurance regarding the preparation of financial statements for external purposes in accordance with U.S. GAAP.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as is defined in Exchange Act Rule 13a-15(f) and as contemplated by Section 404 of the Sarbanes-Oxley Act. Our internal control system was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. All internal control systems, no matter how well designed, have inherent limitations. These limitations include the possibility that judgments in decision-making can be faulty and that breakdowns can occur because of error or mistake. Therefore, any internal control system can provide only reasonable assurance and may not prevent or detect all misstatements or omissions. In addition, our evaluation of effectiveness is as of a particular point in time and there can be no assurance that any system will succeed in achieving its goals under all future conditions or at any time.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2021. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in *Internal Control - Integrated Framework (2013)*. Based on our assessment in accordance with the criteria, we believe that, as a result of the identified material weaknesses in internal controls described below, our internal controls over financial reporting were ineffective as at December 31, 2021. The deficiencies in internal controls included: deficiencies related to the incorrect treatment of foreign exchange gains and losses which should have been matched with an underwriting premium receivable payment, but the failure to match resulted in an overstatement of Aspen U.K.'s underwriting premium receivable together with general foreign exchange revaluation and translation controls within Aspen U.K.; the completeness and accuracy of the information used in recognizing both current and deferred income tax on Aspen U.K.'s branches and the associated application thereof in respect of local tax rules in the various jurisdictions, resulting in an underreporting of tax charge; the misapplication of committed par value measurement prices when valuing privately-held investments rather than funded valuations, resulting in the incorrect valuation of a single investment; and insufficient resources with appropriate level of knowledge within our outwards reinsurance operations and accounting team to effectively design and execute our process level controls around reinsurance premiums payable, ceded written premiums as well as our disclosure controls around outwards reinsurance related balances.

Management identified these internal control deficiencies, certain of which resulted in revisions to the Company's historical financial statements to correct immaterial errors, as further described in Item 18, Note 26 of our consolidated financial

statements, “Correction of Immaterial Errors.” The consolidated financial statements included in this Form 20-F fairly represent in all material respects the financial condition, results of operations and cash flows of the Company for the periods presented.

C. Attestation report of the registered public accounting firm

Not applicable

D. Changes in Internal Control Over Financial Reporting

Remediation Plan and Status:

A material weakness is a deficiency, or combination of deficiencies, in internal controls over financial reporting such that there is a reasonable possibility that a material misstatement of the Company’s annual or interim financial statements will not be prevented or detected on a timely basis.

In order to remediate the identified material weaknesses in our internal control over financial reporting described above, we have initiated (but not yet fully implemented) remedial measures, both those already underway during the year ended December 31, 2021 along with additional planned measures to remediate the material weaknesses. Remediation activities, which remain ongoing, include, but are not limited to the following:

- Implementing new credit controls, enhancing the scope of existing credit controls, and strengthening the documentation of credit control procedures and procedures relating to reconciliations, cash matching and foreign exchange revaluation of Aspen U.K.’s underwriting premiums receivable and ceded written premiums.
- Improving the segregation of responsibilities across credit control processes, which will add additional layers of management review.
- Further enhancing processes and controls that ensure the timeliness and accuracy of branch results for income tax accounting and analysis, including through training and additional process documentation.
- Augmenting existing tax personnel with local tax consulting resources to help ensure we have sufficient local tax knowledge for our branches in overseas jurisdictions.
- Implementing additional controls to the quarterly procedures relating to the valuation of privately-held-investments to ensure valuations are accurately applied within our financial records.
- Strengthening the reinsurance team by hiring additional accounting and operational resources to help ensure that we have a sufficient number of personnel with skills and experience commensurate with the size and complexity of the organization who can effectively design and execute our process level controls around reinsurance premiums payable and ceded written premiums as well as disclosure controls around outward reinsurance related balances.
- Additionally, we have engaged an outside service provider to assist in evaluating and documenting processes and controls, identifying control gaps and strengthening the quality of documentation regarding controls.

These controls will need to be in operation for a sufficient period of time before management has concluded, through testing, that these new controls are operating effectively. We expect that the testing of the new controls will be completed over the course of 2022. Our Board and Audit Committee are committed to, and will continue to monitor the progress and effectiveness of our management’s control-remediation activities.

Management’s assessment of the overall effectiveness of our internal controls over financial reporting was based on the criteria set forth in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations (“COSO”) of the Treadway Commission. Based upon that evaluation, and other than the changes described above in “Remediation Plan and Status,” the Company’s management is not aware of any additional changes, other than the ones mentioned above, in its internal control over financial reporting that occurred during the year ended December 31, 2021 that have materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting. The Company reviews its disclosure controls and procedures, including internal controls over financial reporting, on an ongoing basis.

Item 16A. Audit Committee Financial Expert

The Board has determined that Mr. Richard Lightowler is an independent director, is financially literate, has accounting or related financial management expertise pursuant to NYSE requirements and is an “audit committee financial expert” pursuant to the rules and regulations of the SEC.

Item 16B. Code of Conduct

Our Board has adopted a code of ethics entitled “Code of Conduct” which applies to all of our employees, officers and directors. Copies of our Code of Conduct can be found on our website at www.aspen.co and may be obtained in print, without cost, by writing to Aspen Insurance Holdings Limited, Attention: Company Secretary, 141 Front Street, Hamilton HM19, Bermuda. We intend to satisfy the disclosure requirement under Item 16B(d)-(e) of Form 20-F regarding amendment to, or waiver from, a provision of our Code of Business Conduct and Ethics by posting such information at the website location specified above.

Item 16C. Principal Accountant Fees and Services

The following table represents aggregate fees billed to the Company by KPMG LLP (“KPMG”) ID 1118, London, England, the Company’s independent registered public accounting firm and auditor, for fiscal years ended December 31, 2021 and 2020:

	Twelve Months Ended December 31, 2021	Twelve Months Ended December 31, 2020
	(\$ in millions)	
Audit Fees ⁽¹⁾	\$ 6.4	\$ 4.1
Audit-Related Fees ⁽²⁾	0.5	0.4
Tax Fees ⁽³⁾	—	—
All Other Fees ⁽⁴⁾	—	0.6
Total Fees	\$ 6.9	\$ 5.1

- (1) Audit fees consist of fees paid to KPMG for professional services for the audit of the Company’s annual consolidated financial statements, review of quarterly consolidated financial statements, audit of annual statutory statements, and for services that are normally provided by independent auditors in connection with statutory, comfort letters, SEC and regulatory filings or engagements.
- (2) Audit-related fees consist of fees paid for assurance and related services for the performance of the audit or review of the Company’s financial statements (other than the audit fees disclosed above), such as the audit of Solvency II balance sheet and the 401(k) Plan.
- (3) Tax fees are fees related to tax compliance.
- (4) All other fees relate to fees billed to the Company by KPMG for non-audit services rendered to the Company in connection with the 7.625% / 8.375% Senior Secured PIK Toggle Notes due 2025 issued by Highlands Holdings Bond Issuer, Ltd. and Highlands Holdings Bond Co-Issuer, Inc.

The policy of the Audit Committee is to approve all audit and permissible non-audit services to be provided by the independent registered public accounting firm during the year. The Audit Committee considered whether the provision of the non-audit services by KPMG was compatible with maintaining KPMG’s independence with respect to the Company and determined that the provision of such services was compatible with KPMG maintaining its independence. The Audit Committee approved all of the services provided by KPMG for the fiscal year ended December 31, 2021.

Item 16D. Exemptions from the Listing Standards for Audit Committee

None.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Item 16F. Change in Registrant’s Certifying Accountant

The Company intends to engage Ernst & Young LLP (“EY”) as the Company’s independent registered public accountant in connection with its fiscal year ending December 31, 2022, subject to regulatory approvals, completion of internal governance processes of both the Company and EY and other standard audit procedures. For more information, please refer to the Company’s Annual Report on Form 20-F for the year ended December 31, 2020.

Item 16G. Corporate Governance

As a foreign private issuer, we are entitled to follow the practice of our home country, Bermuda, with respect to certain corporate governance requirements rather than adhering to the corporate governance requirements that are applicable to U.S. issuers listed on the NYSE. Additionally, because 100% of our ordinary shares are owned by Parent and are not listed on the

NYSE, we are a “controlled company” within the meaning of NYSE corporate governance standards. Controlled companies are also exempt from certain NYSE corporate governance standards.

Pursuant to Section 303.A.11 of the NYSE Listed Company Manual, we are required to list the significant differences between our corporate governance practices and the NYSE corporate governance standards applicable to U.S. issuers listed on the NYSE. Listed below are the significant differences:

- We do not have a majority of independent directors. The NYSE requires U.S. issuer listed companies to have a board of directors of at least a majority of independent directors. Controlled companies, however, are exempt from this requirement. Under Bermuda law and our Bye-Laws, we are not required to have a majority of independent directors.
- We do not have a nominating/corporate governance committee. Instead, the functions typically performed by such a committee are performed by the Board. The NYSE requires U.S. issuer listed companies to have a nominating/corporate governance committee composed entirely of independent directors and a committee charter detailing the committee’s purpose and responsibilities and an annual performance evaluation of the committee. Controlled companies, however, are exempt from this requirement. Under Bermuda law and our Bye-Laws, we are not required to have a nominating or corporate governance committee.
- We do not have a compensation committee. The NYSE requires U.S. issuer listed companies to have a compensation committee composed entirely of independent directors and a committee charter detailing the committee’s purpose and responsibilities, an annual performance evaluation of the committee and the rights and responsibilities of the committee with respect to retaining or obtaining advice from an independent adviser. Controlled companies, however, are exempt from this requirement. Under Bermuda law and our Bye-Laws, we are not required to have a compensation committee.

Item 16H. Mine Safety Disclosure

Not applicable.

Item 16I. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 17. Financial Statements

Refer to Item 18 of this report.

Item 18. Financial Statements

ASPEN INSURANCE HOLDINGS LIMITED
CONSOLIDATED BALANCE SHEETS
As at December 31, 2021 and December 31, 2020
(\$ in millions, except share and per share amounts)

	As at December 31, 2021	As at December 31, 2020
ASSETS		
Fixed income maturities, available for sale (amortized cost — 2021: \$4,823.5 and 2020: \$4,126.7 net of allowance for expected credit losses 2021: \$2.7 — 2021: \$0.2)	\$ 4,881.6	\$ 4,348.1
Fixed income maturities, trading at fair value (amortized cost — 2021: \$1,155.5 and 2020: \$844.8)	1,157.5	855.6
Short-term investments, available for sale (amortized cost — 2021: \$10.1 and 2020: \$88.0)	10.1	87.8
Short-term investments, trading at fair value (amortized cost — 2021: \$2.0 and 2020: \$35.4)	2.0	35.4
Catastrophe bonds, trading at fair value (cost — 2021: \$5.3 and 2020: \$18.8)	3.4	18.8
Privately-held investments, trading at fair value (amortized cost — 2021: \$309.2 and 2020: \$319.7)	307.1	299.3
Investments, equity method	3.9	0.9
Other investments, at fair value	151.3	109.4
Total investments	6,516.9	5,755.3
Cash and cash equivalents (including cash within consolidated variable interest entities of — 2021: \$75.2 and 2020: \$69.9) ⁽²⁾	1,314.1	1,747.3
Reinsurance recoverables:		
Unpaid losses (net of allowance for expected credit losses of 2021: \$3.3 — 2020: \$3.8)	3,298.1	3,195.2
Ceded unearned premiums	596.1	453.7
Underwriting premiums receivables (net of allowance for expected credit losses of 2021: \$30.2 — 2020: \$34.0) ⁽¹⁾	1,304.6	1,185.0
Other receivables	153.0	135.2
Funds withheld	103.7	98.0
Deferred policy acquisition costs	290.8	306.6
Derivatives at fair value	12.9	26.8
Receivables for securities sold	19.4	1.4
Office properties and equipment	114.5	77.4
Right-of-use operating lease assets	83.4	74.1
Income taxes refundable	6.4	3.4
Other assets	8.3	8.4
Intangible assets and goodwill	21.9	22.8
Total assets	\$ 13,844.1	\$ 13,090.6
LIABILITIES		
Insurance reserves		
Losses and loss adjustment expenses	\$ 7,611.8	\$ 7,165.3
Unearned premiums	2,112.3	1,817.4
Total insurance reserves	9,724.1	8,982.7
Reinsurance premiums ⁽¹⁾	575.7	572.8
Income taxes payable ⁽¹⁾	4.4	8.8
Deferred tax liabilities ⁽¹⁾	2.8	5.2
Accrued expenses and other payables	289.3	214.4
Payables for securities purchased	44.6	—
Operating lease liabilities	115.2	106.0
Liabilities under derivative contracts	13.3	13.6
Long-term debt	299.9	299.9
Total liabilities	\$ 11,069.3	\$ 10,203.4
Commitments and contingent liabilities (see Note 20)	—	—
SHAREHOLDERS' EQUITY		
60,395,839 ordinary shares of par value \$0.01 each (December 31, 2020 — 60,395,839 shares)	\$ 0.6	\$ 0.6
Additional paid-in capital	1,514.7	1,469.7
Retained earnings ⁽¹⁾	1,382.5	1,397.2
Accumulated other comprehensive (loss)/income ⁽¹⁾	(123.0)	19.7
Total shareholders' equity ⁽¹⁾	2,774.8	2,887.2
Total liabilities and shareholders' equity	\$ 13,844.1	\$ 13,090.6

(1) As at December 31, 2020, underwriting premiums receivables, retained earnings and accumulated other comprehensive income have been corrected to account for the correction of foreign exchange movements on underwriting premium receivable which should have been matched with an underwriting premium receivable payment. Income taxes payable and deferred tax liabilities have been corrected for historic current and deferred income taxes on Aspen U.K.'s branches due to the deficiency in the completeness and accuracy of branch data and associated application thereof in respect of local tax rules in various jurisdictions. Underwriting premium receivables and reinsurance premiums payable have been corrected for immaterial adjustments. Refer to Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" for further details.

(2) Cash and cash equivalents includes restricted cash of \$364.9 million (2020 — \$296.0 million) which are held in trusts.

ASPEN INSURANCE HOLDINGS LIMITED
CONSOLIDATED STATEMENTS OF OPERATIONS AND OTHER COMPREHENSIVE INCOME (LOSS)
For The Twelve Months Ended December 31, 2021, 2020 and 2019
(\$ in millions, except share and per share amounts)

	Twelve Months Ended December 31,		
	2021	2020	2019
Revenues			
Net earned premium ⁽¹⁾	\$ 2,410.5	\$ 2,527.5	\$ 2,293.3
Net investment income	147.5	154.6	197.3
Net realized and unrealized investment gains	56.2	98.5	97.1
Other income	14.7	49.8	4.9
Total revenues ⁽¹⁾	2,628.9	2,830.4	2,592.6
Expenses			
Losses and loss adjustment expenses	1,693.3	1,840.8	1,679.7
Amortization of deferred policy acquisition costs	414.1	465.7	412.7
General, administrative and corporate expenses	418.0	410.9	521.6
Interest on long-term debt	14.3	33.9	20.2
Change in fair value of derivatives	35.9	65.1	144.2
Change in fair value of loan notes issued by variable interest entities	—	—	3.1
Realized and unrealized investment losses	47.4	27.4	10.9
Realized loss on debt extinguishment	—	—	5.5
Net realized and unrealized foreign exchange (gains)/losses ⁽¹⁾	(40.0)	13.8	9.6
Other expenses	10.8	10.8	1.7
Total expenses	2,593.8	2,868.4	2,809.2
Income (loss) from operations before income taxes ⁽¹⁾	35.1	(38.0)	(216.6)
Income tax (expense) ⁽¹⁾	(5.3)	(18.4)	(22.9)
Net income/(loss) ⁽¹⁾	\$ 29.8	\$ (56.4)	\$ (239.5)
Amount attributable to non-controlling interest	—	—	1.2
Net income/(loss) attributable to Aspen Insurance Holdings Limited's ordinary shareholders ⁽²⁾	\$ 29.8	\$ (56.4)	\$ (238.3)
Other Comprehensive Income/(Loss):			
Available for sale investments:			
Reclassification adjustment for net realized (losses) on investments included in net income/(loss)	\$ (20.4)	\$ (67.1)	\$ (6.8)
Change in net unrealized (losses)/gains on available for sale securities held	(137.2)	175.6	171.7
Net change from current period hedged transactions	(6.2)	0.3	4.8
Change in foreign currency translation adjustment ⁽¹⁾	21.4	(11.9)	(28.2)
Other comprehensive (loss)/income, before income taxes ⁽¹⁾	(142.4)	96.9	141.5
Income tax (expense)/benefit thereon:			
Change in net unrealized gains on available for sale securities held ⁽¹⁾	(0.3)	(0.5)	(13.6)
Net change from current period hedged transactions	—	—	(0.8)
Change in foreign currency translation adjustment	—	—	3.2
Total income tax (expense) allocated to other comprehensive income/(loss) ⁽¹⁾	(0.3)	(0.5)	(11.2)
Other comprehensive (loss)/income, net of income taxes ⁽¹⁾	(142.7)	96.4	130.3
Total comprehensive (loss)/income attributable to Aspen Insurance Holdings Limited's ordinary shareholders ⁽¹⁾	\$ (112.9)	\$ 40.0	\$ (108.0)

⁽¹⁾ Net earned premium has been corrected for immaterial errors in relation to gross written premium and reinsurance premium payables for periods 2020 and prior. Net realized and unrealized exchange gains/(losses) and change in foreign currency translation adjustment have been corrected to account for the correction of foreign exchange movements on underwriting premium receivables which should have been matched with an underwriting premium receivable payment for periods 2020 and prior. Income tax expense has been corrected for historic current and deferred income taxes on Aspen U.K.'s branches due to the deficiency in the completeness and accuracy of branch data and associated application thereof in respect of local tax rules in various jurisdictions. Total revenues, net income/(loss) and other comprehensive income/(loss) before and after income taxes have been corrected as a result of the corrections mentioned above for periods 2020 and 2019. Refer to Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" for further details.

ASPEN INSURANCE HOLDINGS LIMITED
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
For The Twelve Months Ended December 31, 2021, 2020 and 2019

(\$ in millions)

	Twelve Months Ended December 31,		
	2021	2020	2019
Ordinary shares			
Beginning of the year	\$ 0.6	\$ 0.6	\$ 0.1
Ordinary shares canceled	—	—	(0.1)
Ordinary shares issued	—	—	0.6
End of the year	0.6	0.6	0.6
Preference shares			
Beginning and end of the year	—	—	—
Non-controlling interest			
Beginning of the year	—	—	3.7
Net change attributable to non-controlling interest for the year	—	—	(1.2)
Minority interest buy-out	—	—	(2.5)
End of the year	—	—	—
Additional paid-in capital			
Beginning of the year	1,469.7	1,201.7	967.5
New ordinary shares issued	—	—	0.8
Capital contribution	45.0	268.0	—
Preference shares issued	—	—	241.6
Share-based compensation	—	—	(9.9)
Minority interest consideration	—	—	(0.8)
Minority interest buy-out	—	—	2.5
End of the year ⁽¹⁾	1,514.7	1,469.7	1,201.7
Retained earnings			
Beginning of the year ⁽²⁾	1,397.2	1,502.4	1,776.6
Net income/(loss) for the year ⁽²⁾	29.8	(56.4)	(239.5)
Dividends on preference shares	(44.5)	(44.5)	(35.9)
Net change attributable to non-controlling interest for the year	—	—	1.2
Opening credit losses ("CECL") ⁽³⁾	—	(4.3)	—
End of the year	1,382.5	1,397.2	1,502.4
Accumulated other comprehensive income:			
Cumulative foreign currency translation adjustments:			
Beginning of the year ⁽²⁾	(177.4)	(165.5)	(140.5)
Change for the year, net of income taxes ⁽²⁾	21.4	(11.9)	(25.0)
End of the year ⁽²⁾	(156.0)	(177.4)	(165.5)
Gain (loss) on derivatives:			
Beginning of the year	4.6	4.3	0.3
Net change from current period hedged transactions, net of income taxes	(6.2)	0.3	4.0
End of the year	(1.6)	4.6	4.3
Unrealized appreciation on available for sale investments:			
Beginning of the year	192.5	84.5	(66.8)
Change for the year, net of income taxes ⁽²⁾	(157.9)	108.0	151.3
End of the year ⁽²⁾	34.6	192.5	84.5
Total accumulated other comprehensive (loss)/income ⁽²⁾	(123.0)	19.7	(76.7)
Total shareholders' equity	\$ 2,774.8	\$ 2,887.2	\$ 2,628.0

⁽¹⁾ Additional paid-in capital includes \$775.0 million less issue costs of \$21.5 million of share premium in relation to preference shares (December 31, 2020 and 2019 — \$775.0 million less issue costs of \$21.5 million)

⁽²⁾ The opening balances for retained earnings, cumulative foreign currency translation, and the net loss and change for the year on foreign cumulative translation adjustments have been corrected to account for the corrections mentioned on the pages of the consolidated balance sheet and the consolidated statement of operations and other comprehensive income. Refer to Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" for further details.

⁽³⁾ The \$4.3 million relates to the cumulative effect-adjustment to opening retained earnings as a result of the recognition of current expected credit losses ("CECL") in the Company's available-for-sale investment portfolio and reinsurance recoverables following the adoption of ASU 2016-13.

ASPEN INSURANCE HOLDINGS LIMITED
CONSOLIDATED STATEMENTS OF CASH FLOWS
For The Twelve Months Ended December 31, 2021, 2020 and 2019

(\$ in millions)

	Twelve Months Ended December 31,		
	2021	2020	2019
Cash flows from/used in operating activities:			
Net income/(loss) ⁽¹⁾	\$ 29.8	\$ (56.4)	\$ (239.5)
Proportion due to non-controlling interest	—	—	1.2
Adjustments to reconcile net income to net cash flows from operating activities:			
Depreciation and amortization	53.3	45.8	39.8
Impairment of lease assets	0.4	12.9	12.3
Amortization of right-to-use operating lease assets	12.0	11.8	13.4
Interest on operating lease liabilities	5.5	5.5	4.6
Realized and unrealized investment gains	(56.2)	(98.5)	(97.1)
Realized and unrealized investment losses	47.4	27.4	10.9
Deferred tax expense/(benefit) ⁽¹⁾	(3.2)	(1.0)	24.7
Change in fair value of loan notes issued by variable interest entities	—	—	3.1
Net realized and unrealized investment foreign exchange (gains)/losses ⁽¹⁾	13.0	(25.3)	27.9
Net change from current period hedged transactions	(6.2)	0.3	4.8
Unrealized (gain)/loss on real estate funds in net investment income	(20.5)	—	—
Changes in:			
Insurance reserves:			
Losses and loss adjustment expenses	483.3	146.9	(203.0)
Unearned premiums	310.2	68.0	18.0
Reinsurance recoverables:			
Unpaid losses	(109.5)	(864.9)	(236.3)
Ceded unearned premiums	(143.1)	(9.6)	116.0
Other receivables	(19.4)	(17.4)	(0.4)
Deferred policy acquisition costs	13.2	(13.3)	(41.1)
Reinsurance premiums payable	1.2	129.7	19.5
Funds withheld	(5.7)	(13.0)	6.8
Premiums receivable ⁽¹⁾	(142.9)	79.9	142.8
Income tax payable ⁽¹⁾	(7.6)	7.6	(1.2)
Accrued expenses and other payable	73.5	2.4	(19.3)
Fair value of derivatives and settlement of liabilities under derivatives	13.6	(87.5)	73.8
Long-term debt and loan notes issued by variable interest entities	—	0.1	0.1
Operating lease liabilities	(17.5)	(17.3)	(18.0)
Other assets	0.1	(6.8)	(1.6)
Net cash from/(used in) operating activities	\$ 524.7	\$ (672.7)	\$ (337.8)

ASPEN INSURANCE HOLDINGS LIMITED
CONSOLIDATED STATEMENTS OF CASH FLOWS
For The Twelve Months Ended December 31, 2021, 2020 and 2019

(\$ in millions)

	Twelve Months Ended December 31,		
	2021	2020	2019
Cash flows from investing activities:			
(Purchases) of fixed income securities — Available for sale	\$ (2,217.3)	\$ (1,632.0)	\$ (1,650.7)
(Purchases) of fixed income securities — Trading	(866.4)	(281.9)	(1,169.1)
Proceeds from sales and maturities of fixed income securities — Available for sale	1,538.1	2,415.8	2,105.3
Proceeds from sales and maturities of fixed income securities — Trading	548.2	554.4	1,302.7
Net proceeds/(purchases) of catastrophe bonds — Trading	14.3	9.8	7.5
(Purchases) of short-term investments — Available for sale	(17.2)	(216.1)	(182.7)
Proceeds from sale of short-term investments — Available for sale	99.6	246.1	159.0
(Purchases) of short-term investments — Trading	(26.8)	(58.3)	(193.6)
Proceeds from sale of short-term investments — Trading	60.8	103.8	141.1
(Purchases) of privately-held investments — Trading	(205.1)	(92.8)	(287.3)
Proceeds from sale of privately-held investments — Trading	182.1	64.9	9.8
Net change in (payable)/receivable for securities (purchased)/sold	26.6	1.5	(0.4)
(Purchases) of other investments	(20.0)	—	—
Net proceeds from sales of other investments	—	71.1	—
(Net) purchases of equipment	(64.5)	(40.7)	(22.2)
Investment in Multiline reinsurer	(2.5)	(0.5)	—
Net sales/(purchases) of investments, equity method	(0.2)	6.1	(1.1)
Net cash (used in)/from investing activities	\$ (950.3)	\$ 1,151.2	\$ 218.3
Cash flows from financing activities:			
Proceeds from the net issuance of ordinary shares, net of issuance costs	\$ —	\$ —	\$ 1.4
Ordinary shares canceled	—	—	(0.1)
Capital contribution	45.0	268.0	—
Preference share (redemption)	—	—	241.6
Minority interest buy-out	—	—	(0.8)
Repayment of long-term debt issued by Silverton	—	—	(7.7)
Dividends paid on preference shares	(44.5)	(44.5)	(35.9)
Long-term debt redeemed	—	—	(125.0)
Make-whole payment	—	—	(5.5)
Cash paid for tax withholding purposes	—	—	(2.8)
Net cash from financing activities	\$ 0.5	\$ 223.5	\$ 65.2
Effect of exchange rate movements on cash and cash equivalents	(8.1)	14.8	1.1
(Decrease)/increase in cash and cash equivalents	(433.2)	716.8	(53.2)
Cash and cash equivalents at beginning of period	1,747.3	1,030.5	1,083.7
Cash and cash equivalents at end of period	\$ 1,314.1	\$ 1,747.3	\$ 1,030.5
Supplemental disclosure of cash flow information:			
Net cash paid/(received) during the period for income taxes	\$ 15.7	\$ 15.0	\$ (4.7)
Cash paid during the period for interest	\$ 14.0	\$ 14.0	\$ 19.0

) Net loss, deferred tax expense/(benefit), net realized and unrealized exchange gains/(losses), income tax payable and underwriting premium receivable have been corrected to account for the correction mentioned on the pages of the consolidated balance sheet and the consolidated statement of operations and other comprehensive income. These corrections have had no impact on the overall cashflow from operating, investing, or financing activities. Refer to Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" for further details.

ASPEN INSURANCE HOLDINGS LIMITED**NOTES TO THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS**
For The Twelve Months Ended December 31, 2021, 2020 and 2019
(\$ in millions, except share and per share amounts)**History and Organization**

History and Organization. Aspen Insurance Holdings Limited (“Aspen Holdings”) was incorporated on May 23, 2002 as a holding company headquartered in Bermuda. We underwrite specialty insurance and reinsurance on a global basis through our Operating Subsidiaries (as defined below) based in Bermuda, the United States and the United Kingdom: Aspen Insurance UK Limited (“Aspen U.K.”) and Aspen Underwriting Limited (“AUL”) (as corporate member of our Lloyd’s operations, which are managed by Aspen Managing Agency Limited (“AMAL”)), Aspen Bermuda Limited (“Aspen Bermuda”), Aspen Specialty Insurance Company (“Aspen Specialty”) and Aspen American Insurance Company (“AAIC”) (each referred to herein as an “Operating Subsidiary” and collectively referred to as the “Operating Subsidiaries”). We also have branches in Australia, Canada, Singapore and Switzerland. We established Aspen Capital Management, Ltd. (“ACML”) and other related entities (collectively, “ACM”) to leverage our existing underwriting franchise, increase our operational flexibility in the capital markets and provide investors direct access to our underwriting expertise. References to the “Company,” the “Group,” “we,” “us” or “our” refer to Aspen Holdings or Aspen Holdings and its consolidated subsidiaries.

On February 15, 2019, the Company completed its merger with Highlands Merger Sub, Ltd. (“Merger Sub”), a wholly owned subsidiary of Highlands Bermuda Holdco, Ltd. (formerly known as Highlands Holdings, Ltd.) (“Parent”). Merger Sub merged with and into the Company (the “Merger”), with the Company continuing as the surviving company and as a wholly owned subsidiary of Parent. Parent, a Bermuda exempted company, is an affiliate of certain investment funds managed by affiliates of Apollo Global Management, Inc., a leading global investment manager (collectively with its subsidiaries, “Apollo”). Additional information about the Merger is set forth in the Company’s Current Report on Form 8-K filed with the United States Securities and Exchange Commission (the “SEC”) on February 15, 2019 and the exhibits thereto, and on August 28, 2018 and the exhibits thereto, including the Merger Agreement, and the Company’s definitive proxy statement on Schedule 14A filed with the SEC on November 6, 2018.

As a result of the Merger, all of the Company’s publicly traded ordinary shares were automatically canceled. The ordinary shares of the Company ceased trading on the New York Stock Exchange (“NYSE”) prior to the opening of trading on February 15, 2019. The Company’s preference shares and depositary shares continue to be listed on the NYSE under the following symbols: AHL PRC, AHL PRD and AHL PRE.

Basis of Presentation and Significant Accounting Policies

The consolidated financial statements of Aspen Holdings are prepared in accordance with United States Generally Accepted Accounting Principles (“U.S. GAAP”) and are presented on a consolidated basis including the transactions of all operating subsidiaries in which the Company has a controlling financial interest and variable interest entities (“VIE”) in which the Company is considered to be the primary beneficiary. Transactions between Aspen Holdings and its subsidiaries are eliminated within the consolidated financial statements.

The consolidated financial statements have been prepared on a going concern basis.

(a) Use of Estimates

Assumptions and estimates made by management have a significant effect on the amounts reported within the consolidated financial statements. The most significant of these relate to losses and loss adjustment expenses, reinsurance recoverables, gross written premiums and commissions which have not been reported to the Company such as those relating to proportional treaty reinsurance contracts, unrecognized tax benefits, recoverability of deferred tax assets, the fair value of derivatives and the fair value of other and privately-held investments. All material assumptions and estimates are regularly reviewed and adjustments made as necessary but actual results could be significantly different from those expected when the assumptions or estimates were made.

(b) Accounting for Insurance and Reinsurance Operations

Premiums Earned. Premiums are recorded as written on the inception date of a policy. Premiums are primarily recognized as revenues proportionately over the coverage period. Premiums earned are recorded in the statements of operations, net of the cost of purchased reinsurance. Premiums written which are not yet recognized as earned premium are recorded in the consolidated balance sheet as unearned premiums, gross of any ceded unearned premiums. Written and earned premiums and the related costs include estimates for premiums which have not been finally determined. These relate mainly to contractual provisions for the payment of adjustment or additional premiums, premiums payable under proportional treaties and delegated underwriting authorities, and reinstatement premiums.

Adjustment and additional premiums are premiums charged which relate to experience during the policy term. The proportion of adjustable premiums included in the premium estimates varies between business lines with the largest adjustment premiums being in property and casualty reinsurance, marine, aviation and energy insurance and the smallest in property and casualty insurance.

Premiums under proportional treaty contracts and delegated underwriting authorities are generally not reported to the Company until after the reinsurance coverage is in force. As a result, an estimate of these “pipeline” premiums is recorded. The Company estimates pipeline premiums based on projections of ultimate premium taking into account reported premiums and expected development patterns.

Reinstatement premiums on assumed excess of loss reinsurance contracts are provided based on experience under such contracts. Reinstatement premiums are the premiums charged for the restoration of the reinsurance limit of an excess of loss contract to its full amount after payment by the reinsurer of losses as a result of an occurrence. Reinstatement premiums are recognized as revenue in full at the date of loss, triggering the payment of the reinstatement premiums. Reinstatement premiums provide future insurance cover for the remainder of the initial policy term. An allowance for uncollectible premiums is established for possible non-payment of premium receivables, as deemed necessary.

Credit Losses on Underwriting Premiums Receivable. Underwriting premium receivable balances are reported net of an allowance for expected credit losses. The allowance, based on ongoing review and monitoring of amounts outstanding, historical loss data, including write-offs and other relevant factors, is charged to net income in the period the receivable is recorded and revised in subsequent periods to reflect changes in the Company’s estimate of expected credit losses. Credit risk is partially mitigated by the Company’s ability to cancel the policy if the policyholder does not pay the premium.

Losses and Loss Adjustment Expenses. Losses represent the amount paid or expected to be paid to claimants in respect of events that have occurred on or before the balance sheet date. The costs of investigating, resolving and processing these claims are known as loss adjustment expenses (“LAE”). The statement of operations records these losses net of reinsurance, meaning that gross losses and loss adjustment expenses incurred are reduced by the amounts recovered or expected to be recovered under reinsurance contracts.

Reinsurance. Written premiums, earned premiums, incurred claims, LAE and the amortization of deferred policy acquisition costs all reflect the net effect of assumed and ceded reinsurance transactions. Assumed reinsurance refers to the Company’s acceptance of certain insurance risks that other insurance companies have underwritten. Ceded reinsurance arises from contracts under which other insurance companies agree to share certain risks with the Company.

Reinsurance accounting is followed when there is significant timing risk, significant underwriting risk and a reasonable possibility of significant loss. Reinsurance and retrocession does not isolate the ceding company from its obligations to policyholders. In the event that a reinsurer or retrocessionaire fails to meet its obligations, the ceding company’s obligations remain. The Company regularly evaluates the financial condition of its reinsurers and retrocessionaires and monitors the concentration of credit risk to minimize its exposure to financial loss from reinsurers’ and retrocessionaires’ insolvency by establishing an allowance for expected credit losses to be recognized over the life of the reinsurance recoverable.

Outward reinsurance premiums, which are paid when the Company purchases reinsurance or retrocessional coverage, are accounted for using the same accounting methodology as the Company uses for inwards premiums. Premiums payable under reinsurance contracts that operate on a “losses occurring during” basis are accounted for in full over the period of coverage while those arising from “risks attaching during” policies are expensed over the earnings period of the underlying premiums receivable from the reinsured business. Adjustment premiums and reinstatement premiums in relation to outward reinsurance are accrued when it is determined that the ultimate losses will trigger a payment and recognized within premiums payable.

Accounting for Retroactive Reinsurance Agreements. Retroactive reinsurance agreements are reinsurance agreements under which a reinsurer agrees to reimburse the Company as a result of past insurable events. For these agreements, the excess of the amounts ultimately collectible under the agreement over the consideration paid is recognized as a deferred gain liability which is amortized into income over the settlement period of the ceded reserves once the paid losses have exceeded the minimum retention. The amount of the deferral is recalculated each period based on actual loss payments and updated estimates of ultimate losses. If the consideration paid exceeds the ultimate losses collectible under the agreement, the net loss on the retroactive reinsurance agreement is recognized within income immediately.

Premiums payable for retroactive reinsurance coverage and meeting the conditions of reinsurance accounting are reported as reinsurance recoverables to the extent that those amounts do not exceed recorded liabilities relating to underlying reinsurance contracts. To the extent that recorded liabilities on an underlying reinsurance contract exceed premiums payable for retroactive coverage, a deferred gain is recognized.

Reserves. Insurance reserves are established for the total unpaid cost of claims and LAE in respect of events that have occurred by the balance sheet date, including the Company’s estimates of the total cost of claims incurred but not yet reported (“IBNR”). Claim reserves are reduced for estimated amounts of salvage and subrogation recoveries. Estimated amounts recoverable from reinsurers on unpaid losses and LAE are reflected as assets.

For reported claims, reserves are established on a case-by-case basis within the parameters of coverage provided in the insurance policy or reinsurance agreement. For IBNR claims, reserves are estimated using a number of established actuarial methods to establish a range of estimates from which a management best estimate is selected. Both case and IBNR reserve estimates consider variables such as past loss experience, changes in legislative conditions, changes in judicial interpretation of legal liability, policy coverages and inflation.

As many of the coverages underwritten involve claims that may not be ultimately settled for many years after they are incurred, subjective judgments as to the ultimate exposure to losses are an integral and necessary component of the loss reserving process. The Company regularly reviews its reserves, using a variety of statistical and actuarial techniques to analyze current claims costs, frequency and severity data, and prevailing economic, social and legal factors. Reserves established in prior periods are adjusted as claim experience develops and new information becomes available. Adjustments to previously estimated reserves are reflected in the financial results of the period in which the adjustments are made.

The process of estimating required reserves does, by its very nature, involve considerable uncertainty. The level of uncertainty can be influenced by factors such as the existence of coverage with long duration payment patterns and changes in claims handling practices, as well as the factors noted above. Ultimate actual payments for claims and LAE could turn out to be significantly different from the Company's estimates.

Credit Losses on Reinsurance Recoverables. Amounts recoverable from reinsurers are estimated in a manner consistent with the claim liability with the reinsured business. The Company evaluates the financial condition of its reinsurers and monitors concentration of credit risk to minimize its exposure to significant losses from individual reinsurers. To further reduce credit exposure on reinsurance recoverables, the Company has received collateral, including letters of credit and trust accounts, from certain reinsurers. Following the adoption of ASC 326, as described above, an allowance is established for expected credit losses to be recognized over the life of the reinsurance recoverable. The allowance is based upon the current financial strength of the individual reinsurer and the amount of collateral held.

Amortization of Deferred Policy Acquisition Costs. The costs directly related to writing an insurance policy are referred to as policy acquisition expenses and include commissions, premium taxes and profit commissions. With the exception of profit commissions, these expenses are incurred when a policy is issued, and only the costs directly related to the successful acquisition of new and renewal insurance and reinsurance contracts are deferred and amortized over the same period as the corresponding premiums are recorded as revenues. Profit commissions are estimated based on the related performance criteria evaluated at the balance sheet date, with subsequent changes to those estimates recognized when they occur. Commissions received related to reinsurance premiums ceded are netted against broker commissions in determining acquisition costs eligible for deferral.

On a regular basis a recoverability analysis is performed of the deferred policy acquisition costs in relation to the expected recognition of revenues, including anticipated investment income, and adjustments, if any, are reflected as period costs. Should the analysis indicate that the acquisition costs are unrecoverable, further analyses are performed to determine if a reserve is required to provide for losses which may exceed the related unearned premium.

General, Administrative and Corporate Expenses. These costs represent the expenses incurred in running the business and include, but are not limited to compensation costs for employees, rental costs, IT development and operating and non-operating costs and professional and consultancy fees. General, policy and administrative costs directly attributable to the successful acquisition of business are deferred and amortized over the same period as the corresponding premiums are recorded as revenues. When reporting the results for its business segments, the Company includes expenses which are directly attributable to the segment plus an allocation of central administrative costs. Corporate expenses are not allocated to the Company's business segments as they typically do not fluctuate with the levels of premium written and are related to the Company's operations which include group executive costs, group finance costs, group legal and actuarial costs and certain strategic and other costs.

(c) Accounting for Investments, Cash and Cash Equivalents

Fixed Income Securities. The fixed income securities portfolio comprises securities issued by governments and government agencies, corporate bonds, mortgage and other asset-backed securities and bank loans. Investments in fixed income securities are classified as available for sale or trading and are reported at estimated fair value in the consolidated balance sheet. Investment transactions are recorded on the trade date with balances pending settlement reflected in the consolidated balance sheet under receivables for securities sold and other payables for securities purchased, respectively. Fair values are based on quoted market prices and other data provided by third-party pricing services.

Short-term Investments. Short-term investments primarily comprise highly liquid debt securities with a maturity greater than three months but less than one year from the date of purchase and are held as part of the investment portfolio of the Company. Short-term investments are classified as either trading or available for sale and carried at estimated fair value.

Catastrophe Bonds. Investments in catastrophe bonds are classified as trading and are carried on the consolidated balance sheet at estimated fair value. The fair values are based on independent broker-dealer quotes.

Privately-held Investments. The Company's privately-held investments primarily comprise commercial mortgage loans and middle market loans. These investments are classified as trading and are carried on the consolidated balance sheet at estimated fair value. Privately-held investments are initially valued at cost or transaction value which approximates fair value. In subsequent measurement periods, the fair values of these securities are primarily determined using internally developed discounted cash flow models. Interest income is accrued on the principal amount of the loan based on its contractual interest rate subject to it being probable that we will receive interest on that particular underlying loan. Interest income, amortization of premiums and discounts, and prepayment fees are reported in net investment income on the consolidated statements of income.

Other Investments, Equity Method. Other investments represent the Company's investments that are recorded using the equity method of accounting. Adjustments to the fair value of these investments are made based on the net asset value of the investment.

Other investments. Other investments represent the Company's investments in real estate funds. Adjustments to the fair value are made based on the net asset value of the investment.

Cash and Cash Equivalents. Cash and cash equivalents are carried at fair value. Cash and cash equivalents comprise cash on hand, deposits held on call with banks and other short-term highly liquid investments due to mature within three months from the date of purchase and which are subject to insignificant risk of change in fair value.

Gains and Losses. Realized gains or losses on the sale of investments are determined on the basis of the first in first out cost method and, for fixed income available for sale securities, include adjustments to the cost basis of investments for declines in value that are considered to be other-than-temporary. Unrealized gains and losses represent the difference between the cost, or the cost as adjusted by amortization of any difference between its cost and its redemption value ("amortized cost"), of the security and its fair value at the reporting date and are included within other comprehensive income for securities classified as available for sale and in realized and unrealized investment gains or losses in the consolidated statement of operations for securities classified as trading.

Current Expected Credit Losses ("CECL") / Other-than-temporary Impairment of Investments. Following the Company's adoption of ASU 2016-13 "Financial Instruments - Credit Losses (Topic 326)", effective January 1, 2020, credit losses on available for sale debt securities accounting policy is applicable; prior to this date, the comparative periods presented the other-than-temporary impairment of investment accounting policy which was applicable:

Credit Losses on Available for Sale Debt Securities. A detailed analysis is performed each reporting period end to assess declines in the fair values of available for sale debt securities. Our credit loss model employs a discounted cash flow approach across all asset classes. Credit losses are only computed for assets held at an unrealized loss at the balance sheet date and will have a fair value floor. Default probabilities are estimated for each rating from AAA to C and analysis is undertaken separately for different assets classes and geographies. The expected credit losses, and subsequent adjustments to such losses are recorded within net realized gains/(losses) and are deducted from the amortized cost basis of the financial asset, with the net carrying value of the financial asset presented on the consolidated balance sheet at the amount expected to be collected.

Other-than-temporary Impairment of Investments. A security is impaired when its fair value is below its cost or amortized cost. The Company reviewed its investment portfolio each quarter on an individual security basis for potential other-than-temporary impairment ("OTTI") based on criteria including issuer-specific circumstances, credit ratings actions and general macro-economic conditions.

OTTI was deemed to occur when there was no objective evidence to support recovery in value of a security and (i) the Company intended to sell the security or more likely than not would be required to sell the security before recovery of its cost or adjusted amortized cost basis or (ii) it was deemed probable that the Company would be unable to collect all amounts due according to the contractual terms of the individual security. In the first case, the entire unrealized loss position was taken as an OTTI charge to realized losses in earnings. In the second case, the unrealized loss was separated into the amount related to credit loss and the amount related to all other factors. The OTTI charge related to credit loss was recognized in realized losses in earnings and the amount related to all other factors was recognized in other comprehensive income. The cost basis of the investment is reduced accordingly and no adjustments to the cost basis were made for subsequent recoveries in value.

Although the Company reviewed each security on a case by case basis, it had also established parameters focusing on the extent and duration of impairment to help identify securities in an unrealized loss position which were other-than-temporarily impaired. For fixed income securities in the available for sale portfolio, the Company considered securities which had been in an unrealized loss position for 12 months or more which had a market value of more than 20% below cost should be other-than-temporarily impaired.

Investment Income. Investment income includes amounts received and accrued in respect of periodic interest ("coupons") payable to the Company by the issuer of fixed income securities, equity dividends and interest credited on cash and cash

equivalents. It also includes amortization of premium and accretion of discount in respect of fixed income securities. Investment income also includes changes in fair value and income distribution from investments in real estate funds. Investment management and custody fees are charged against net investment income reported in the consolidated statement of operations.

(d) Accounting for Derivative Financial Instruments

The Company enters into derivative instruments such as interest rate swaps and forward exchange contracts in order to manage certain market and credit risks. The Company records derivative instruments at fair value on the Company's balance sheet as either assets or liabilities, depending on their rights and obligations.

The accounting for the gain or loss due to the changes in the fair value of these instruments is dependent on whether the derivative qualifies as a hedge. If the derivative does not qualify as a hedge, the gains or losses are reported in earnings when they occur. If the derivative does qualify as a hedge, the accounting treatment varies based on the type of risk being hedged.

(e) Accounting for Intangible Assets

Intangible assets are held in the consolidated balance sheet at cost less amortization and impairment. Amortization applies on a straight-line basis in respect of assets having a finite estimated useful economic life. The Company performs a qualitative assessment annually to determine whether it is more likely than not that an intangible asset considered to have an indefinite life is impaired. Goodwill is assessed annually for impairment or more frequently if circumstances indicate an impairment may have occurred.

(f) Accounting for Office Properties and Equipment

Office properties and equipment are carried at cost less accumulated depreciation. These assets are depreciated on a straight-line basis over the estimated useful lives of the assets. Computer equipment and software is depreciated between three and five years with depreciation for software commencing on the date the software is brought into use. Furniture and fittings are depreciated over four years and leasehold improvements are depreciated over the lesser of 15 years or the lease term.

(g) Accounting for Right-of-Use Operating Lease Assets

Right-of-use operating lease assets comprise primarily of leased office real estate and other assets. For all office real estate leases, rent incentives, including reduced-rent and rent free periods and contractually agreed rent increases during the lease term, have been included when determining the present value of future cash flows. Right-of-use operating lease assets are carried at cost less accumulated depreciation. Right-of-use operating lease assets are depreciated over the lease term.

Right-of-use operating lease assets are tested for impairments whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If the carrying value of an asset is impaired, it is reduced to the recoverable amount by an immediate charge to the income statement. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use.

(h) Accounting for Foreign Currencies Translation

The reporting currency of the Company is the U.S. Dollar. The functional currencies of the Company's foreign operations and branches are the currencies in which the majority of their business is transacted.

Transactions in currencies other than the functional currency are measured in the functional currency of that operation at the exchange rate prevailing at the date of the transaction. Monetary assets and liabilities denominated in non-functional currencies are remeasured at the exchange rate prevailing at the balance sheet date and any resulting foreign exchange gains or losses are reflected in the statement of operations.

Monetary and non-monetary assets and liabilities of the Company's functional currency operations are translated into U.S. Dollars at the exchange rate prevailing at the balance sheet date. Income and expenses of these operations are translated at the exchange rate prevailing at the date of the transaction. Unrealized gains or losses arising from the translation of functional currencies are recorded net of tax as a component of other comprehensive income.

(i) Accounting for Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and for operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. When the Company does not believe that, on the basis of available information, it is more likely than not that deferred tax assets will be fully recovered, it recognizes a valuation allowance against its deferred tax assets to reduce the deferred tax assets to the amount more likely than not to be realized. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Furthermore, a tax benefit from a tax position may be recognized in the financial statements only if it is more-likely-than-not that the position is sustainable, based solely on its technical merits and consideration of the relevant tax authority's widely understood administrative practices and precedents. The tax benefit recognized, when the likelihood of realization is more likely-than-not (i.e. greater than 50 percent), is measured at the largest amount that is greater than 50 percent likely of being realized upon settlement.

The Company applies a portfolio approach to release the income tax effects in accumulated other comprehensive income. Under this approach, the income tax effects upon the sale of an available-for-sale debt security, settlement of hedged transactions and upon foreign currency translation adjustments for each period, are determined under the intraperiod tax allocation approach. Any tax effects remaining in accumulated other comprehensive income are only released when the entire portfolio is liquidated, sold or extinguished.

(j) Accounting for Preference Shares

The Company had at the balance sheet date in issue three classes of preference shares. The Company has no obligation to pay interest on these securities but they carry entitlements to dividends payable at the discretion of the Board of Directors. In the event of non-payment of dividends for six consecutive periods, holders of preference shares have director appointment rights. The preference shares are therefore accounted for as equity instruments and included within total shareholders' equity.

(k) Accounting for Long-Term Incentive Plans

The Company operates an employee long-term incentive plan, comprised of Performance Units and Exit Units, the terms and conditions of which are described in Note 16. The Company applies a fair-value based measurement method in calculating the compensation costs of Performance Units which are recognized on a straight line basis over the vesting period.

(l) Accounting for Business Combinations

The Company accounts for a transaction as a business combination where the assets acquired and liabilities assumed following a transaction constitute a business. An acquired entity must have inputs and processes that make it capable of generating a return or economic benefit to be considered a business. If the assets acquired are not a business, the Company accounts the transaction as an asset acquisition. The Company recognizes and measures at fair value 100 percent of the assets and liabilities of any acquired business. Goodwill is recognized and measured as the difference between the consideration paid or payable less the fair value of assets acquired.

The Company accounts for the disposal of subsidiary undertakings when it ceases to control the subsidiary's assets and liabilities or the group of assets. A gain or loss is recognized and measured as the difference between the fair value of consideration received or receivable and the value of assets, liabilities and equity components de-recognized, related to that subsidiary or group of assets when deconsolidated.

Costs that are directly related to a business combination transaction are expensed in the periods in which the costs are incurred and the services are received.

(m) Accounting Pronouncements

Accounting Pronouncements Adopted in 2021

On December 18, 2019, Financial Accounting Standards Board (the "FASB") issued ASU 2019-12, "*Income Taxes (Topic 740)*" which makes amendments aimed at simplifying the accounting for income taxes. This ASU was effective for fiscal years beginning after December 15, 2020 and interim periods within those fiscal years. During the year, the Company evaluated and considered the provisions of ASU 2019-12 and has concluded that there is no material impact on the consolidated financial statements for the current year. Adoption of this ASU did not have a material impact on the Company's financial statements and disclosures.

On March 12, 2020, the FASB issued ASU 2020-04, "*Reference Rate Reform (Topic 848)*" which provides optional guidance for a limited period of time (March 12, 2020 to December 31, 2022) aiming at easing the potential burden in accounting for the effects of reference rate reform, such as the potential cessation of the London Interbank Offered Rate ("LIBOR"). This ASU was effective as of March 12, 2020 through December 31, 2022. Adoption of this ASU did not have a material impact on the Company's financial statements and disclosures.

On January 7, 2021, the FASB issued ASU 2021-01, "*Reference Rate Reform (Topic 848)*" which provides additional clarification on the scope of Topic 848 so that derivatives affected by the discounting transition are explicitly eligible for certain optional expedients and exceptions in Topic 848. Additionally, to clarify that a receive-variable-rate, pay-variable-rate cross-currency interest rate swap may be considered an eligible hedging instrument in a net investment hedge if both legs of the swap

do not have the same repricing intervals and dates as a result of reference rate reform. This ASU was effective as of January 7, 2021. Adoption of this ASU did not have a material impact on the Company's financial statements and disclosures.

Accounting Pronouncements Not Yet Adopted

Other accounting pronouncements were issued during the year ended December 31, 2021 which were either not relevant to the Company or did not impact the Company's consolidated financial statements.

(n) Correction of Immaterial Errors

During the current year, management identified immaterial errors which resulted in a revision of the Company's historical financial statements, as further described below:

Foreign exchange gains and losses. During the second quarter of 2021, the Company identified an error regarding incorrect treatment of foreign exchange gains and losses arising as a result of currency matching issues within Aspen U.K.'s underwriting premiums receivable. The error resulted in previous foreign exchange revaluation and translation amounts, which should have been matched with an underwriting premium receivable payment being carried over, and were incorrectly included in Aspen U.K.'s underwriting premiums receivable, thereby overstating the related asset value.

Income tax expense. During the year, the Company identified an error regarding the completeness and accuracy of the information used in recognizing both current and deferred income taxes on Aspen U.K.' branches and the associated application thereof in respect of local tax rules in the various jurisdiction.

Net earned premium. During the year, the Company identified immaterial differences within gross written and re-insurance premium relating to prior year which have been corrected.

The Company has concluded that these errors are immaterial to the prior period financial statements of Aspen Holdings and that correcting the income statement errors in the current period would likely materially misstate the current period financial statements. In accordance with U.S. GAAP, we have, therefore, corrected the errors in the comparatives of the 2021 financial statements of Aspen Holdings by adjusting 2020 and 2019 prior period information and adding disclosure of the errors. Refer to Item 18, Note 26, "Correction of Immaterial Errors" of our consolidated financial statements for additional information.

3. Segment Reporting

The Company manages its underwriting operations as two distinct business segments, namely Aspen Re and Aspen Insurance. The Company has determined its reportable segments by taking into account the manner in which management makes operating decisions and assesses operating performance. Profit or loss for each of the Company's business segments is measured by underwriting income or loss. Underwriting profit is the excess of net earned premiums over the sum of losses and loss expenses, amortization of deferred policy acquisition costs and general and administrative expenses. Underwriting income or loss provides a basis for management to evaluate the segment's underwriting performance.

Reinsurance Segment. The reinsurance segment consists of property catastrophe reinsurance, other property reinsurance, casualty reinsurance and specialty reinsurance.

For a more detailed description of this business segment, refer to Item 4, "Information on the Company — Business Overview — Aspen Reinsurance" above.

Insurance Segment. The insurance segment consists of first party and specialty insurance, casualty and liability insurance and financial and professional lines insurance. Additionally, the insurance segment includes Aspen Underwriting Limited's participation as a corporate member in Carbon Syndicate 4747 ("Carbon Syndicate"). For a more detailed description of this segment, refer to Item 4 "Information on the Company — Business Overview — Aspen Insurance" above.

Non-underwriting Disclosures. The Company provides additional disclosures for corporate and other (non-operating) income and expenses. Corporate and other income and expenses include: corporate expenses, net investment income, net realized and unrealized investment gains or losses, other strategic and other costs, changes in fair value of derivatives or the loan notes issued by variable interest entities, interest expenses, net realized and unrealized foreign exchange gains or losses, asset impairments and income taxes. These income and expense items are not allocated to the Company's business segments as they are not directly related to the Company's business segment operations and is consistent with how management measures the performance of its segments. The Company does not allocate its assets by business segment as it evaluates underwriting income or loss of each business segment separately from the results of the Company's investment portfolio.

The Company uses underwriting ratios as measures of performance. The loss ratio is the ratio of losses and loss adjustment expenses to net earned premiums. The policy acquisition expense ratio is the ratio of amortization of deferred policy acquisition costs to net earned premiums. The general and administrative expense ratio is the ratio of general and administrative expenses to net earned premiums. The combined ratio is the sum of the loss ratio, the policy acquisition expense ratio and the general and administrative expense ratio.

The following tables provide a summary of gross and net written and earned premiums, underwriting income or loss, ratios and reserves for each of the Company's business segments for the twelve months ended December 31, 2021, 2020 and 2019:

	Twelve Months Ended December 31, 2021		
	Reinsurance	Insurance	Total
	(\$ in millions)		
Underwriting Revenues			
Gross written premiums	\$ 1,597.0	\$ 2,341.4	\$ 3,938.4
Net written premiums	1,199.0	1,388.7	2,587.7
Gross earned premiums	1,479.2	2,139.1	3,618.3
Net earned premiums	1,118.8	1,291.7	2,410.5
Underwriting Expenses			
Losses and loss adjustment expenses	705.2	988.1	1,693.3
Amortization of deferred policy acquisition costs	221.6	192.5	414.1
General and administrative expenses	121.3	211.8	333.1
Underwriting income/(loss)	70.7	(100.7)	(30.0)
Corporate expenses			(64.3)
Non-operating expenses			(20.6)
Net investment income			147.5
Realized and unrealized investment gains			56.2
Realized and unrealized investment losses			(47.4)
Change in fair value of derivatives			(35.9)
Interest expense on long term debt			(14.3)
Net realized and unrealized foreign exchange gains			40.0
Other income			14.7
Other expenses			(10.8)
Income before income taxes			35.1
Income tax (expense)			(5.3)
Net income			\$ 29.8
Net reserves for loss and loss adjustment expenses	\$ 2,148.4	\$ 2,165.3	\$ 4,313.7
Ratios			
Loss ratio	63.0 %	76.5 %	70.2 %
Policy acquisition expense ratio	19.8	14.9	17.2
General and administrative expense ratio	10.8	16.4	13.8
Expense ratio	30.6	31.3	31.0
Combined ratio	93.6 %	107.8 %	101.2 %

⁽¹⁾ Non-operating expenses includes \$19.3 million of severance, consulting and professional services in relation to non-recurring projects and other costs, \$0.4 million of impairment charges related to lease assets as a result of exiting certain office space and \$0.9 million of amortization of intangible assets and other non-operating expenses.

	Twelve Months Ended December 31, 2020		
	Reinsurance	Insurance	Total
	(\$ in millions)		
Underwriting Revenues			
Gross written premiums	\$ 1,656.4	\$ 2,042.1	\$ 3,698.5 ⁽²⁾
Net written premiums	1,297.7	1,280.1	2,577.8 ⁽²⁾
Gross earned premiums	1,612.0	2,026.4	3,638.4 ⁽²⁾
Net earned premiums	1,287.7	1,239.8	2,527.5 ⁽²⁾
Underwriting Expenses			
Losses and loss adjustment expenses	958.6	882.2	1,840.8
Amortization of deferred policy acquisition costs	246.0	219.7	465.7
General and administrative expenses	110.8	197.2	308.0
Underwriting (loss)	(27.7)	(59.3)	(87.0) ⁽²⁾
Corporate expenses			(70.2)
Non-operating expenses			(32.7) ⁽¹⁾
Net investment income			154.6
Realized and unrealized investment gains			98.5
Realized and unrealized investment losses			(27.4)
Change in fair value of derivatives			(65.1)
Interest expense on long term debt			(33.9)
Net realized and unrealized foreign exchange (losses)			(13.8) ⁽²⁾
Other income			49.8
Other expenses			(10.8)
(Loss) before income taxes			(38.0) ⁽²⁾
Income tax (expense)			(18.4) ⁽²⁾
Net (loss)			\$ (56.4) ⁽²⁾
Net reserves for loss and loss adjustment expenses	\$ 2,095.7	\$ 1,874.4	\$ 3,970.1
Ratios			
Loss ratio	74.4 %	71.1 %	72.8 %
Policy acquisition expense ratio	19.1	17.7	18.4
General and administrative expense ratio	8.6	15.9	12.2
Expense ratio	27.7	33.6	30.6
Combined ratio	102.1 %	104.7 %	103.4 %

⁽¹⁾ Non-operating expenses includes \$18.2 million of costs related to severance, retention awards and other costs, \$12.9 million of impairment charges related to lease assets as a result of sub-leasing certain office space and \$1.6 million of amortization of intangible assets and other non-operating expenses.

⁽²⁾ Net earned premium has been corrected for immaterial errors in relation to gross written premium and reinsurance premium payables for periods 2020 and prior. Net realized and unrealized exchange gains/(losses) and change in foreign currency translation adjustment have been corrected to account for the correction of foreign exchange movements on underwriting premium receivables which should have been matched with an underwriting premium receivable payment for periods 2020 and prior. Income tax expense has been corrected for historic current and deferred income tax on Aspen U.K.'s branches due to the deficiency in the completeness and accuracy of branch data and associated application thereof in respect of local tax rules in various jurisdictions. Total revenues, net income/(loss) and other comprehensive income/(loss) before and after tax have been corrected as a result of the corrections mentioned above for periods 2020 and 2019. Refer to Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" for further details.

	Twelve Months Ended December 31, 2019		
	Reinsurance	Insurance	Total
	(\$ in millions)		
Underwriting Revenues			
Gross written premiums	\$ 1,485.5	\$ 1,956.9	\$ 3,442.4
Net written premiums	1,251.1	1,176.8	2,427.9
Gross earned premiums	1,494.9	1,927.5	3,422.4
Net earned premiums	1,255.2	1,038.1	2,293.3
Underwriting Expenses			
Losses and loss adjustment expenses	917.9	761.8	1,679.7
Amortization of deferred policy acquisition costs	264.9	147.8	412.7
General and administrative expenses	111.7	229.8	341.5
Underwriting (loss)	(39.3)	(101.3)	(140.6)
Corporate expenses			(54.5)
Non-operating expenses			(125.6) ⁽¹⁾
Net investment income			197.3
Realized and unrealized investment gains			97.1
Realized and unrealized investment losses			(10.9)
Realized (loss) on debt extinguishment			(5.5)
Change in fair value of loan notes issued by variable interest entities			(3.1)
Change in fair value of derivatives			(144.2) ⁽³⁾
Interest expense on long term debt			(20.2)
Net realized and unrealized foreign exchange (losses)			(9.6) ⁽²⁾
Other income			4.9
Other expenses			(1.7)
(Loss) before income taxes			(216.6) ⁽²⁾
Income tax (expense)			(22.9)
Net (loss)			\$ (239.5) ⁽²⁾
Net reserves for loss and loss adjustment expenses	\$ 2,605.9	\$ 2,026.1	\$ 4,632.0
Ratios			
Loss ratio	73.1 %	73.4 %	73.2 %
Policy acquisition expense ratio	21.1	14.2	18.0
General and administrative expense ratio	8.9	22.1	14.9
Expense ratio	30.0	36.3	32.9
Combined ratio	103.1 %	109.7 %	106.1 %

- ⁽¹⁾ Non-operating expenses includes \$103.4 million of expenses related to the Merger, severance, retention and other costs, \$22.2 million of expenses related to the Company's operating effectiveness and efficiency program, which includes \$12.3 million of impairment charges related to lease assets as a result of sub-leasing certain office space.
- ⁽²⁾ Net realized and unrealized exchange gains/(losses) have been corrected to account for the correction of foreign exchange movements which should have been matched with an underwriting premium receivable payment for periods 2020 and prior, totaling a \$2.2 million gain in 2019. Income/(loss) before and after tax figures have been corrected as a result of the correction to net realized and unrealized exchange gains and losses for the periods mentioned.
- ⁽³⁾ Change in fair value of derivatives includes a loss of \$130.2 million in respect of interest rate swaps.

Geographical Areas. The following summary presents the Company's gross written premiums based on the location of the insured risk for the twelve months ended December 31, 2021, 2020 and 2019.

	For the Twelve Months Ended		
	December 31, 2021	December 31, 2020	December 31, 2019
	(\$ in millions)		
Australia/Asia	\$ 275.8	\$ 259.7	\$ 215.9
Caribbean	12.9	6.0	9.3
Europe	140.6	92.5	82.8
United Kingdom	393.2	369.0	295.7
United States & Canada ⁽¹⁾	2,301.8	2,267.5	2,003.9
Worldwide excluding United States ⁽²⁾	31.5	23.1	63.0
Worldwide including United States ⁽³⁾	592.2	501.2	614.9
Others	190.4	179.5	156.9
Total	<u>\$ 3,938.4</u>	<u>\$ 3,698.5</u>	<u>\$ 3,442.4</u>

⁽¹⁾ "United States and Canada" comprises individual policies that insure risks specifically in the United States and/or Canada, but not elsewhere.

⁽²⁾ "Worldwide excluding the United States" comprises individual policies that insure risks wherever they may be across the world but specifically excludes the United States.

⁽³⁾ "Worldwide including the United States" comprises individual policies that insure risks wherever they may be across the world but specifically includes the United States.

4. Investments

Income Statement

Investment Income. The following table summarizes investment income for the twelve months ended December 31, 2021, 2020 and 2019:

	For the Twelve Months Ended		
	December 31, 2021	December 31, 2020	December 31, 2019
	(\$ in millions)		
Fixed income securities — Available for sale	\$ 87.2	\$ 106.5	\$ 128.2
Fixed income securities — Trading	30.2	32.8	42.0
Short-term investments — Available for sale	0.1	0.8	2.3
Short-term investments — Trading	—	0.5	2.5
Fixed term deposits (included in cash and cash equivalents)	0.7	6.4	19.5
Catastrophe bonds — Trading	0.9	1.4	2.3
Privately-held investments — Trading	18.2	20.9	3.4
Other investments, at fair value ⁽¹⁾	21.9	(2.0)	8.9
Total	<u>159.2</u>	<u>167.3</u>	<u>209.1</u>
Investment expenses	<u>(11.7)</u>	<u>(12.7)</u>	<u>(11.8)</u>
Net investment income	<u>\$ 147.5</u>	<u>\$ 154.6</u>	<u>\$ 197.3</u>

⁽¹⁾ Other investments represents the Company's investments in real estate funds. The movement in the year represents the change in fair value of the investment and has been included as part of our investment income.

The following table summarizes the net realized and unrealized investment gains and losses recorded in the statement of operations and the change in unrealized gains and losses on investments recorded in other comprehensive income for the twelve months ended December 31, 2021, 2020 and 2019:

	For the Twelve Months Ended		
	December 31, 2021	December 31, 2020	December 31, 2019
	(\$ in millions)		
Available for sale:			
Fixed income securities — gross realized gains	\$ 22.7	\$ 68.8	\$ 14.4
Fixed income securities — gross realized (losses)	(3.6)	(1.8)	(7.3)
Cash and cash equivalents — gross realized gains	2.0	0.5	0.1
Cash and cash equivalents — gross realized (losses)	(0.8)	(0.4)	(0.2)
Net change in expected credit gains	(2.5)	0.4	—
Trading:			
Fixed income securities — gross realized gains	12.2	18.2	34.3
Fixed income securities — gross realized (losses)	(2.0)	(3.8)	(2.6)
Cash and cash equivalents — gross realized gains	0.1	0.2	—
Cash and cash equivalents — gross realized (losses)	(0.3)	(0.3)	(0.3)
Privately-held investments — gross realized gains	0.6	—	0.2
Privately-held investments — gross realized (losses)	(13.8)	—	(0.2)
Privately-held investments — net unrealized gains/(losses)	18.1	(20.4)	—
Catastrophe bonds — net unrealized (losses)/gains	(0.8)	—	0.9
Net unrealized (losses)/gains	(23.4)	—	47.2
Investments — equity method:			
Gross realized and unrealized gain (loss) in MVI	0.1	(0.4)	(0.1)
Gross unrealized gain in Multi-Line Reinsurer	0.2	—	—
Gross realized and unrealized (loss) gain in Digital Risk	—	(0.3)	(0.2)
Gross realized gain on sale of Bene	—	1.8	—
Gross realized gain on sale of Crop Re	—	8.6	—
Total net realized and unrealized investment gains recorded in the statement of operations	\$ 8.8	\$ 71.1	\$ 86.2
Change in available for sale net unrealized (losses)/gains:			
Fixed income securities	(157.6)	108.5	164.9
Income tax expense	(0.3)	(0.5)	(13.6)
Total change in net unrealized (losses)/gains, net of taxes recorded in other comprehensive income	\$ (157.9)	\$ 108.0	\$ 151.3

Balance Sheet

Fixed Income Securities and Short-Term Investments — Available For Sale. The following tables present the cost or amortized cost, gross unrealized gains and losses and estimated fair market value of available for sale investments in fixed income securities and short-term investments as at December 31, 2021 and December 31, 2020:

As at December 31, 2021					
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Allowance for Credit Losses	Fair Market Value
(\$ in millions)					
U.S. government	\$ 1,066.2	\$ 24.0	\$ (5.9)	\$ —	\$ 1,084.3
U.S. agency	20.7	0.8	—	—	21.5
Municipal	81.2	2.0	(0.5)	(0.1)	82.6
Corporate	2,176.1	47.5	(13.0)	(2.3)	2,208.3
Non-U.S. government-backed corporate	138.5	0.2	(1.9)	—	136.8
Non-U.S. government	250.8	1.4	(1.2)	(0.3)	250.7
Asset-backed	0.5	—	—	—	0.5
Non-agency commercial mortgage-backed	6.6	0.3	—	—	6.9
Agency mortgage-backed	1,082.9	19.1	(12.0)	—	1,090.0
Total fixed income securities — Available for sale	4,823.5	95.3	(34.5)	(2.7)	4,881.6
Total short-term investments — Available for sale	10.1	—	—	—	10.1
Total	\$ 4,833.6	\$ 95.3	\$ (34.5)	\$ (2.7)	\$ 4,891.7

As at December 31, 2020					
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Allowance for Credit Losses	Fair Market Value
(\$ in millions)					
U.S. government	\$ 1,041.3	\$ 60.5	\$ (0.6)	\$ —	\$ 1,101.2
U.S. agency	32.8	1.5	—	—	34.3
Municipal	61.6	5.5	—	—	67.1
Corporate	1,714.5	112.0	(0.1)	(0.2)	1,826.2
Non-U.S. government-backed corporate	62.7	0.7	—	—	63.4
Non-U.S. government	268.8	4.3	—	—	273.1
Asset-backed	2.3	—	—	—	2.3
Non-agency commercial mortgage-backed	6.7	0.7	—	—	7.4
Agency mortgage-backed	936.0	37.2	(0.1)	—	973.1
Total fixed income securities — Available for sale	4,126.7	222.4	(0.8)	(0.2)	4,348.1
Total short-term investments — Available for sale	88.0	—	(0.2)	—	87.8
Total	\$ 4,214.7	\$ 222.4	\$ (1.0)	\$ (0.2)	\$ 4,435.9

Fixed Income Securities, Short Term Investments, Equities, Catastrophe Bonds and Privately-held Investments — Trading. The following tables present the cost or amortized cost, gross unrealized gains and losses, and estimated fair market value of trading investments in fixed income securities, short-term investments, equity securities, catastrophe bonds and privately-held investments as at December 31, 2021 and December 31, 2020:

As at December 31, 2021				
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value
(\$ in millions)				
Fixed Income Securities — Trading				
U.S. government	\$ 115.9	\$ 0.6	\$ (0.2)	\$ 116.3
Municipal	3.9	0.1	—	4.0
Corporate	95.7	1.9	(0.8)	96.8
High yield loans	77.2	0.1	(0.4)	76.9
Non-U.S. government-backed corporate	13.3	—	(0.2)	13.1
Non-U.S. government	34.9	—	(0.4)	34.5
Asset-backed	784.3	3.3	(1.9)	785.7
Agency mortgage-backed	30.3	0.2	(0.3)	30.2
Total fixed income securities — Trading	1,155.5	6.2	(4.2)	1,157.5
Short-term investments — Trading	2.0	—	—	2.0
Catastrophe bonds — Trading	5.3	—	(1.9)	3.4
Privately-held investments — Trading				
Commercial mortgage loans	\$ 212.0	\$ 0.4	\$ (0.9)	\$ 211.5
Middle market loans	66.9	—	(1.5)	65.4
Asset-backed securities	26.8	—	(0.2)	26.6
Equity securities	3.5	0.1	—	3.6
Total privately-held investments — Trading	309.2	0.5	(2.6)	307.1
Total Investments — Trading	<u>\$ 1,472.0</u>	<u>\$ 6.7</u>	<u>\$ (8.7)</u>	<u>\$ 1,470.0</u>
As at December 31, 2020				
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value
(\$ in millions)				
Fixed Income Securities — Trading				
U.S. government	\$ 117.9	\$ 2.7	\$ (0.1)	\$ 120.5
Municipal	3.2	0.3	—	3.5
Corporate	94.4	9.1	—	103.5
High yield loans	10.0	—	(0.2)	9.8
Non-U.S. government	41.5	0.1	—	41.6
Asset-backed	541.7	3.1	(5.7)	539.1
Agency mortgage-backed	36.1	1.5	—	37.6
Total fixed income securities — Trading	844.8	16.8	(6.0)	855.6
Short-term investments — Trading	35.4	—	—	35.4
Catastrophe bonds — Trading	18.8	—	—	18.8
Privately-held investments — Trading				
Commercial mortgage loans	178.6	0.1	(15.1)	163.6
Middle market loans	117.4	0.2	(5.5)	112.1
Asset-backed securities	18.7	—	(0.1)	18.6
Equity securities	5.0	—	—	5.0
Total privately-held investments — Trading	319.7	0.3	(20.7)	299.3
Total Investments — Trading	<u>\$ 1,218.7</u>	<u>\$ 17.1</u>	<u>\$ (26.7)</u>	<u>\$ 1,209.1</u>

The Company classifies the financial instruments listed above as held for trading because this most closely reflects the facts and circumstances of the investments held.

As at December 31, 2021, the Company had a 2.0% position in real estate funds and a 3.6% position in MML and CML, representing in total 5.6% of our Managed Portfolio (December 31, 2020 — 5.1%).

Catastrophe bonds. The Company has invested in catastrophe bonds with a total value of \$3.4 million as at December 31, 2021 (December 31, 2020 — \$18.8 million). The bonds are either zero-coupon notes or receive quarterly interest payments based on variable interest rates with scheduled maturities ranging from 2022 to 2025. The redemption value of the bonds will adjust based on the occurrence or aggregate occurrence of a covered event, such as windstorms and earthquakes in the United States, Canada, the North Atlantic, South America, Europe, Japan or Australia.

Privately-held investments. The Company has invested in privately-held investments, which primarily include commercial mortgage loans of \$211.5 million and middle market loans of \$65.4 million as at December 31, 2021 (December 31, 2020 — commercial mortgage loans of \$163.6 million; middle market loans of \$112.1 million).

Commercial Mortgage Loans. The commercial mortgage loans are related to investments in properties including apartments, hotels, office and retail buildings, other commercial properties and industrial properties. The commercial mortgage loan portfolio is diversified by property type, geographic region and issuer to reduce risks. As part of our investment process, we evaluate factors such as size, property type, and security to determine that properties are performing at a consistent and acceptable level to secure the related debt. The following table presents the type of commercial mortgage loans and geographic region as at December 31, 2021 and December 31, 2020:

	As at December 31, 2021		As at December 31, 2020	
	Net Carrying Value (\$ millions)	Percentage of Total (%)	Net Carrying Value (\$ millions)	Percentage of Total (%)
Property type				
Apartment	101.6	48.1	80.7	49.3
Hotels	68.8	32.5	20.4	12.5
Office building	33.9	16.0	33.9	20.7
Other commercial	7.2	3.4	28.6	17.5
Total commercial mortgage loans	\$ 211.5	100 %	163.6	100 %
Geographic Region				
U.S.	183.7	86.9	122.7	75.0
International	27.8	13.1	40.9	25.0
Total commercial mortgage loans	\$ 211.5	100 %	163.6	100 %

The primary credit quality indicator of commercial mortgage loans is loan performance. Non-performing commercial mortgage loans are generally 90 days or more past due. As of December 31, 2021, none of our commercial mortgage loans were non-performing. Loan-to-value and debt service coverage ratios are measures we use to assess the risk and quality of commercial mortgage loans. The loan-to-value ratio is expressed as a percentage of the value of the loan relative to the value of the underlying property. A loan-to-value ratio in excess of 100% indicates the unpaid loan amount exceeds the underlying collateral. The following table represents the loan-to-value ratio of the commercial mortgage loan portfolio as at December 31, 2021 and December 31, 2020:

	As at December 31, 2021		As at December 31, 2020	
	(in millions)			
Less than 50%	\$	—	\$	14.9
50% to 60%		131.2		39.3
61% to 70%		80.3		99.5
71% to 80%		—		9.9
Commercial mortgage loans	\$	211.5	\$	163.6

The debt-service coverage ratio is measured by a property's net operating income as a multiple of its debt re-payments. A ratio of less than 1.0 reflects a property's operations is not sufficient to cover its debt payments. The following table represents the debt-service coverage ratio of the commercial mortgage loan portfolio, excluding those that are non-performing and construction loans which are still under development, as at December 31, 2021 and December 31, 2020:

	As at December 31, 2021		As at December 31, 2020	
	(in millions)			
Greater than 1.20x	\$	66.3	\$	82.2
1.00 - 1.20x		62.4		14.9
Less than 1.00x		18.8		—
Commercial mortgage loans ⁽¹⁾	\$	147.5	\$	97.1

⁽¹⁾ As at December 31, 2021, we have non-performing loans of \$Nil (December 31, 2020 — \$0.7 million) and construction loans of \$64.0 million (December 31, 2020 — \$65.8 million) which only generate income when the construction is completed. As no income is currently being generated on these loans, they are not included in the table above. The total value of commercial mortgage loans are \$211.5 million as at December 31, 2021, (December 31, 2020 — \$163.6 million).

Middle Market Loans. The middle market loans are investments in senior secured loan positions with full covenants, focused on the middle market in both U.S. and Europe. The middle market loan portfolio is diversified by industry type, geographic region and issuer to reduce risks. As part of our investment process, we evaluate factors such as size, industry and security to determine that loans are performing at a consistent and acceptable level to secure the related debt. The following table presents the type of middle market loans and geographic region as at December 31, 2021 and December 31, 2020:

	As at December 31, 2021		As at December 31, 2020	
	Net Carrying Value	Percentage of Total	Net Carrying Value	Percentage of Total
	(\$ millions)	(%)	(\$ millions)	(%)
Industry type				
Materials	20.9	32.0	28.0	24.9
Financials	6.1	9.3	27.1	24.2
Industrials	18.7	28.5	17.3	15.5
Consumer discretionary	4.3	6.6	13.7	12.2
Health care	—	—	7.5	6.7
Energy	5.6	8.6	7.3	6.5
Consumer staples	4.9	7.5	6.4	5.7
Information technology	4.9	7.5	4.8	4.3
Total middle market mortgage loans	\$ 65.4	100 %	\$ 112.1	100 %
Geographic Region				
U.S.	56.2	85.9	91.8	81.9
International	9.2	14.1	20.3	18.1
Total middle market loans	\$ 65.4	100 %	\$ 112.1	100 %

The primary credit quality indicator of middle market loans is loan performance. Non-performing middle market loans are generally 90 days or more past due. As of December 31, 2021, all of our middle market loans were performing. Loan-to-enterprise-value and fixed charge coverage ratios are measures we use to assess the risk and quality of middle market loans. The loan-to-enterprise-value ratio is expressed as a percentage of the value of the loan relative to the value of the business. A loan-to-enterprise-value ratio in excess of 100% indicates the unpaid loan amount exceeds the value of the underlying business. The following table represents the loan-to-enterprise-value ratio of the middle market loan portfolio as at December 31, 2021 and December 31, 2020:

	As at December 31, 2021	As at December 31, 2020
	(in millions)	
Less than 50%	\$ 11.0	\$ 59.8
50% to 60%	9.2	11.0
61% to 70%	15.8	6.4
71% to 80%	5.6	—
81% to 100%	12.0	17.2
Greater than 100%	11.8	17.7
Middle market loans	\$ 65.4	\$ 112.1

The fixed charge coverage ratio, based upon the most recent financial statements, is expressed as a percentage of a firm's earnings plus fixed charges to its fixed charges. Fixed charges include debt repayments, interest and equipment lease expenses. A fixed charge coverage ratio of less than 1.0 indicates a firm's operations do not generate enough income to cover its fixed charges. The following represents the fixed charge coverage ratio of the middle market loan portfolio as at December 31, 2021 and December 31, 2020

	As at December 31, 2021	As at December 31, 2020
	(in millions)	
Greater than 1.20x	\$ 25.8	\$ 73.6
1.00 - 1.20x	22.8	—
Less than 1.00x	16.8	38.5
Middle market loans	\$ 65.4	\$ 112.1

Aspen has individually assessed each of the middle market loans with the loan-to-enterprise-value ratio of greater than 100% and fixed charge coverage ratio of less than 1.00x. These companies were impacted by COVID-19 and have only become fully operational half way through the year. However performance on these companies has exceeded pre-COVID-19 levels, tracking ahead of plan and therefore expect EBITDA to normalize around the historical levels and return the above ratios within acceptable levels. As a result we still determine all our middle market loans to be performing.

Asset-backed securities. Our asset-backed securities portfolio of privately-held investments consists of a single non-U.S. based issuer that issues fixed rate notes that are backed by future flows from international credit card companies and this security is performing.

Equity securities. Our equity securities portfolio of privately-held investments consists of a single non-U.S. based issuer that is a special purpose vehicle designed to grant a first lien right to the underlying senior notes within the structure. The underlying issuer is a financial services lender to middle market companies and this security is performing.

Investments — Equity Method. In January 2015, the Company, along with seven other insurance companies, established a micro-insurance venture consortium and micro-insurance incubator ("MVI") domiciled in Bermuda. The MVI is a social impact organization that provides micro-insurance products to assist global emerging consumers. The Company's initial investment in the MVI was \$0.8 million. The Company made an additional investment of \$0.1 million in the twelve months ended December 31, 2017 and a further investment of \$0.2 million in the twelve months ended December 31, 2018. In March, 2021 the Company committed an additional \$0.8 million equity contribution to MVI over a 2 year period and paid \$0.4 million in the period ending December 31, 2021.

On July 26, 2016, the Company purchased through its wholly-owned subsidiary, Acorn Limited ("Acorn"), a 20.0% share of Bene Assicurazioni ("Bene"), an Italian-based motor insurer for a total consideration of \$3.3 million. The investment was accounted for under the equity method and adjustments to the carrying value of this investment were made based on the Company's share of capital, including share of income and expenses. The Company made additional investments of \$1.2 million and \$1.1 million, in the twelve months ended December 31, 2018 and December 31, 2019, respectively.

On November 20, 2020, the Company sold its investment in Bene for \$6.1 million, realizing a gain of \$1.8 million.

On January 1, 2017, the Company purchased through its wholly-owned subsidiary, Aspen U.S. Holdings, Inc. ("Aspen U.S. Holdings"), a 49% share of Digital Risk Resources, LLC ("Digital Re"), a U.S.-based enterprise engaged in the business of developing, marketing and servicing turnkey information security and privacy liability insurance products for a total consideration of \$2.3 million. The investment is accounted for under the equity method and adjustments to the carrying value of this investment are made based on the Company's share of capital, including share of income and expenses.

On December 18, 2017, the Company acquired through its wholly-owned subsidiary, Aspen U.S. Holdings, a 23.2% share of Crop Re Services LLC (“Crop Re”), a newly formed U.S.-based subsidiary of CGB Diversified Services, Inc (“CGB DS”) in exchange for the sale of AG Logic Holdings, LLC (“AgriLogic”), the Company’s U.S. crop insurance business.

On December 14, 2020, we completed the sale of our 23.2% interest in Crop Re to CGB DS (the “CGB Sale”). The CGB Sale has and will result in a material diminution of our U.S. agricultural business in 2021 and beyond. As a part of the CGB Sale, CGB DS paid AAIC \$71.1 million for its ownership interest in Crop Re, as well as \$14.5 million to settle loss carryforwards for the 2018 and 2019 crop years. In addition, AAIC entered into a commutation agreement with CGB DS (the “Commutation Agreement”), under which AAIC paid \$2.2 million to CGB DS as a commutation settlement for the 2018 and 2019 crop years. The Commutation Agreement does not cover the crop years from 2010 to 2017 or the 2020 crop year, therefore we remain exposed to reinsurance obligations and potential claims in regards to those years.

On December 23, 2019, the Company committed \$5.0 million as an equity investment in the holding company of a multi-line reinsurer. The strategy for the multi-line reinsurer is to combine a diversified reinsurance business, focused primarily on long-tailed lines of property and casualty business and, potentially to a lesser extent, life business, with a diversified investment strategy. During the period ending December 31, 2021, \$2.5 million (December 31, 2020 \$0.5 million) capital was invested in multi-line reinsurer.

The table below shows the Company’s investments in MVI, Multi-Line Reinsurer, Bene, Digital Re and Crop Re for the twelve months ended December 31, 2021 and 2020:

	MVI	Multi-Line Reinsurer	Bene	Digital Re	Crop Re	Total
	(\$ in millions)					
Opening undistributed value of investment as at January 1, 2021	\$ —	\$ 0.5	\$ —	\$ 0.4	\$ —	\$ 0.9
Investment in the period	0.4	2.5	—	0.3	—	3.2
Distribution received	—	—	—	(0.5)	—	(0.5)
Unrealized gain for the twelve months to December 31, 2021	0.1	0.2	—	—	—	0.3
Closing value of investment as at December 31, 2021	0.5	3.2	—	0.2	—	3.9
Opening undistributed value of investment as at January 1, 2020	\$ 0.4	\$ —	\$ 4.3	\$ 0.7	\$ 62.5	\$ 67.9
Investment in the period	—	0.5	—	—	—	0.5
Unrealized (loss) for the twelve months to December 31, 2020	(0.4)	—	—	(0.3)	—	(0.7)
Gain on disposal	—	—	1.8	—	8.6	10.4
Proceeds from disposal	—	—	(6.1)	—	(71.1)	(77.2)
Closing value of investments at December 31, 2020	\$ —	\$ 0.5	\$ —	\$ 0.4	\$ —	\$ 0.9

Other Investments. On December 20, 2017, the Company committed to, and during 2018 invested \$100.0 million as a limited partner to a real estate fund, classified as other investments. As at December 31, 2021, the current fair value of the fund \$129.9 million.

On September 30, 2021, the Company committed and funded \$20.0 million as a limited partner to a third party managed real estate fund. The Partnership was established to make equity and equity related investments in multifamily and other commercial real estate properties located in the United States and its territories, with the goal of generating superior risk-adjusted returns. The Partnership seeks to acquire commercial real estate assets including real estate assets (or interests therein) that may have management or operational problems and require improvements or lack sufficient capital, including mortgage loans and development or redevelopment properties. As at December 31, 2021, the current fair value of the fund is \$21.4 million.

As at December 31, 2021, the aggregate current fair value of the real estate funds investments described above is \$151.3 million.

For further information on the real estate funds, refer to Note 20(a) in these consolidated financial statements, “Commitments and Contingencies.”

Fixed Income Securities. The scheduled maturity distribution of the Company’s available for sale fixed income securities as at December 31, 2021 and December 31, 2020 is set forth below. Actual maturities may differ from contractual maturities because issuers of securities may have the right to call or prepay obligations with or without call or prepayment penalties.

As at December 31, 2021			
	Amortized Cost or Cost	Fair Market Value	Average S&P Ratings by Maturity
	(\$ in millions)		
Due one year or less	\$ 545.1	\$ 549.0	AA-
Due after one year through five years	2,057.2	2,087.5	AA-
Due after five years through ten years	1,090.5	1,106.3	A+
Due after ten years	40.7	41.4	A-
Total — Government and corporate	3,733.5	3,784.2	
Non-agency commercial mortgage-backed	6.6	6.9	AA+
Agency mortgage-backed	1,082.9	1,090.0	AA+
Asset-backed	0.5	0.5	AAA
Total fixed income securities — Available for sale	\$ 4,823.5	\$ 4,881.6	

At December 31, 2020			
	Amortized Cost or Cost	Fair Market Value	Average S&P Ratings by Maturity
	(\$ in millions)		
Due one year or less	\$ 498.6	\$ 501.3	AA
Due after one year through five years	1,833.6	1,925.9	AA-
Due after five years through ten years	741.9	806.5	AA-
Due after ten years	107.6	131.6	AA-
Total — Government and corporate	3,181.7	3,365.3	
Non-agency commercial mortgage-backed	6.7	7.4	AA+
Agency mortgage-backed	936.0	973.1	AA+
Asset-backed	2.3	2.3	AAA
Total fixed income securities — Available for sale	\$ 4,126.7	\$ 4,348.1	

Guaranteed Investments. As at December 31, 2021 and December 31, 2020, the Company held no investments which are guaranteed by mono-line insurers, excluding those with explicit government guarantees. The Company’s exposure to other third-party guaranteed debt is primarily to investments backed by non-U.S. government guaranteed issuers.

Gross Unrealized Losses. The following tables summarize, by type of security, the aggregate fair value and gross unrealized loss by length of time the security has been in an unrealized loss position for the Company's available for sale portfolio as at December 31, 2021 and December 31, 2020:

December 31, 2021							
	0-12 months		Over 12 months		Total		
	Fair Market Value	Gross Unrealized Losses	Fair Market Value	Gross Unrealized Losses	Fair Market Value	Gross Unrealized Losses	Number of Securities
(\$ in millions)							
U.S. government	\$ 309.1	\$ (4.0)	\$ 29.3	\$ (1.9)	\$ 338.4	\$ (5.9)	51
U.S. agency	6.1	—	—	—	6.1	—	5
Municipal	29.7	(0.5)	—	—	29.7	(0.5)	20
Corporate	804.6	(11.7)	23.6	(1.3)	828.2	(13.0)	400
Non-U.S. government-backed corporate	114.4	(1.9)	—	—	114.4	(1.9)	10
Non-U.S. government	181.8	(1.2)	3.1	—	184.9	(1.2)	35
Agency mortgage-backed	564.5	(11.6)	16.0	(0.4)	580.5	(12.0)	116
Total fixed income securities — Available for sale	2,010.2	(30.9)	72.0	(3.6)	2,082.2	(34.5)	637
Total short-term investments — Available for sale	4.4	—	—	—	4.4	—	7
Total	\$ 2,014.6	\$ (30.9)	\$ 72.0	\$ (3.6)	\$ 2,086.6	\$ (34.5)	644

December 31, 2020							
	0-12 months		Over 12 months		Total		
	Fair Market Value	Gross Unrealized Losses	Fair Market Value	Gross Unrealized Losses	Fair Market Value	Gross Unrealized Losses	Number of Securities
(\$ in millions)							
U.S. government	\$ 58.7	\$ (0.6)	\$ —	\$ —	\$ 58.7	\$ (0.6)	10
Corporate	39.6	(0.1)	—	—	39.6	(0.1)	16
Non-U.S. government	7.5	—	—	—	7.5	—	4
Agency mortgage-backed	33.3	(0.1)	2.1	—	35.4	(0.1)	19
Total fixed income securities — Available for sale	139.1	(0.8)	2.1	—	141.2	(0.8)	49
Total short-term investments — Available for sale	8.7	—	—	(0.2)	8.7	(0.2)	15
Total	\$ 147.8	\$ (0.8)	\$ 2.1	\$ (0.2)	\$ 149.9	\$ (1.0)	64

The increase in gross unrealized losses is largely attributable to the impact of rising interest rates on our bond portfolio

Current Expected Credit Loss and Other-Than-Temporary Impairments.

On June 16, 2016, the FASB issued ASU 2016-13, “*Financial Instruments - Credit Losses (Topic 326)*” which replaced other-than-temporary impairment (“OTTI”) by a new impairment model, known as the current expected loss model (“CECL”), which is based on expected losses rather than incurred losses. For a more detailed description of accounting policies for CECL and OTTI, refer to Note 2(c), “Basis of Preparation and Significant Accounting Policies” of these consolidated financial statements.

CECL. Following the adoption of ASU 2016-13, with effect from January 1, 2020, the Company recognized a reduction in its available-for-sale investment portfolio totaling \$0.6 million as a result of recognizing CECL through opening retained earnings for periods 2019 and prior.

For the twelve months ended December 31, 2021, there was an increase in the CECL allowance on available-for-sale investments of \$2.5 million (December 31, 2020 — \$0.4 million decrease).

5. Variable Interest Entities

As at December 31, 2021, the Company had investments in one (December 31, 2020 — one) variable interest entity (“VIE”), namely Peregrine Reinsurance Ltd (“Peregrine”).

Peregrine. In November 2016, Peregrine, a subsidiary of the Company, was registered as a segregated accounts company under the Segregated Accounts Companies Act 2000, as amended. As at December 31, 2021, Peregrine had six segregated accounts which were funded by third-party investors and two segregated accounts which are funded by Aspen are consolidated within the financial statements.

The Company has determined that Peregrine has the characteristics of a VIE as addressed by the guidance in ASC 810, *Consolidation*. The six segregated accounts have not been consolidated as part of the Company’s consolidated financial statements because the Company is not the primary beneficiary of those accounts. The Company has, however, concluded that it is the primary beneficiary of the Peregrine general fund and, similar to prior reporting periods, the results of the Peregrine general fund are included in the Company’s consolidated financial statements.

6. Fair Value Measurements

The Company’s estimates of fair value for financial assets and liabilities are based on the framework established in the fair value accounting guidance included in ASC Topic 820, “*Fair Value Measurements and Disclosures*.” The framework prioritizes the inputs, which refer broadly to assumptions market participants would use in pricing an asset or liability, into three levels.

The Company considers prices for actively traded securities to be derived based on quoted prices in an active market for identical assets, which are Level 1 inputs in the fair value hierarchy. The majority of these securities are valued using prices supplied by pricing services.

The Company considers prices for other securities that may not be as actively traded which are priced via pricing services, vendors and broker-dealers, or with reference to interest rates and yield curves, to be derived based on inputs that are observable for the asset, either directly or indirectly, which are Level 2 inputs in the fair value hierarchy. The majority of these securities are also valued using prices supplied by pricing services.

The Company considers securities, other financial instruments, privately-held investments and derivative insurance contracts subject to fair value measurement whose valuation is derived by internal valuation models to be based largely on unobservable inputs, which are Level 3 inputs in the fair value hierarchy.

The following tables present the level within the fair value hierarchy at which the Company's financial assets and liabilities are measured on a recurring basis as at December 31, 2021 and December 31, 2020:

	As at December 31, 2021			
	Level 1	Level 2	Level 3	Total
	(\$ in millions)			
Available for sale financial assets, at fair value				
U.S. government	\$ 1,084.3	\$ —	\$ —	\$ 1,084.3
U.S. agency	—	21.5	—	21.5
Municipal	—	82.6	—	82.6
Corporate	—	2,208.3	—	2,208.3
Non-U.S. government-backed corporate	—	136.8	—	136.8
Non-U.S. government	164.4	86.3	—	250.7
Asset-backed	—	0.5	—	0.5
Non-agency commercial mortgage-backed	—	6.9	—	6.9
Agency mortgage-backed	—	1,090.0	—	1,090.0
Total fixed income securities available for sale, at fair value	1,248.7	3,632.9	—	4,881.6
Short-term investments available for sale, at fair value	6.5	3.6	—	10.1
Held for trading financial assets, at fair value				
U.S. government	116.3	—	—	116.3
Municipal	—	4.0	—	4.0
Corporate	—	96.8	—	96.8
Non-U.S. government-backed corporate	—	13.1	—	13.1
High yield loans	—	76.9	—	76.9
Non-U.S. government	11.9	22.6	—	34.5
Asset-backed	—	785.7	—	785.7
Agency mortgage-backed	—	30.2	—	30.2
Total fixed income securities trading, at fair value	128.2	1,029.3	—	1,157.5
Short-term investments trading, at fair value	1.1	0.9	—	2.0
Privately-held investments trading, at fair value	—	—	307.1	307.1
Catastrophe bonds trading, at fair value	—	3.4	—	3.4
Other investments ⁽¹⁾	—	—	—	151.3
Other financial assets and liabilities, at fair value				
Derivatives at fair value — foreign exchange contracts	—	12.9	—	12.9
Liabilities under derivative contracts — foreign exchange contracts	—	(13.3)	—	(13.3)
Total	1,384.5	4,669.7	307.1	6,512.6

⁽¹⁾ Other investments represents our investments in real estate funds and are measured at fair value using the net asset value per share practical expedient. As a result this has not been classified in the fair value hierarchy. The fair value amounts presented in the table above are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheets. The investment in the real estate funds are subject to restrictions as detailed in Note 20(a), "Commitments and Contingencies."

	At December 31, 2020			
	Level 1	Level 2	Level 3	Total
	(\$ in millions)			
Available for sale financial assets, at fair value				
U.S. government	\$ 1,101.2	\$ —	\$ —	\$ 1,101.2
U.S. agency	—	34.3	—	34.3
Municipal	—	67.1	—	67.1
Corporate	184.2	88.9	—	273.1
Non-U.S. government-backed corporate	—	63.4	—	63.4
Non-U.S. government	—	7.4	—	7.4
Asset-backed	—	973.1	—	973.1
Non-agency commercial mortgage-backed	—	2.3	—	2.3
Agency mortgage-backed	—	1,826.2	—	1,826.2
Total fixed income securities available for sale, at fair value	1,285.4	3,062.7	—	4,348.1
Short-term investments available for sale, at fair value	81.0	6.8	—	87.8
Held for trading financial assets, at fair value				
U.S. government	120.5	—	—	120.5
Municipal	—	3.5	—	3.5
Corporate	—	103.5	—	103.5
High yield loans	—	9.8	—	9.8
Non-U.S. government	41.2	0.4	—	41.6
Asset-backed	—	539.1	—	539.1
Agency mortgage-backed	—	37.6	—	37.6
Total fixed income securities trading, at fair value	161.7	693.9	—	855.6
Short-term investments trading, at fair value	35.4	—	—	35.4
Privately-held investments	—	—	299.3	299.3
Catastrophe bonds trading, at fair value	—	18.8	—	18.8
Other investments ⁽¹⁾	—	—	—	109.4
Other financial assets and liabilities, at fair value				
Derivatives at fair value — foreign exchange contracts	—	26.8	—	26.8
Liabilities under derivative contracts — foreign exchange contracts	—	(13.6)	—	(13.6)
Total	\$ 1,563.5	\$ 3,795.4	\$ 299.3	\$ 5,767.6

⁽¹⁾ Other investments represents our investments in real estate funds and are measured at fair value using the net asset value per share practical expedient. As a result this has not been classified in the fair value hierarchy. The fair value amounts presented in the table above are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheets. The investment in the real estate funds are subject to restrictions as detailed in Note 20(a), "Commitments and Contingencies."

Transfers of assets into or out of a particular level are recorded at their fair values as of the end of each reporting period consistent with the date of the determination of fair value. During the twelve months ended December 31, 2021, \$19.5 million (December 31, 2020 — \$8.3 million was transferred in to Level 3) was transferred from Level 3 to Level 2 due to publicly available market inputs within its valuation methodology.

As at December 31, 2021, there were privately-held investments worth \$307.1 million (December 31, 2020 — \$299.3 million) classified as Level 3. As a result of loans sold by Aspen and loans repaid to Aspen by borrowers, a net settlement of \$182.2 million occurred during the year.

The following table presents a reconciliation of the beginning and ending balances for all assets and liabilities measured at fair value on a recurring basis using Level 3 inputs for the twelve months ended December 31, 2021 and December 31, 2020:

Twelve Months Ended December 31, 2021	Balance at beginning of year	Purchases and issuances	Transfers in/(out)	Settlements and sales	Increase/(decrease) in fair value including net income	Balance at end of year	Change in unrealized investment gains (losses) relating to assets held at end of year
Assets							
Privately-held investments — trading							
Commercial mortgage loans	\$ 163.6	\$ 169.9	\$ —	\$ (122.5)	\$ 0.5	\$ 211.5	\$ (0.5)
Middle market loans	112.1	5.6	—	(56.1)	3.7	65.3	(1.5)
Asset-backed securities	18.6	10.0	—	(1.8)	(0.1)	26.7	(0.2)
Equity securities	5.0	0.1	—	(1.6)	0.1	3.6	—
Preference shares	—	19.5	(19.5)	—	—	—	—
Total Level 3 assets	\$ 299.3	\$ 205.1	\$ (19.5)	\$ (182.2)	\$ 4.2	\$ 307.1	\$ (2.2)
Twelve Months Ended December 31, 2020							
Assets							
Privately-held investments — trading							
Commercial mortgage loans	\$ 156.4	\$ 79.7	\$ —	\$ (59.4)	\$ (13.1)	\$ 163.6	\$ 0.1
Middle market loans	111.7	0.9	8.3	(4.8)	(4.0)	112.1	(5.3)
Asset-backed securities	8.7	10.0	—	—	(0.1)	18.6	—
Equity securities	2.7	2.4	—	(0.1)	—	5.0	—
Total Level 3 assets	\$ 279.5	\$ 93.0	\$ 8.3	\$ (64.3)	\$ (17.2)	\$ 299.3	\$ (5.2)

Valuation of Fixed Income Securities. The Company's fixed income securities are classified as either available for sale or trading and are carried at fair value. As at December 31, 2021 and December 31, 2020, the Company's fixed income securities were valued by pricing services or broker-dealers using standard market conventions. The market conventions utilize market quotations, market transactions in comparable instruments and various relationships between instruments including, but not limited to, yield to maturity, dollar prices and spread prices in determining value.

Independent Pricing Services. The underlying methodology used to determine the fair value of securities in the Company's available for sale and trading portfolios is by the pricing services. Pricing services will gather observable pricing inputs from multiple external sources, including buy and sell-side contacts and broker-dealers, in order to develop their internal prices.

Pricing services provide pricing for less complex, liquid securities based on market quotations in active markets. Pricing services supply prices for a broad range of securities including those for actively traded securities, such as Treasury and other Government securities, in addition to those that trade less frequently or where valuation includes reference to credit spreads, pay down and pre-pay features and other observable inputs. These securities include Government agency, municipals, corporate and asset-backed securities.

For securities that may trade less frequently or do not trade on a listed exchange, these pricing services may use matrix pricing consisting of observable market inputs to estimate the fair value of a security. These observable market inputs include: reported trades, benchmark yields, broker-dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, reference data, and industry and economic factors. Additionally, pricing services may use a valuation model such as an option adjusted spread model commonly used for estimating fair values of mortgage-backed and asset-backed securities. The Company does not derive dollar prices using an index as a pricing input for any individual security.

Broker-Dealers. The Company obtains quotes from broker-dealers who are active in the corresponding markets when prices are unavailable from independent pricing services or index providers. Generally, broker-dealers value securities through their trading desks based on observable market inputs. Their pricing methodologies include mapping securities based on trade data, bids or offers, observed spreads and performance of newly issued securities. They may also establish pricing through observing secondary trading of similar securities. Quotes from broker-dealers are non-binding.

The Company obtains prices for all of its fixed income investment securities via its third-party accounting service provider, and in the majority of cases receiving a number of quotes so as to obtain the most comprehensive information available to determine a security's fair value. A single valuation is applied to each security based on the vendor hierarchy maintained by the Company's third-party accounting service provider.

As at December 31, 2021, the Company obtained an average of 3.0 quotes per fixed income investment compared to 2.6 quotes at December 31, 2020.

The Company, in conjunction with its third-party accounting service provider, obtains an understanding of the methods, models and inputs used by the third-party pricing service and index providers to assess the ongoing appropriateness of vendors' prices. The Company and its third-party accounting service provider also have controls in place to validate that amounts provided represent fair values. Processes to validate and review pricing include, but are not limited to:

- quantitative analysis (e.g., comparing the quarterly return for each managed portfolio to its target benchmark, with significant differences identified and investigated);
- comparison of market values obtained from pricing services and broker-dealers against alternative price sources for each security where further investigation is completed when significant differences exist for pricing of individual securities between pricing sources;
- initial and ongoing evaluation of methodologies used by outside parties to calculate fair value; and
- comparison of the fair value estimates to the Company's knowledge of the current market.

Prices obtained from pricing services and broker-dealers are not adjusted by us; however, prices provided by a pricing service, or broker-dealer in certain instances may be challenged based on market or information available from internal sources, including those available to the Company's third-party investment accounting service provider. Subsequent to any challenge, revisions made by the pricing service or broker-dealer to the quotes are supplied to the Company's investment accounting service provider.

Management reviews the vendor hierarchy maintained by the Company's third-party accounting service provider in order to determine which price source provides the most appropriate fair value (i.e., a price obtained from a pricing service with more seniority in the hierarchy will be used over a less senior one in all cases). The hierarchy level assigned to each security in the Company's available for sale and trading portfolios is based upon its assessment of the transparency and reliability of the inputs used in the valuation as of the measurement date. The hierarchy of pricing services is determined using various qualitative and quantitative points arising from reviews of the vendors conducted by the Company's third-party accounting service provider. Vendor reviews include annual due diligence meetings with index providers and pricing services vendors covering valuation methodology, operational walkthroughs and legal and compliance updates.

Fixed Income Securities. Fixed income securities are traded on the over-the-counter ("OTC") market based on prices provided by one or more market makers in each security. Securities such as U.S. Government, U.S. Agency, Foreign Government and investment grade corporate bonds have multiple market makers in addition to readily observable market value indicators such as expected credit spread, except for Treasury securities, over the yield curve. The Company uses a variety of pricing sources to value fixed income securities including those securities that have pay down/prepay features such as mortgage-backed securities and asset-backed securities in order to ensure fair and accurate pricing. The fair value estimates for the investment grade securities in the Company's portfolio do not use significant unobservable inputs or modeling techniques.

U.S. Government and Agency Securities. U.S. government and agency securities consist primarily of bonds issued by the U.S. Treasury and corporate debt issued by agencies such as the Federal National Mortgage Association ("FNMA"), the Federal Home Loan Mortgage Corporation ("FHLMC") and the Federal Home Loan Bank. As the fair values of U.S. Treasury securities are based on unadjusted market prices in active markets, they are classified within Level 1. The fair values of U.S. government agency securities are priced using the spread above the risk-free yield curve. As the yields for the risk-free yield curve and the spreads for these securities are observable market inputs, the fair values of U.S. government agency securities are classified within Level 2.

Municipal Securities. The Company's municipal portfolio consist of bonds issued by U.S. domiciled state and municipality entities. The fair value of these securities is determined using spreads obtained from broker-dealers, trade prices and the new issue market which are Level 2 inputs in the fair value hierarchy. Consequently, these securities are classified within Level 2.

Non-U.S. Government. The issuers for securities in this category are non-U.S. governments and their agents including, but not limited to, the U.K., Australia, Canada, France and Germany. The fair values of certain non-U.S. government bonds, primarily sourced from international indices, are based on unadjusted market prices in active markets and are therefore classified within Level 1. The remaining non-U.S. government bonds are classified within level 2 as they are not actively traded. The fair values of the non-U.S. agency securities, again primarily sourced from international indices, are priced using the spread above the risk-free yield curve. As the yields for the risk-free yield curve and the spreads for these securities are

observable market inputs, the fair values of non-U.S. agency securities are classified within Level 2. In addition, foreign government securities include a portion of the Emerging Market Debt (“EMD”) portfolio which is also classified within Level 2.

Corporate. Corporate securities consist primarily of short-term, medium-term and long-term debt issued by U.S. and foreign corporations covering a variety of industries and are generally priced by index providers and pricing vendors. Some issuers may participate in government programs which guarantee timely payment of principal and interest in the event of a default. The fair values of these securities are generally determined using the spread above the risk-free yield curve. Inputs used in the evaluation of these securities include credit data, interest rate data, market observations and sector news, broker-dealer quotes and trade volumes. In addition, corporate securities include a portion of the EMD portfolio. The Company classifies these securities across Level 1 and 2, with majority of them being in Level 1.

Mortgage-backed Securities. Residential and commercial mortgage-backed securities consist of bonds issued by the Government National Mortgage Association, the FNMA and the FHLMC as well as private non-agency issuers. The fair values of these securities are determined through the use of a pricing model (including Option Adjusted Spread) which uses prepayment speeds and spreads to determine the appropriate average life of the mortgage-backed security. These spreads are generally obtained from broker-dealers, trade prices and the new issue market. As the significant inputs used to price mortgage-backed securities are observable market inputs, these securities are classified within Level 2.

Asset-backed Securities. Asset-backed securities are securities backed by notes or receivables against assets other than real estate. The underlying collateral for the Company’s asset-backed securities consists mainly of student loans, automobile loans and credit card receivables. These securities are primarily priced by index providers and pricing vendors. Inputs to the valuation process include broker-dealer quotes and other available trade information, prepayment speeds, interest rate data and credit spreads. The Company classifies these securities within Level 2.

Short-term Investments. Short-term investments consist of highly liquid debt securities with a maturity greater than three months but less than one year from the date of purchase. Short-term investments are classified as either trading or available for sale according to the facts and circumstances of the investment held. Short-term investments are valued in a manner similar to the Company’s fixed maturity investments and are classified within Levels 1 and 2.

Privately-Held Investments. Privately-held investments are initially valued at cost or transaction value which approximates fair value. In subsequent measurement periods, the fair values of these securities are determined using internally developed discounted cash flow models. These models include inputs that are specific to each investment. The inputs used in the fair value measurements include dividend or interest rates and appropriate discount rates. The selection of an appropriate discount rate is judgmental and is the most significant unobservable input used in the valuation of these securities. A significant increase (decrease) in this input in isolation could result in significantly lower (higher) fair value measurement for privately-held investments. In order to assess the reasonableness of the inputs the Company uses in the discounted cash flow models, the Company maintains an understanding of current market conditions, issuer specific information that may impact future cash flows as well as collaboration with independent vendors for most securities to assess the reasonableness of the discount rate being used.

The following table summarizes the quantitative inputs and assumptions used for financial assets and liabilities categorized as Level 3 under the fair value hierarchy as at December 31, 2021:

At December 31, 2021	Fair Value Level 3 (\$ in millions)	Valuation Techniques	Unobservable (U) inputs	Ranges			Weighted Average
Privately-held investments — Trading							
Commercial mortgage loans	\$ 173.9	Discounted cash flow	Discount rate	3.5%	— 9.5%	5.8%	
Commercial mortgage loans	37.6	Transaction Value	n/a	n/a	n/a	n/a	
Commercial mortgage loans	—	Liquidation Method	n/a	n/a	n/a	n/a	
Middle market loans	65.3	Discounted cash flow	Discount rate	6.2%	— 15.5%	9.1%	
Middle market loans	—	Recovery Approach	n/a	n/a	n/a	n/a	
Asset-backed securities	26.7	Discounted cash flow	Discount rate	3.0%	— 7.3%	5.4%	
Equity securities	2.8	Discounted cash flow	Discount rate	9.2%	9.2%	9.2%	
Equity securities	0.8	Transaction Value	n/a	n/a	n/a	n/a	
	\$ 307.1						

Catastrophe Bonds. Catastrophe bonds are variable rate fixed income instruments with redemption values adjusted based on the occurrence of a covered event, usually windstorms and earthquakes. Catastrophe bonds are classified as trading and carried at fair value. Catastrophe bonds are priced using an average of multiple broker-dealer quotes and as such, are considered Level 2.

Foreign Exchange Contracts. The foreign exchange contracts which the Company uses to mitigate currency risk are characterized as OTC due to their customized nature and the fact that they do not trade on a major exchange. These instruments trade in a very deep liquid market, providing substantial price transparency and accordingly are classified as Level 2.

Other investments. The Company's other investments represent our investments in real estate funds. Adjustments to the fair values are made based on the net asset value of the investments. The net valuation criteria established by the manager of such investments are established in accordance with the governing documents and the asset manager's valuation guidelines, which include: the discounted cash flows method and the performance multiple approach, which uses a multiple derived from market data of comparable companies or assets to produce operating performance metrics. Alternative valuation methodologies may be employed for investments with unusual characteristics.

7. Reinsurance

The Company purchases retrocession and reinsurance to limit and diversify the Company's risk exposure and to increase its own insurance and reinsurance underwriting capacity. These agreements provide for recovery of a portion of losses and loss adjustment expenses from reinsurers. As is the case with most reinsurance contracts, the Company remains liable to the extent that reinsurers do not meet their obligations under these agreements. In line with its risk management objectives, the Company evaluates the financial condition of its reinsurers and monitors concentrations of credit risk.

Balances pertaining to reinsurance transactions are reported "gross" on the consolidated balance sheet, meaning that reinsurance recoverable on unpaid losses and ceded unearned premiums are not deducted from insurance reserves but are recorded as assets. For more information on reinsurance recoverables, refer to Note 21, "Concentrations of Credit Risk — Reinsurance recoverables" and Note 10, "Reserves for Losses and Loss Adjustment Expenses" of these consolidated financial statements.

The effect of assumed and ceded reinsurance on premiums written, premiums earned and insurance losses and loss adjustment expenses for the twelve months ended December 31, 2021, 2020 and 2019 was as follows:

	Twelve Months Ended December 31,		
	2021	2020	2019
	(\$ in millions)		
Premiums written⁽¹⁾:			
Direct	\$ 2,341.4	\$ 2,042.1	\$ 1,956.9
Assumed	1,597.0	1,656.4	1,485.5
Ceded	(1,350.7)	(1,120.7)	(1,014.5)
Net premiums written	\$ 2,587.7	\$ 2,577.8	\$ 2,427.9
Premiums earned⁽¹⁾:			
Direct	\$ 2,139.1	\$ 2,026.4	\$ 1,927.5
Assumed	1,479.2	1,612.0	1,494.9
Ceded	(1,207.8)	(1,110.9)	(1,129.1)
Net premiums earned	\$ 2,410.5	\$ 2,527.5	\$ 2,293.3
Insurance losses and loss adjustment expenses:			
Direct	\$ 1,499.8	\$ 1,479.6	\$ 1,415.5
Assumed	1,000.6	1,134.5	1,147.9
Ceded	(807.1)	(773.3)	(883.7)
Net insurance losses and loss adjustment expenses	\$ 1,693.3	\$ 1,840.8	\$ 1,679.7

⁽¹⁾ For the period twelve months ended December 31, 2020 gross written premium and net premiums earned have been corrected downward by \$5.1 million for immaterial errors. Refer to Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" for further details

On March 2, 2020, the Company entered into an adverse development cover reinsurance agreement ("ADC") with a subsidiary of Enstar Group Limited ("Enstar"), pursuant to which Enstar's subsidiary will reinsure losses incurred on or prior to December 31, 2019. Enstar's subsidiary will provide \$770.0 million of cover in excess of \$3.805 billion retention up to an aggregate of \$4.575 billion, and an additional \$250.0 million of cover in excess above \$4.815 billion, up to \$5.065 billion. As a

result of the ADC, we have significantly reduced our exposure to claims from risks underwritten on or prior to December 31, 2019, and we expect the ADC to significantly reduce volatility from our historical business going forward.

As at December 31, 2021, the Company has recognized \$68.1 million of recoverables on the ADC, of which \$58.3 million has been recognized as a deferred gain on the balance sheet within reinsurance recoverables unpaid losses. The deferred gain on retroactive contracts is amortized into income over the settlement period of the ceded reserves. For the twelve months ended December 31, 2021, amortization of deferred gains totaling \$9.8 million has been recognized as income within net insurance losses and loss adjustment expenses.

Current expected loss model ("CECL"). Following the adoption of this ASU with effect from January 1, 2020, the Company recognized a reduction in the Company's reinsurance recoverables by \$3.8 million as a result of recognizing CECL through opening retained earnings for periods 2019 and prior.

For the twelve months ended December 31, 2021 there was a decrease in the CECL allowance on reinsurance recoverables of \$0.5 million (December 31, 2020 — \$0.1 million increase).

The Company is potentially exposed to concentrations of credit risk in respect of amounts recoverable from reinsurers, refer to Note 21, "Concentrations of Credit Risk — Reinsurance recoverables" of these consolidated financial statements for more detail.

8. Derivative Contracts

The following table summarizes information on the location and amounts of derivative fair values on the consolidated balance sheet as at December 31, 2021 and 2020:

Derivatives Not Designated as Hedging Instruments Under ASC 815	Balance Sheet Location	As at December 31, 2021		As at December 31, 2020	
		Notional Amount	Fair Value	Notional Amount	Fair Value
		(\$ in millions)		(\$ in millions)	
Foreign Exchange Contracts	Derivatives at Fair Value	\$ 759.8	\$ 12.9 ⁽¹⁾	\$ 803.1	\$ 21.5 ⁽¹⁾
Foreign Exchange Contracts	Liabilities under Derivative Contracts	\$ 785.9	\$ (12.4)	\$ 599.2	\$ (13.6)

⁽¹⁾ Net of \$2.1 million of cash collateral (December 31, 2020 — \$3.4 million).

Derivatives Designated as Hedging Instruments Under ASC 815	Balance Sheet Location	As at December 31, 2021		As at December 31, 2020	
		Notional Amount	Fair Value	Notional Amount	Fair Value
		(\$ in millions)		(\$ in millions)	
Foreign Exchange Contracts	Derivatives at Fair Value	\$ —	\$ —	\$ 90.6	\$ 5.3
Foreign Exchange Contracts	Liabilities under Derivative Contracts	\$ 143.1	\$ (0.9)	\$ —	\$ —

The following table provides the unrealized and realized gains/(losses) recorded in the statements of operations and other comprehensive income for derivatives that are not designated or designated as hedging instruments under ASC 815 — "Derivatives and Hedging" for the twelve months ended December 31, 2021 and 2020:

		Amount of (Loss)/Gain Recognized on Derivatives	
		For the Twelve Months Ended	
	Location of Gain/(Loss) Recognized on Derivatives	December 31, 2021	December 31, 2020
Derivatives not designated as hedges		(\$ in millions)	
Foreign Exchange Contracts	Change in Fair Value of Derivatives	(35.9)	16.0
Interest Rate Swaps	Change in Fair Value of Derivatives	—	(81.1)
Derivatives designated as hedges			
Foreign Exchange Contracts	General, administrative and corporate expenses	(5.7)	(3.2)
Foreign Exchange Contracts	Net change from current period hedged transactions	(6.2)	0.3

Foreign Exchange Contracts. The Company uses foreign exchange contracts to manage foreign currency risk associated with our operating expenses but also foreign exchange risk associated with net assets or liabilities in currencies other than the U.S. dollar. A foreign exchange contract involves an obligation to purchase or sell a specified currency at a future date at a price set at the time of the contract. Foreign exchange contracts will not eliminate fluctuations in the value of the Company's assets and liabilities denominated in foreign currencies but rather allow it to establish a rate of exchange for a future point in time.

As at December 31, 2021, the Company held foreign exchange contracts that were not designated as hedges under ASC 815 with an aggregate nominal amount of \$1,545.7 million (2020 — \$1,402.3 million). The foreign exchange contracts are recorded as derivatives at fair value in the balance sheet with changes recorded as a change in fair value of derivatives in the statement of operations. For the twelve months ended December 31, 2021, the impact of foreign exchange contracts on net income was a loss of \$35.9 million (December 31, 2020 — gain of \$16.0 million).

As at December 31, 2021, the Company held foreign exchange contracts that were designated as hedges under ASC 815 with an aggregate nominal amount of \$143.1 million (2020 — \$90.6 million). The foreign exchange contracts are recorded as derivatives at fair value in the balance sheet with the effective portion recorded in other comprehensive income and the ineffective portion recorded as a change in fair value of derivatives in the statement of operations. The contracts are effective and therefore the movement in other comprehensive income representing the effective portion for the twelve months ended December 31, 2021 was a loss of \$6.2 million (December 31, 2020 — gain of \$0.3 million).

As the foreign exchange contracts settle, the realized gain or loss is reclassified from other comprehensive income into general, administration and corporate expenses of the statement of operations and other comprehensive income. For the twelve months ended December 31, 2021, the amount recognized within general, administration and corporate expenses for settled foreign exchange contracts was a realized loss of \$5.7 million (December 31, 2020 — loss of \$3.2 million).

Interest Rate Swaps. In the first quarter of 2019, the Company entered into fixed for floating interest rate swaps with a total notional amount of \$3,138.0 million due to mature between January 18, 2021 and January 18, 2034. The interest rate swaps were used in the ordinary course of the Company's investments activities to partially mitigate any negative impact of rises in interest rates on the market value of the Company's fixed income portfolio. During 2020, we unwound the remaining \$1,250.0 million of our interest rate swaps. For the twelve months ended December 31, 2021, there was a loss of Nil (December 31, 2020 — \$81.1 million).

9. Deferred Policy Acquisition Costs

The following table represents a reconciliation of beginning and ending deferred policy acquisition costs for the twelve months ended December 31, 2021 and 2020:

	Twelve Months Ended December 31, 2021	Twelve Months Ended December 31, 2020
	(\$ in millions)	
Balance at the beginning of the period	\$ 306.6	\$ 291.1
Acquisition costs deferred	398.3	481.2
Amortization of deferred policy acquisition costs	(414.1)	(465.7)
Balance at the end of the period	\$ 290.8	\$ 306.6

10. Reserves for Losses and Loss Adjustment Expenses

The following table represents a reconciliation of beginning and ending consolidated loss and LAE reserves for the twelve months ended December 31, 2021, 2020 and 2019:

	As at December 31,		
	2021	2020	2019
	(\$ in millions)		
Provision for losses and LAE at the start of the year	\$ 7,165.3	\$ 6,951.8	\$ 7,074.2
Less reinsurance recoverable	(3,195.2)	(2,319.8)	(2,077.6)
Net loss and LAE at the start of the year	3,970.1	4,632.0	4,996.6
Net loss and LAE expenses (disposed) ⁽¹⁾	—	(818.5)	—
Movement in net provision for losses and LAE for claims incurred:			
Current year	1,648.2	1,841.7	1,620.2
Prior years	45.1	(0.9)	59.5
Total incurred	1,693.3	1,840.8	1,679.7
Losses and LAE payments for claims incurred:			
Current year	(729.1)	(404.9)	(428.5)
Prior years	(580.7)	(1,359.7)	(1,694.1)
Total paid	(1,309.8)	(1,764.6)	(2,122.6)
Foreign exchange (gains)/losses	(39.9)	80.4	78.3
Net losses and LAE reserves at the end of the year	4,313.7	3,970.1	4,632.0
Plus reinsurance recoverable on unpaid losses at the end of the year	3,298.1	3,195.2	2,319.8
Provision for losses and LAE at the end of the year	\$ 7,611.8	\$ 7,165.3	\$ 6,951.8

⁽¹⁾ Net loss and LAE expenses disposed in 2020 includes the ADC agreement providing \$770.0 million of cover and the loss portfolio transfer transactions for our surety insurance book of \$42.0 million and our U.S. accident and health book of \$6.5 million.

For the twelve months ended December 31, 2021, there was an increase of \$45.1 million in the Company's estimate of the ultimate claims to be paid in respect of prior accident years compared to a decrease of \$0.9 million for the twelve months ended December 31, 2020.

Overall, prior year reserve strengthening totaled \$45.1 million in 2021, compared with net favorable reserve development of \$0.9 million in 2020. Prior year reserve strengthening excludes the full economic benefit of the recoveries from the ADC of \$58.3 million which is currently within reinsurance recoverables on unpaid losses.

Reserve releases in the reinsurance segment in 2021 were \$134.4 million compared to \$36.1 million in 2020 and came primarily from casualty reinsurance and specialty reinsurance. Net unfavorable reserve development in the insurance segment in 2021 was \$179.5 million compared to net unfavorable reserve development of \$35.2 million in 2020 and came primarily from casualty insurance lines and first party and specialty lines.

The following table provides a reconciliation of reinsurance recoverables on unpaid losses as at December 31, 2021, 2020 and 2019, including reserves associated with the adverse development cover reinsurance agreements.

	As at December 31,		
	2021	2020	2019
	(in millions)		
Reinsurance recoverable excluding adverse development cover	\$ 2,518.3	\$ 2,425.2	\$ 2,319.8
Adverse development cover reinsurance agreement cover	770.0	770.0	—
Movement in reinsurance recoverables excess of attachment point	68.1	—	—
Less unamortized deferred gain on retroactive contracts	(58.3)	—	—
Reinsurance recoverable on unpaid losses	<u>\$ 3,298.1</u>	<u>\$ 3,195.2</u>	<u>\$ 2,319.8</u>

The following tables show an analysis of incurred claims and allocated loss adjustment expenses, net of reinsurance and cumulative paid claims and allocated claim adjustment expenses, net of reinsurance as at December 31, 2021, 2020, 2019, 2018 2017, 2016, 2015, 2014, 2013 and 2012. The loss development triangles are derived from all business written by the Company as although a limited number of contracts are written which have durations of greater than one year the contracts do not meet the definition of a long duration contract. All amounts included in the following tables related to transactions denominated in a foreign currency have been translated into U.S. Dollars using the exchange rates in effect at December 31, 2021.

The Company has chosen to disaggregate the business in its Insurance segment, for the purposes of these loss development triangles as: Property, Casualty, Marine, Aviation and Energy, and Financial and Professional insurance lines. The Company considers that this presentation of its Insurance lines loss development triangles more precisely reflects meaningful trending information. Certain accident years have negative IBNR due to the allocation of the adverse development cover, which has been allocated in line with the agreement and premiums paid.

Property Insurance Lines											As at December 31, 2021	
Incurred Claims, IBNR and Loss Adjustment Expenses, Net of Reinsurance												
Accident Year	For the Years Ended December 31,										Total of IBNR Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
	Unaudited Prior Years											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
	\$(in millions)											
2012	170.6	168.6	167.3	166.2	160.6	154.8	153.7	153.8	154.4	155.6	—	6,083
2013		130.8		117.5	113.3	114.3	112.3	112.6	112.8	110.7	0.3	5,764
2014			166.1	157.9	134.7	135.3	134.6	133.0	132.4	133.4	—	9,973
2015				241.8	207.4	201.8	204.2	204.6	201.5	202.2	2.0	11,598
2016					239.9	250.7	245.5	246.9	248.4	249.2	1.6	10,785
2017						297.5	260.3	253.5	254.9	254.1	10.3	9,693
2018							205.5	208.2	191.9	190.4	0.4	8,171
2019								128.5	132.1	122.6	—	6,812
2020									206.7	211.2	36.2	7,295
2021										\$ 210.9	88.8	4,978
								Total		\$ 1,840.3		

Property Insurance Lines												
Cumulative Paid Claims and Allocated Loss Adjustment Expenses, Net of Reinsurance												
Accident Year	For the Years Ended December 31,											
	Unaudited Prior Years											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
	\$(in millions)											
2012	41.5	129.6	139.2	153.4	157.6	155.1	154.3	154.3	154.3	155.6		
2013		39.2	76.4	89.7	101.7	106.4	109.1	110.9	111.2	110.0		
2014			40.5	86.9	114.5	124.2	128.3	129.8	131.0	132.3		
2015				57.5	144.1	172.1	181.3	198.0	196.4	197.8		
2016					67.3	169.7	202.5	224.8	233.8	239.0		
2017						97.0	189.9	223.2	244.1	248.4		
2018							62.6	162.9	185.0	181.8		
2019								49.6	92.6	103.4		
2020									61.9	125.5		
2021										59.2		
								Total		\$ 1,553.0		
	All outstanding liabilities for 2012 and subsequent years, net of reinsurance										\$ 287.3	
	All outstanding liabilities before 2012, net of reinsurance										2.0	
	Liabilities for claims and claim adjustment expenses, net of reinsurance										\$ 289.3	

Casualty Insurance Lines											As at December 31, 2021	
Incurred Claims, IBNR and Loss Adjustment Expenses, Net of Reinsurance												
Accident Year	For the Years Ended December 31,										Total of IBNR Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
	Unaudited Prior Years											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
	\$(in millions)											
2012	78.6	63.4	70.6	61.7	69.6	67.2	69.2	71.1	71.5	69.3	3.4	3,130
2013		134.0	117.4	115.8	121.3	104.3	105.4	105.7	104.3	100.9	7.2	3,367
2014			146.2	128.4	140.3	130.5	137.7	141.8	138.8	130.4	5.7	3,865
2015				205.1	225.1	187.6	205.5	238.4	236.7	227.7	13.5	4,736
2016					218.9	190.0	185.3	192.0	203.1	233.8	54.1	4,753
2017						182.9	176.3	180.4	199.3	201.6	18.9	5,416
2018							124.0	126.8	137.9	135.5	22.7	5,419
2019								126.5	148.8	127.9	4.7	5,104
2020									134.9	133.9	94.3	3,570
2021										176.5	150.5	2,707
	Total									1,537.5		

Casualty Insurance Lines											
Cumulative Paid Claims and Allocated Loss Adjustment Expenses, Net of Reinsurance											
Accident Year	For the Years Ended December 31,										
	Unaudited Prior Years									2021	
	2012	2013	2014	2015	2016	2017	2018	2019	2020		
(\$ in millions)											
2012	1.3	6.7	14.3	30.0	41.3	49.7	50.6	55.2	59.9	65.0	
2013		2.3	26.0	39.8	53.4	69.0	81.5	85.8	87.8	88.0	
2014			2.7	13.5	33.1	60.4	74.0	98.4	111.4	110.1	
2015				3.2	17.2	57.0	93.5	139.7	169.2	181.4	
2016					4.2	23.1	40.7	83.5	111.0	134.8	
2017						3.6	23.2	53.4	98.4	116.8	
2018							3.2	28.2	44.1	69.7	
2019								6.4	18.6	70.4	
2020									—	3.2	
2021										9.5	
Total									\$	848.9	
All outstanding liabilities for 2012 and subsequent years, net of reinsurance										\$	688.6
All outstanding liabilities before 2012, net of reinsurance											37.0
Liabilities for claims and claim adjustment expenses, net of reinsurance										\$	725.6

Marine, Aviation and Energy Insurance Lines											As at December 31, 2021	
Incurred Claims, IBNR and Loss Adjustment Expenses, Net of Reinsurance												
For the Years Ended December 31,												
Accident Year	Unaudited Prior Years										Total of IBNR Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
	(\$ in millions)											
2012	268.8	306.2	325.8	346.4	332.1	328.2	316.5	311.2	306.1	308.8	(6.1)	3,823
2013		321.0	333.8	342.5	325.9	333.0	346.6	345.2	340.2	343.3	2.8	4,178
2014			309.8	314.0	298.9	310.5	306.0	313.0	302.2	312.5	(5.9)	4,043
2015				297.1	300.2	282.6	286.8	310.4	313.0	321.4	(4.6)	4,074
2016					260.8	230.8	229.4	229.6	219.4	221.7	0.2	4,429
2017						210.7	201.1	207.4	214.9	209.8	37.9	6,041
2018							171.4	208.5	209.4	219.9	(2.4)	5,178
2019								146.5	154.1	146.0	3.0	3,575
2020									111.0	111.8	12.0	4,128
2021										94.0	44.7	2,108
	Total									2,289.2		

Marine, Aviation and Energy Insurance Lines											
Cumulative Paid Claims and Allocated Loss Adjustment Expenses, Net of Reinsurance											
For the Years Ended December 31,											
Accident Year	Unaudited Prior Years										2021
	2012	2013	2014	2015	2016	2017	2018	2019	2020		
	(\$ in millions)										
2012	51.5	132.4	174.9	211.2	240.0	250.9	273.8	274.7	276.9		284.8
2013		41.5	131.7	205.0	235.4	264.8	284.5	300.6	310.8		311.0
2014			53.6	116.9	189.3	210.0	232.7	250.9	263.1		275.6
2015				44.9	123.4	174.6	194.5	222.5	257.9		280.6
2016					30.9	82.7	142.8	164.3	191.2		199.0
2017						40.3	97.8	140.6	168.8		156.9
2018							26.9	105.1	133.4		155.7
2019								33.6	72.8		118.1
2020									28.5		66.7
2021											23.5
	Total										\$ 1,871.9
	All outstanding liabilities for 2012 and subsequent years, net of reinsurance										\$ 417.3
	All outstanding liabilities before 2012, net of reinsurance										10.6
	Liabilities for claims and claim adjustment expenses, net of reinsurance										\$ 427.9

Financial and Professional Insurance Lines											As at December 31, 2021	
Incurred Claims, IBNR and Loss Adjustment Expenses, Net of Reinsurance												
For the Years Ended December 31,												
Unaudited Prior Years												
Accident Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total of IBNR Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
	(\$ in millions)											
2012	88.5	89.9	93.6	97.0	94.0	89.6	101.7	96.5	103.4	104.5	(4.4)	579
2013		106.1	100.6	105.0	101.7	100.8	91.9	90.9	97.6	102.8	2.2	586
2014			135.7	131.6	130.2	120.6	131.9	120.9	121.7	123.7	(2.7)	800
2015				175.0	176.3	186.4	190.6	191.9	186.7	185.9	(0.4)	1,080
2016					191.9	212.6	217.4	203.1	186.3	185.7	13.5	1,255
2017						207.7	184.1	188.9	189.4	188.6	12.8	1,739
2018							158.5	174.6	156.9	152.7	6.0	4,617
2019								250.5	263.8	236.0	52.8	23,894
2020									351.0	352.0	181.7	105,317
2021										289.6	221.5	31,311
	Total									\$ 1,921.5		

Financial and Professional Insurance Lines											
Cumulative Paid Claims and Allocated Loss Adjustment Expenses, Net of Reinsurance											
Accident Year	For the Years Ended December 31,										
	Unaudited Prior Years										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
	(\$ in millions)										
2012	22.8	39.6	50.8	59.4	65.4	70.6	80.3	85.3	91.3	92.8	
2013		8.1	21.2	31.3	65.6	64.1	72.8	75.0	78.3	81.8	
2014			3.0	30.9	53.8	72.5	80.0	85.9	92.6	104.2	
2015				13.8	43.6	70.3	89.7	110.4	139.6	146.2	
2016					15.2	71.4	102.5	130.6	126.6	136.0	
2017						27.2	51.4	83.6	117.5	137.2	
2018							21.0	75.7	101.6	117.1	
2019								27.4	87.3	138.4	
2020									48.0	121.9	
2021										43.7	
									Total	\$	1,119.3
All outstanding liabilities for 2012 and subsequent years, net of reinsurance										\$	802.2
All outstanding liabilities before 2012, net of reinsurance											6.5
Liabilities for claims and claim adjustment expenses, net of reinsurance										\$	808.7

Property Catastrophe and Other Property Reinsurance											As at December 31, 2021	
Incurred Claims, IBNR and Loss Adjustment Expenses, Net of Reinsurance												
Accident Year	For the Years Ended December 31,										Total of IBNR Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
	Unaudited Prior Years											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
	\$ (in millions)											
2012	280.2	303.1	286.2	278.8	282.2	279.2	271.7	261.6	264.9	248.6	(3.1)	679
2013		217.4	199.9	189.7	178.5	177.1	173.8	171.0	168.2	164.7	0.6	832
2014			189.9	176.8	160.9	149.5	149.8	144.9	144.9	143.9	0.8	900
2015				214.6	187.3	177.2	156.6	171.8	171.9	179.8	11.7	1,051
2016					272.6	272.7	271.0	249.2	244.9	230.4	(15.2)	1,308
2017						557.7	534.5	516.2	505.0	481.2	(3.8)	1,956
2018							343.1	394.2	389.5	403.5	22.2	1,808
2019								262.8	272.3	270.6	3.6	1,395
2020									322.9	366.9	20.1	1,333
2021										461.5	198.6	1,005
Total										\$ 2,951.1		
Property Catastrophe and Other Property Reinsurance												
Cumulative Paid Claims and Allocated Loss Adjustment Expenses, Net of Reinsurance												
Accident Year	For the Years Ended December 31,										2020	2021
	Unaudited Prior Years											
	2012	2013	2014	2015	2016	2017	2018	2019				
	(\$ in millions)											
2012	35.6	135.7	188.8	208.9	216.4	227.6	232.1	242.2	247.9	248.6		
2013		34.5	98.8	146.9	159.0	163.7	165.2	166.8	161.2	161.2		
2014			37.4	100.7	127.1	137.0	140.9	139.6	141.3	141.5		
2015				35.8	95.0	127.1	139.2	156.2	158.6	162.2		
2016					57.2	164.7	206.0	217.1	230.4	236.7		
2017						123.2	357.4	416.6	440.8	437.6		
2018							122.8	311.6	325.7	345.4		
2019								28.2	153.0	205.6		
2020									42.4	169.2		
2021										75.6		
Total										\$ 2,183.6		
All outstanding liabilities for 2012 and subsequent years, net of reinsurance												767.5
All outstanding liabilities before 2012, net of reinsurance												17.4
Liabilities for claims and claim adjustment expenses, net of reinsurance												\$ 784.9

Casualty Reinsurance											As at December 31, 2021	
Incurred Claims, IBNR and Loss Adjustment Expenses, Net of Reinsurance												
For the Years Ended December 31,												
Unaudited Prior Years												
Accident Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total of IBNR Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
	(\$ in millions)											
2012	235.1	233.3	244.6	236.0	232.8	233.7	242.6	245.1	240.0	196.2	(27.1)	1,813
2013		215.6	230.8	226.3	223.6	206.6	201.7	204.4	201.6	165.8	(6.8)	1,691
2014			206.2	209.0	217.6	211.1	204.5	207.1	202.9	160.5	(14.8)	1,805
2015				195.4	202.2	211.7	214.2	212.0	208.0	160.6	(13.6)	1,964
2016					234.7	247.3	247.0	257.2	264.7	213.5	(2.1)	2,056
2017						246.6	244.0	254.9	254.1	194.2	3.4	2,005
2018							230.1	259.8	267.0	190.6	24.7	1,766
2019								236.2	256.6	179.2	52.3	1,300
2020									256.4	237.6	177.8	753
2021										209.0	177.0	355
								Total		\$ 1,907.2		

Casualty Reinsurance											
Cumulative Paid Claims and Allocated Loss Adjustment Expenses, Net of Reinsurance											
For the Years Ended December 31,											
Unaudited Prior Years											
Accident Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
	(\$ in millions)										
2012	2.2	17.8	42.1	65.5	96.6	117.8	134.7	144.4	162.2	165.4	
2013		3.4	15.9	42.8	65.1	93.1	115.0	127.8	139.9	146.3	
2014			2.5	13.8	37.8	60.3	86.7	107.7	125.7	135.7	
2015				3.5	18.0	38.5	65.7	89.7	109.0	123.3	
2016					9.3	33.7	64.5	96.7	127.0	148.0	
2017						8.9	30.7	59.2	97.9	117.3	
2018							7.2	33.7	73.7	104.9	
2019								9.2	36.5	61.4	
2020									9.2	28.0	
2021										7.9	
								Total		\$ 1,038.2	
	All outstanding liabilities for 2012 and subsequent years, net of reinsurance										869.0
	All outstanding liabilities before 2012, net of reinsurance										106.3
	Liabilities for claims and claim adjustment expenses, net of reinsurance										\$ 975.3

Specialty Reinsurance											As at December 31, 2021	
Incurred Claims, IBNR and Loss Adjustment Expenses, Net of Reinsurance												
For the Years Ended December 31,												
Unaudited Prior Years												
Accident Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total of IBNR Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
(\$ in millions)												
2012	176.2	199.5	188.8	173.3	171.7	172.4	169.1	166.6	165.6	156.3	(3.9)	641
2013		144.4	139.6	131.3	119.4	118.6	114.8	114.4	111.0	104.8	(0.5)	577
2014			152.4	140.1	132.1	122.9	125.8	124.3	120.1	114.9	0.6	619
2015				165.9	170.0	164.5	159.0	157.3	152.8	149.0	4.7	777
2016					238.8	239.9	237.7	230.0	225.0	214.7	(5.4)	937
2017						379.7	392.4	376.0	364.4	343.2	(6.1)	1,328
2018							397.4	396.4	394.3	391.1	13.0	1,399
2019								476.1	498.9	495.4	49.2	1,519
2020									415.6	382.4	66.7	1,400
2021										155.8	106.1	1,020
								Total		\$ 2,507.6		

Specialty Reinsurance											
Cumulative Paid Claims and Allocated Loss Adjustment Expenses, Net of Reinsurance											
For the Years Ended December 31,											
Accident Year	Unaudited Prior Years									2021	
	2012	2013	2014	2015	2016	2017	2018	2019	2020		
	(\$ in millions)										
2012	24.6	93.0	128.1	138.2	143.5	148.8	150.1	152.9	153.4	156.1	
2013		25.0	70.9	86.9	94.0	101.0	101.0	101.9	101.7	100.7	
2014			16.6	56.5	81.3	89.3	99.7	102.6	104.2	106.2	
2015				17.7	56.4	104.1	122.0	130.9	134.0	134.0	
2016					58.7	150.9	165.5	183.6	193.8	203.8	
2017						94.6	238.8	271.0	306.3	317.1	
2018							27.2	280.8	314.6	331.1	
2019								274.3	382.7	402.1	
2020									213.1	270.4	
2021										28.4	
								Total		\$ 2,049.9	
	All outstanding liabilities for 2012 and subsequent years, net of reinsurance										457.7
	All outstanding liabilities before 2012, net of reinsurance										14.6
	Liabilities for claims and claim adjustment expenses, net of reinsurance										\$ 472.3

Reconciliation of Incurred and Paid Claims Development to total Provision for Losses and LAE

	Twelve Months Ended December 31, 2021 (S in millions)	Twelve Months Ended December 31, 2020
Net outstanding liabilities:		
Insurance lines		
- Property insurance lines	289.3	226.8
- Casualty insurance lines	725.6	618.7
- Marine, aviation and energy insurance lines	427.9	431.4
- Financial and professional insurance lines	808.7	738.5
Total insurance lines	2,251.5	2,015.4
Reinsurance lines		
- Property catastrophe and other property reinsurance	784.9	631.0
- Casualty reinsurance	975.3	1,084.2
- Specialty reinsurance	472.3	535.4
Total reinsurance lines	2,232.5	2,250.6
Net loss and LAE	4,484.0	4,266.0
Reinsurance recoverable on unpaid losses:		
Insurance lines	2,117.4	2,140.3
Reinsurance lines	1,180.7	1,054.9
Total reinsurance recoverable on unpaid losses	3,298.1	3,195.2
Deferred gain on retroactive contracts	58.3	—
Unallocated claims incurred	56.6	50.3
Other reinsurance balances recoverable ⁽¹⁾	(286.4)	(346.7)
Carbon syndicate reserves	1.0	—
Other	0.2	0.5
	(170.3)	(295.9)
Provision for losses and LAE at the end of the year	7,611.8	7,165.3

⁽¹⁾ Other reinsurance balances recoverable primarily include amounts that have been billed but not yet received.

Average Annual Percentage Payout of Incurred Claims by Age, Net of Reinsurance

Years	1	2	3	4	5	6	7	8	9	10
Insurance	16.1 %	25.7 %	17.2 %	11.9 %	7.4 %	6.7 %	4.5 %	2.5 %	1.3 %	2.5 %
Reinsurance	18.1 %	30.9 %	15.3 %	9.7 %	8.3 %	5.6 %	4.0 %	2.7 %	2.6 %	1.1 %

11. Income Taxes

Aspen Holdings and Aspen Bermuda are incorporated under the laws of Bermuda. Under Bermuda law, the corporate tax rate is zero and, as a result, Aspen Holdings and Aspen Bermuda are not taxed on any Bermudian income or capital gains. In the event of any Bermudian income or capital gains taxes being imposed, Aspen Holdings and Aspen Bermuda have received an assurance from the Bermuda Minister of Finance that such entities will be exempt from those taxes until March 31, 2035.

During the current year, management identified immaterial errors which resulted in revising the Company's historical financial statements, as further described below:

Income tax: During the year, the Company identified an error regarding the completeness and accuracy of the information used in recognizing both current and deferred income taxes on Aspen U.K.'s branches and the associated application thereof in respect of local tax rules in the various jurisdictions. Consequential impacts have been recorded in the income tax reconciliation and the breakdown of the net deferred tax liabilities.

The Company has concluded that the error is immaterial to the prior period financial statements of Aspen Holdings and that correcting the error in the current period would likely materially misstate the current period financial statements. In accordance with U.S. GAAP, we have, therefore, corrected the error in the comparatives of the 2021 financial statements of Aspen Holdings by adjusting 2020 and 2019 prior period information and adding disclosure of the error. Refer to Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" for further details.

The Company's U.S. operating companies were subject to a U.S. federal income tax rate of 21%.

The Company's U.K. operating companies were taxed at the U.K. corporate tax rate of 19%.

Total income tax (benefit)/expense for the twelve months ended December 31, 2021, 2020 and 2019 was allocated as follows:

	Twelve Months Ended December 31,		
	2021	2020	2019
	(\$ in millions)		
Income tax expense/(benefit) allocated to net income	\$ 5.3	\$ 18.4	\$ 22.9
Income tax expense allocated to other comprehensive income	0.3	0.5	11.2
Total income tax expense/(benefit)	\$ 5.6	\$ 18.9	\$ 34.1

(Loss)/income from operations before income taxes and income tax expense/(benefit) attributable to that (loss)/income for the twelve months ended December 31, 2021, 2020 and 2019 is provided in the tables below:

	Twelve Months Ended December 31, 2021			
	(Loss)/income before tax	Current tax (benefit)/expense	Deferred tax (benefit)/expense	Total income tax (benefit)/expense
	(\$ in millions)			
Bermuda	\$ 22.9	\$ —	\$ —	\$ —
U.S. ⁽¹⁾	5.0	5.8	—	5.8
U.K.	75.1	—	(0.3)	(0.3)
Other ⁽²⁾	(67.9)	2.7	(2.9)	(0.2)
Total	\$ 35.1	\$ 8.5	\$ (3.2)	\$ 5.3

	Twelve Months Ended December 31, 2020			
	(Loss) before tax	Current tax (benefit)/expense	Deferred tax (benefit)/expense	Total income tax (benefit)/expense
	(\$ in millions)			
Bermuda	\$ (81.5)	\$ —	\$ —	\$ —
U.S. ⁽³⁾	19.7	8.9	—	8.9
U.K.	11.0	0.1	—	0.1
Other ⁽⁴⁾	12.8	10.3	(0.9)	9.4
Total	\$ (38.0)	\$ 19.3	\$ (0.9)	\$ 18.4

	Twelve Months Ended December 31, 2019			
	(Loss) before tax	Current tax (benefit)/expense	Deferred tax (benefit)/expense	Total income tax (benefit)/expense
	(\$ in millions)			
Bermuda	\$ (107.6)	\$ —	\$ —	\$ —
U.S.	(60.0)	1.0	6.5	7.4
U.K.	(43.5)	(6.7)	17.3	10.6
Other	(5.5)	4.0	0.9	4.9
Total	\$ (216.6)	\$ (1.7)	\$ 24.7	\$ 22.9

⁽¹⁾ The U.S. current tax expense of \$5.8 million is mainly Base Erosion and Anti-abuse Tax.

⁽²⁾ Current tax expense and deferred tax (benefit) in “Other” is made up of taxation paid in respect of branches of U.K. and Bermudian operating subsidiaries and withholding taxes payable in Australia.

⁽³⁾ The 2020 U.S. deferred tax expense has been corrected from \$5.7 million credit to \$0.0 million. This removes an invalid intraperiod tax allocation between the statement of operations and unrealized gains on investments in other comprehensive income.

⁽⁴⁾ The 2020 other territories’ tax expense in “other” has been corrected from \$5.3 million to \$9.4 million to correct the income tax calculation in the Swiss and Australian branches of the U.K. operating companies.

As noted above, the tax rate in Bermuda, the Company's country of domicile, is zero. Application of the statutory income tax rate for operations in other jurisdictions produces a differential to the expected income tax (benefit)/expense as shown in the table below. The reconciliation between the income tax (benefit)/expense and the amount that would result from applying the statutory rate for the Company for the twelve months ended December 31, 2021, 2020 and 2019 is provided in the table below:

	Twelve Months Ended December 31,		
	2021	2020	2019
	(\$ in millions)		
Income Tax Reconciliation			
Income tax benefit at statutory tax rate of zero percent	\$ —	\$ —	\$ —
Overseas statutory tax rates differential	(0.9)	(3.8)	(21.2)
Base erosion and anti-abuse tax (BEAT) expense	6.1	4.3	0.3
Prior year adjustments ⁽¹⁾	0.5	(25.0)	(1.7)
Change in valuation allowance ⁽²⁾	9.6	40.8	42.6
Impact of unrecognized tax benefits ⁽³⁾	—	—	—
Restricted foreign tax credits ⁽⁴⁾	—	—	1.5
Australian non-resident withholding tax	0.6	1.0	1.0
Share-based payments	—	—	(0.6)
Foreign exchange	(1.5)	0.2	—
Non-deductible expenses	2.4	4.7	—
Non-taxable items	—	—	(0.1)
Impact of changes in statutory tax rates ⁽⁵⁾	(11.5)	(3.8)	1.1
Total income tax expense/(benefit)	<u>\$ 5.3</u>	<u>\$ 18.4</u>	<u>\$ 22.9</u>

⁽¹⁾ The submission dates for filing income tax returns for the Company's U.S. and U.K. operating subsidiaries are after the submission date of this report. Accordingly, the final tax liabilities may differ from the estimated income tax expense included in this report and may result in prior year adjustments being reported. The prior period adjustments for the twelve months ended December 31, 2021 predominantly relate to the determination of the results of the branches of the U.K. operating subsidiaries. The prior period adjustments for the twelve months ended December 31, 2020 and 2019 predominantly relate to the determination of results in the U.K. These items can only be ultimately determined after this report is filed.

⁽²⁾ The 2021 valuation allowance movement includes \$5.5 million increase relating to U.K. deferred tax assets in U.K. operating subsidiaries, \$9.1 million increase relating to deferred tax assets in the branches of the U.K. and Bermuda operating subsidiaries, and \$5.0 million decrease from U.S. operations, which includes \$15.5 million decrease due to utilization of existing net operating losses. The U.K. tax rate change effect on the valuation allowance is \$11.3 million.

⁽³⁾ In 2021, the company did not have any unrecognized tax benefits.

Income tax returns that have been filed by the Company's U.S. operating subsidiaries are subject to examination for 2016 and later tax years. The Company's U.K. operating subsidiaries' income tax returns are subject to examination for 2020 and later tax years.

⁽⁴⁾ Restricted foreign tax credits are taxes paid by branches of U.K. operating subsidiaries that are not creditable against U.K. taxes.

⁽⁵⁾ The U.K. tax rate will change from April 1, 2023 from 19% to 25%, which resulted in an increase in the deferred tax assets and an offsetting increase in the valuation allowance.

The tax effects of temporary differences and carryforwards that give rise to deferred tax assets and deferred tax liabilities are presented in the following table as at December 31, 2021 and 2020:

	As at December 31,	
	2021	2020
	(\$ in millions)	
Deferred tax assets:		
Operating loss carryforwards	170.2	147.8
Insurance reserves: Losses and loss adjustment expenses	16.7	12.2
Accrued expenses	4.6	6.4
Foreign tax credit carryforwards	20.2	16.7
Insurance reserves: Unearned premiums	28.3	24.5
Office properties and equipment	15.1	12.7
Operating lease liabilities	19.2	17.9
Other temporary differences	3.2	2.5
Total deferred tax assets	277.5	240.7
Less valuation allowance	(225.9)	(187.1)
Deferred tax assets, net of valuation allowance	\$ 51.6	\$ 53.6
Deferred tax liabilities:		
Investments	(2.5)	(8.4)
Intangible assets	(2.8)	(2.7)
Deferred policy acquisition costs	(28.6)	(33.3)
Right-of-use operating lease assets	(10.6)	(12.5)
Insurance reserves: Losses and loss adjustment expenses	(8.3)	—
Other temporary differences	(1.6)	(1.9)
Total deferred tax (liabilities)	(54.4)	(58.8)
Net deferred tax (liabilities)	\$ (2.8)	\$ (5.2)

Deferred tax liabilities and assets represent the tax effect of carryforwards and temporary differences between the value of assets and liabilities for financial statement purposes and such values as measured by U.K., U.S. and other tax laws and regulations.

The 2020 deferred tax liabilities and assets have been corrected. Deferred tax assets of \$48.1 million relating to foreign tax credit carryforwards and foreign branch net operating losses for the U.K. operating companies, that were not previously recognized, have now been recognized. A valuation allowance has been recognized against these assets as management believes that it is more likely than not that a tax benefit will not be realized. Deferred tax liabilities of \$5.4 million in the Swiss branches of the U.K. operating companies that had not previously been recognized have now been recognized.

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences and carry forwards become deductible or creditable. Management considers the scheduled reversal of existing taxable temporary differences, carryback availability, projected future taxable income, and tax-planning strategies in making this assessment.

As at December 31, 2021, the Company has net operating losses carryforwards for U.S. federal income tax purposes of \$443.1 million (2020 — \$526.4 million), net operating losses carryforwards for U.K. corporate tax purposes of \$168.9 million (2020 — \$101.8 million), deferred syndicate losses of \$66.2 million (2020 — \$57.9 million), and losses in other jurisdictions of \$103.9 million (2020 — \$46.8 million).

Of the \$443.1 million that are available to offset future U.S. federal taxable income, all \$443.1 million will expire between 2031 and 2039. The amount of pre-merger net operating losses carryforwards that can be used each year is limited by section 382 to \$6.5 million per year for Aspen U.K.'s U.S. branch and \$20.8 million per year for the U.S. operating subsidiaries.

The net operating losses in the U.K. and other jurisdictions are available to offset future corporate income in those jurisdictions over an indefinite period.

For U.S. federal income tax purposes, the Company also has charitable contribution carryforwards of \$0.1 million (2020 — \$1.0 million) expiring in 2026. For U.K. corporate tax purposes, the Company has capital loss carryforwards of \$3.8 million which are available to offset future U.K. capital gains over an indefinite period, and foreign tax credit carryforwards of \$20.2 million (2020 — \$16.7 million) which are available to offset future U.K. corporate tax arising on the same foreign source of income over an indefinite period.

A valuation allowance of \$119.7 million (2020 — \$119.2 million) on U.S. deferred tax assets (which includes these loss carryforwards) has been recognized at December 31, 2021 as management believes that it is more likely than not that a tax benefit will not be realized.

A valuation allowance of \$88.7 million (2020 — \$58.6 million) has been established against U.K. deferred tax assets.

The U.K., U.S. and other jurisdictions valuation allowance combined total is \$225.9 million (2020 — \$187.1 million). The increase in the valuation allowance totals \$38.8 million (2020 — \$37.9 million increase) with \$9.6 million (2020 — \$40.8 million increase) recorded in the consolidated income statement and \$27.5 million (2020 — \$4.8 million decrease) recorded in other comprehensive income and \$1.7 million increase (2020 — \$1.9 million increase) due to translation adjustments.

12. Capital Structure

The following table provides a summary of the Company's authorized and issued share capital as at December 31, 2021 and 2020:

	As at December 31, 2021		At December 31, 2020	
	Number	\$ in Thousands	Number	\$ in Thousands
Authorized share capital:				
Ordinary Shares \$0.01 per share (2020 — \$0.01 per share	70,000,000	700	70,000,000	700
Preference Shares 0.15144558¢ per share	30,000,000	45	30,000,000	45
Total authorized share capital		745		745
Issued share capital:				
Issued ordinary shares \$0.01 per share (2020 — \$0.01 per share	60,395,839	604	60,395,839	604
Issued 5.950% preference shares of 0.15144558¢ each with a liquidation preference of \$25 per share	11,000,000	17	11,000,000	17
Issued 5.625% preference shares of 0.15144558¢ each with a liquidation preference of \$25 per share	10,000,000	15	10,000,000	15
Issued 5.625% preference shares of 0.15144558¢ represented by depositary shares, each with a liquidation preference of \$25 per share ⁽¹⁾	10,000	—	10,000	—
Total issued share capital		636		636

⁽¹⁾ Each depositary share represents a 1/1000th interest in a share of the 5.625% preference shares.

(a) Ordinary Shares

Issued Ordinary Shares. The Company's issued ordinary shares of par value \$0.01 at both December 31, 2021 and 2020 was 60,395,839. The Company did not acquire any ordinary shares for the twelve months ended December 31, 2021.

(b) Preference Shares

Preference Shares Issuance. On May 2, 2013, we issued 11,000,000 5.950% Fixed-to-Floating Rate Perpetual Non-Cumulative Preference Shares, with a liquidation preference of \$25 per share (the "5.950% Preference Shares") for an aggregate amount of \$275.0 million. Our 5.950% Preference Shares are listed on the NYSE under symbol "AHLPRC."

On September 20, 2016, the Company issued 10,000,000 shares of 5.625% Perpetual Non-Cumulative Preference Shares (the "5.625% Preference Shares"). The 5.625% Preference Shares have a liquidation preference of \$25 per share. Net proceeds were \$241.3 million, consisting of \$250.0 million of total liquidation preference less \$8.7 million of issuance expenses. The 5.625% Preference Shares are listed on the NYSE under the symbol "AHL PRD".

On August 13, 2019, the Company issued 10,000,000 depositary shares, each of which represents 1/1000th interest in a share of the newly designated 5.625% Perpetual Non-Cumulative Preference Shares. The depositary shares have a liquidation preference of \$25 per share. Net proceeds were \$241.6 million, comprising \$250.0 million of total liquidation preference less \$8.4 million of issuance expenses. The depositary shares are listed on the NYSE under the symbol "AHL PRE".

(c) Additional Paid-in Capital

Additional paid-in capital as at December 31, 2021 was \$1,514.7 million (December 31, 2020 — \$1,469.7 million). Included within additional paid-in capital is the aggregate liquidation preferences of the Company's preference shares of \$775.0 million less issue costs of \$21.5 million (December 31, 2020 — \$775.0 million less issue costs of \$21.5 million).

During the fourth quarter of 2021, our parent company Highlands Bermuda Holdco, Ltd. contributed additional capital totaling \$45.0 million.

13. Statutory Requirements and Dividends Restrictions

As a holding company, Aspen Holdings relies on dividends and other distributions from its Operating Subsidiaries to provide cash flow to meet ongoing cash requirements, including any future debt service payments and other expenses, and to pay dividends, if any, to our preference and ordinary shareholders. Aspen Holdings must comply with the provisions of the Bermuda Companies Act 1981, as amended, (the “Companies Act”) regulating the payment of dividends and distributions.

The ability of the Company’s Operating Subsidiaries to pay the Company dividends or other distributions is subject to the laws and regulations applicable to each jurisdiction, as well as the Operating Subsidiaries’ need to maintain capital requirements adequate to maintain their insurance and reinsurance operations and their financial strength ratings issued by independent rating agencies.

The company law of England and Wales prohibits Aspen U.K. or AUL from declaring a dividend to its shareholders unless it has “profits available for distribution.” The determination of whether a company has profits available for distribution is based on its accumulated realized profits and other distributable reserves less its accumulated realized losses. While the U.K. insurance regulatory laws impose no statutory restrictions on a general insurer’s ability to declare a dividend, the rules of the Prudential Regulation Authority (the “PRA”) require each insurance company within its jurisdiction to maintain its solvency margin at all times. Accordingly, Aspen U.K., AMAL and AUL may not pay a dividend if the payment of such dividend would result in their SCR coverage ratio falling below certain levels. In addition, any future changes regarding regulatory requirements, including those described above, may restrict the ability of Aspen U.K., AMAL and AUL to pay dividends in the future. As at December 31, 2021, Aspen U.K. had an accumulated balance of retained losses of approximately \$306.3 million and AUL had an accumulated balance of retained losses of approximately £122.1 million. Aspen U.K. held a capital contribution reserve of \$655.0 million as at December 31, 2021 which, under certain circumstances, could be distributable.

Aspen Bermuda must comply with the provisions of the Companies Act and the Insurance Act regulating the payment of dividends and distributions. Aspen Bermuda may not in any financial year pay dividends which would exceed 25% of its total statutory capital and surplus, as shown on its statutory balance sheet in relation to the previous financial year, unless it files with the BMA a solvency affidavit at least seven days in advance of payment. As at December 31, 2021, 25% of Aspen Bermuda’s statutory capital and surplus amounted to \$326.4 million. Aspen Bermuda must also obtain the prior approval of the BMA before reducing its total statutory capital as set out in its previous year’s financial statements by 15% or more.

Under both North Dakota and Texas law, insurance companies may only pay dividends out of earned surplus as distinguished from contributed surplus. As such, Aspen Specialty and AAIC could not pay a dividend as at December 31, 2021 without prior regulatory approval.

Actual and required statutory capital and surplus for the principal operating subsidiaries of the Company, excluding its Lloyd’s syndicate, as at December 31, 2021 and December 31, 2020 were estimated as follows:

	As at December 31, 2021		
	U.S.	Bermuda	U.K.
	(\$ in millions)		
Required statutory capital and surplus	\$ 561.2	\$ 683.7	\$ 800.7
Actual statutory capital and surplus	\$ 889.7	\$ 1,141.0	\$ 963.6

	As at December 31, 2020		
	U.S.	Bermuda	U.K.
	(\$ in millions)		
Required statutory capital and surplus	\$ 504.8	\$ 632.5	\$ 786.0
Actual statutory capital and surplus	\$ 606.2	\$ 1,147.5	\$ 969.5

As the sole corporate member of our Lloyd’s Syndicate, AUL was required to hold capital at Lloyd’s of \$752.0 million as at December 31, 2021, adjusting funding to meet this level on an annual basis in the following Q2 and not holding less than 90% of this amount at any time. As at December 31, 2021, AUL had capital at Lloyd’s of \$704.0 million of which \$531.2 million was provided as Funds at Lloyd’s by Aspen Bermuda.

The Bermuda Monetary Authority is the group supervisor of the Company. The laws and regulations of Bermuda require that the Company maintain a minimum amount of group statutory capital and surplus based on the enhanced capital requirement using the group standardized risk-based capital model of the Bermuda Monetary Authority. The Company is also

subject to an early-warning level based on 120% of the enhanced capital requirement which may trigger additional reporting requirements or other enhanced oversight. The statutory capital requirements of our Operating Subsidiaries are set out above. To the extent that these requirements are met, we do not anticipate any dividend restrictions arising as a result of the Company's enhanced capital requirement. For more information on the Company's regulatory requirements, refer to Item 4, "Information on the Company — Regulatory Matters" above.

14. Dividends

Dividends. On March 4, 2022, the Company's Board of Directors declared the following dividends:

	Dividend	Payable on:	Record Date:
5.950% Preference Shares (AHL PRC)	\$ 0.3719	April 1, 2022	March 15, 2022
5.625% Preference Shares (AHL PRD)	\$ 0.3516	April 1, 2022	March 15, 2022
5.625% Preference Shares, represented by depositary shares (AHL PRE) ⁽¹⁾	\$ 351.56	April 1, 2022	March 15, 2022

⁽¹⁾ The newly-designated 5.625% Preference Shares are represented by depositary shares, each representing a 1/1000th interest in a share of the 5.625% Preference Shares. The dividend paid per depositary share is likewise 1/1000th of the declared dividend, equivalent to \$0.35156 per depositary share.

15. Retirement Plans

The Company operates defined contribution retirement plans for the majority of its employees at varying rates of their salaries. Total contributions by the Company to the retirement plans were \$13.5 million in the twelve months ended December 31, 2021 (2020 — \$12.1 million, 2019 — \$12.9 million).

16. Share-Based Payments and Long-Term Incentive Plan

In 2019, the Company implemented a new long-term incentive scheme, under which annual awards are split equally between Performance Units and Exit Units. Performance Units vest after two years subject to the Company achieving pre-determined growth in book value per share targets. Exit Units vest upon change of control (Sale or IPO) and achieving pre-determined multiples of invested capital return targets. Both Performance Units and Exit Units are cash-based awards.

The Company's total share-based compensation / long-term incentive plan expense for the twelve months ended December 31, 2021 was \$0.5 million (December 31, 2020 — \$2.1 million), which primarily related to a charge of \$0.5 million (December 31, 2020 — \$1.3 million) in relation to Performance Units, \$Nil (December 31, 2020 — \$0.5 million) in relation to previously awarded deferred cash awards and Nil (December 31, 2020 — \$0.3 million) in relation to other share-based compensation expense. The income tax effect of this is not considered to be material.

17. Intangible Assets and Goodwill

The following table provides a summary of the Company's intangible assets for the twelve months ended December 31, 2021 and 2020:

	Twelve Months Ended December 31, 2021				
	Beginning of the Year	Additions/(Disposals)	Amortization	Impairment	End of the Year
	(\$ in millions)				
Intangible Assets					
Trademarks	\$ 1.6	\$ —	\$ (0.3)	\$ —	\$ 1.3
Agency Relationships	0.6	—	(0.6)	—	—
Non-compete Agreements	—	—	—	—	—
Insurance Licenses	16.7	—	—	—	16.7
Goodwill	3.9	—	—	—	3.9
Total	\$ 22.8	\$ —	\$ (0.9)	\$ —	\$ 21.9

	Twelve Months Ended December 31, 2020				
	Beginning of the Year	Additions/(Disposals)	Amortization	Impairment	End of the Year
	(\$ in millions)				
Intangible Assets					
Trademarks	\$ 1.9	\$ —	\$ (0.3)	\$ —	\$ 1.6
Agency Relationships	1.2	—	(0.6)	—	0.6
Renewal Rights	—	—	—	—	—
Non-compete Agreements	0.2	—	(0.2)	—	—
Insurance Licenses	16.7	—	—	—	16.7
Goodwill	3.9	—	—	—	3.9
Total	\$ 23.9	\$ —	\$ (1.1)	\$ —	\$ 22.8

Aspen's intangible assets relate to trademarks, contracts to sell products through independent broker and agents (Agency Relationships), an agreement for renewal rights with Liberty Specialty Markets Limited, non-compete agreements and licenses to trade in the U.S. and U.K.

In addition, Aspen has recognized goodwill of \$2.1 million on the acquisition of equity voting interest of Blue Waters, a specialist marine insurance agency in October 2016 and of \$1.8 million on the purchase in January 2017 of 49% share of Digital Re, a digital risk and specialty insurer.

The "Aspen" trademark, valued at \$1.3 million, goodwill and insurance licenses are considered to have an indefinite life and are tested annually for impairment or when events or changes in circumstances indicate that these assets might be impaired. For the years ended December 31, 2021 and December 31, 2020, the Company performed its annual qualitative assessment and determined that it was more likely than not that these were not impaired.

The remaining intangible assets, including the "Blue Waters" trademark valued at Nil, as it has been fully amortized in the year were estimated to have an economic useful life of 5 years. The Company amortizes the estimated value of these assets over their estimated useful life which is included as an expense in the income statement.

18. Operating Leases

As at December 31, 2021, the Company has recognized right-of-use operating lease assets of \$83.4 million, net of impairment and operating lease liabilities of \$115.2 million. Right-of-use operating lease assets comprise primarily of leased office real estate globally and other assets. For all office real estate leases, rent incentives, including reduced-rent and rent free periods and contractually agreed rent increases during the lease term, have been included when determining the present value of future cash flows.

As part of the Company's operating effectiveness and efficiency program, we are consolidating our office space. Where negotiations are either in advanced stages of discussion and it is probable that the sub-lease transactions will be completed, or we have agreed terms to sub-lease our office space, we have assessed our right-of-use lease assets for impairment and have recognized a \$0.4 million (2020 — \$12.9 million) charge within the period.

The Company believes its office space is sufficient to conduct its operations for the foreseeable future in these locations.

The Company has no lease transactions between related parties.

Operating lease charge. The following table summarizes the operating lease charge for the twelve months ended December 31, 2021 and 2020:

	For the Twelve Months Ended	
	December 31, 2021	December 31, 2020
	(\$ in millions)	
Amortization charge on right-of-use operating leased assets	\$ 12.0	\$ 11.8
Interest on operating lease liabilities	5.5	5.5
Operating lease charge	\$ 17.5	\$ 17.3

Lease Liabilities. The following table summarizes the maturity of lease liabilities under non-cancellable leases as of December 31, 2021 and 2020:

	December 31, 2021	December 31, 2020
	(\$ in millions)	
Operating leases — maturities		
2021	\$ —	\$ 17.2
2022	17.0	14.2
2023	17.0	13.5
2024	16.5	12.6
2025	16.1	12.2
2026	15.3	12.0
Later years	61.8	51.4
Total minimum lease payments	\$ 143.7	\$ 133.1
Less imputed interest	(28.5)	(27.1)
Total lease liabilities	\$ 115.2	\$ 106.0

Other lease information. The following table summarizes the cash flows on operating leases for the twelve months ended December 31, 2021 and 2020, and other supplemental information:

	For the Twelve Months Ended	
	December 31, 2021	December 31, 2020
	(\$ in millions)	
Cash paid for amounts included in the measurement of lease liabilities		
- Operating cash outflow from operating leases	\$ (17.5)	\$ (17.3)
Right-of-use assets obtained in exchange for lease obligations		
- Operating leases	\$ 23.9	\$ 5.0
Reduction to Right-of-use assets resulting from reductions to lease obligations		
- Operating leases	\$ 2.3	\$ 13.0
Weighted Averages		
- Operating leases, remaining lease terms (years)	8.8	9.1
- Operating leases, average discount rate	5.0 %	5.0 %

19. Related Party Transactions

Apollo's indirect subsidiary, Apollo Asset Management Europe PC LLP ("AAME"), serves as the investment manager for the Company and certain of the Company's subsidiaries, and Apollo's indirect subsidiary, Apollo Management Holdings, L.P. ("AMH"), provides the Company with management consulting services and advisory services.

Additionally, certain employees of Apollo and its affiliates serve on the Board.

A description of relationships we have with Apollo and its affiliates and transactions that have existed or that we have entered into with Apollo and its affiliates are described below.

Investment Management Relationships

AAME serves as the Company's investment manager and the investment manager for certain of our subsidiaries, and provides centralized asset management investment advisory and risk services for the portfolio of our investments and investments of such subsidiaries pursuant to the investment management agreements ("IMAs") that have been entered into with AAME.

In addition, pursuant to the IMAs, AAME may engage sub-advisors or delegates to provide certain of the investment advisory and management services to our subsidiaries. Such sub-advisors may include affiliates of AAME.

Under each of the IMAs, AAME will be paid an annual investment management fee (the “Management Fee”) which will be based on a cost-plus structure. The “cost” is comprised of the direct and indirect fees, costs, expenses and other liabilities arising in or otherwise connected with the services provided under the IMAs. The “plus” component will be a mark-up in an amount of up to 25% determined based on an applicable transfer pricing study. The Management Fee will be subject to certain maximum threshold levels, including an annual fee cap of 15 bps of the total amount of investable assets. Affiliated sub-advisors, including AMI and AMC, will also earn additional fees for sub-advisory services rendered.

During the year ended December 31, 2021, the Company recognized IMA fees of \$5.8 million (2020 — \$5.3 million), of which \$3.2 million (2020 — \$2.1 million) remains payable to AAME at year end.

Management Consulting Agreement

As previously disclosed, the Company entered into a Management Consulting Agreement, dated March 28, 2019 (the “Management Consulting Agreement”), with AMH. Pursuant to the Management Consulting Agreement, AMH will provide us with management consulting and advisory services related to the business and affairs of the Company and its subsidiaries and we will pay to AMH in consideration for its services under the Management Consulting Agreement an annual management consulting fee equal to the greater of (i) 1% of the consolidated net income of the Company and its subsidiaries for the applicable fiscal year, and (ii) \$5 million.

During the year ended December 31, 2021, the Company recognized Management Consulting fees of \$5.0 million (2020 — \$5.0 million), of which none remains payable to AMH at year end (2020 — \$0.0 million).

Other Payables to Related Parties

As at year end December 31, 2021, the Company had an intercompany payable balance of \$0.6 million (2020 — \$18.1 million), due to its parent, Highlands Bermuda Holdco, Ltd.

20. Commitments and Contingent Liabilities

(a) Restricted assets

The Company's subsidiaries are obliged by the terms of its contractual obligations to U.S. policyholders and by obligations to certain regulatory authorities to facilitate issue of letters of credit or maintain certain balances in trust funds for the benefit of policyholders.

The following table details the forms and value of Company's material restricted assets as at December 31, 2021 and 2020:

	As at December 31, 2021	At December 31, 2020
	(\$ in millions, except percentages)	
Regulatory trusts and deposits:		
Affiliated transactions	\$ 891.3	\$ 1,027.9
Third party	3,099.7	2,762.2
Letters of credit / guarantees ⁽¹⁾	539.8	516.8
Total restricted assets (excluding illiquid assets)	4,530.8	4,306.9
Other investments — real estate funds (illiquid assets)	151.3	109.4
Total restricted assets and illiquid assets	\$ 4,682.1	\$ 4,416.3
Total as percent of cash and invested assets ⁽²⁾	59.7 %	58.6 %

⁽¹⁾ As at December 31, 2021, the Company had pledged funds of \$539.8 million (December 31, 2020 — \$516.8 million) as collateral for the secured letters of credit.

⁽²⁾ Investable assets comprise total investments, cash and cash equivalents, accrued interest, receivables for securities sold and payables for securities purchased.

Investments — Equity Method. In March 2021, the company committed an additional \$0.8 million equity contribution to MVI over a 2 year period and paid \$0.4 million in the period ending December 31, 2021.

Real Estate Funds. We invest in real estate funds which, as is typical for this type of investment, have lock-up periods. A lock-up period is the initial amount of time an investor is contractually required to remain invested before having the ability to redeem. As at December 31, 2021, the lock-up periods across these funds range from one quarter to several years. Thereafter these funds could also be redeemed on a pro-rata basis depending on the liquidity position of the fund. There are no assurances as to when the Company may be able to withdraw, in whole or in part, its redemption request from the fund.

Commercial Mortgage Loans. On December 23, 2019, the Company committed \$5.0 million as an equity investment in the holding company of a multi-line reinsurer. The strategy for the multi-line reinsurer is to combine a diversified reinsurance business, focused primarily on long-tailed lines of property and casualty business and, potentially to a lesser extent, life business, with a diversified investment strategy. During the period ending December 31, 2021, \$2.5 million (December 31, 2020 \$0.5 million) capital was invested in multi-line reinsurer.

The Company's current arrangements with our bankers for the issue of letters of credit require us to provide collateral in the form of cash and investments for the full amount of all secured and undrawn letters of credit that are outstanding. We monitor the proportion of our otherwise liquid assets that are committed to trust funds or to the collateralization of letters of credit. As at December 31, 2021 and 2020, these funds amounted to approximately 59.7% of the \$7.8 billion and approximately 58.6% of the \$7.5 billion of investable assets held by the Company, respectively. We do not consider that this unduly restricts our liquidity at this time. For more information on our credit facilities and long-term debt arrangements, refer to Note 23, "Credit Facility and Long-term Debt" of these consolidated financial statements.

Funds at Lloyd's. AUL operates at Lloyd's as the corporate member for Syndicate 4711. Lloyd's determines Syndicate 4711's required regulatory capital principally through the syndicate's annual business plan. Such capital, called Funds at Lloyd's, consists of investable assets as at December 31, 2021 in the amount of \$565.8 million (2020 — \$541.4 million).

The amounts provided as Funds at Lloyd's will be drawn upon and become a liability of the Company in the event of Syndicate 4711 declaring a loss at a level that cannot be funded from other resources, or if Syndicate 4711 requires funds to cover a short term liquidity gap. The amount which the Company provides as Funds at Lloyd's is not available for distribution to the Company for the payment of dividends. Aspen Managing Agency Limited, the managing agent to Syndicate 4711, is also required by Lloyd's to maintain a minimum level of capital which as at December 31, 2021 was £0.4 million (December 31, 2020 — £0.4 million). This is not available for distribution by the Company for the payment of dividends.

U.S. Reinsurance Trust Fund. For its U.S. reinsurance activities, Aspen U.K. has established and must retain a multi-beneficiary U.S. trust fund for the benefit of its U.S. cedants so that they may take financial statement credit without the need to post cedant-specific security. The minimum trust fund amount is \$20.0 million plus an amount equal to 100% of Aspen U.K.'s U.S. reinsurance liabilities, which were \$1,470.5 million as at December 31, 2021 and \$1,455.3 million as at December 31, 2020. As at December 31, 2021, the balance (including applicable letter of credit facilities) held in the trust was \$1,581.9 million (2020 — \$1,478.0 million).

Aspen Bermuda has also established and must retain a multi-beneficiary U.S. trust fund for the benefit of its U.S. cedants so that they may take financial statement credit without the need to post cedant-specific security. The minimum trust fund amount is \$20.0 million plus an amount equal to 100% of Aspen Bermuda's liabilities to its U.S. cedants which was \$450.4 million and \$382.8 million as at December 31, 2021 and 2020, respectively. As at December 31, 2021, the balance held in the U.S. trust fund and other Aspen Bermuda trusts was \$519.7 million (2020 — \$572.3 million).

U.S. Surplus Lines Trust Fund. Aspen U.K. and Syndicate 4711 have also established a U.S. surplus lines trust fund with a U.S. bank to secure liabilities under U.S. surplus lines policies. The balance held in trust as at December 31, 2021 was \$216.0 million (2020 — \$208.0 million).

U.S. Regulatory Deposits. As at December 31, 2021, Aspen Specialty had a total of \$6.9 million (2020 — \$6.7 million) on deposit with six U.S. states in order to satisfy state regulations for writing business in those states. AAIC had a further \$6.4 million (2020 — \$6.1 million) on deposit with twelve U.S. states.

Canadian Trust Fund. Aspen U.K. has established a Canadian trust fund with a Canadian bank to secure a Canadian insurance license. As at December 31, 2021, the balance held in trust was CAD\$196.8 million (2020 — CAD\$156.8 million).

Australian Trust Fund. Aspen U.K. has established an Australian trust fund with an Australian bank to secure policyholder liabilities and as a condition for maintaining an Australian insurance license. As at December 31, 2021, the balance held in trust was AUD A\$226.6 (2020 — AUD\$256.6 million).

Swiss Trust Fund. Aspen U.K. has established a Swiss trust fund with a Swiss bank to secure policyholder liabilities and as a condition for maintaining a Swiss insurance license. As at December 31, 2021, the balance held in trust was CHF8.0 million (2020 — CHF8.0 million).

Singapore Fund. Aspen U.K. has established a segregated Singaporean bank account to secure policyholder liabilities and as a condition for maintaining a Singaporean insurance license and meet local solvency requirements. As at December 31, 2021, the balance in the account was SGD S\$178.0 (2020 — SGD\$148.9 million).

(b) Variable interest entities

As at December 31, 2021, the Company had investments in one (December 31, 2020 — one) variable interest entities, Peregrine Reinsurance Ltd.

Peregrine Reinsurance Ltd. For further information regarding the Company's investment in Peregrine Reinsurance Ltd, refer to Note 5, "Variable Interest Entities" of these consolidated financial statements.

(c) Contingent liabilities

In common with the rest of the insurance and reinsurance industry, the Company is also subject to litigation and arbitration in the ordinary course of business. The Company's Operating Subsidiaries are regularly engaged in the investigation, conduct and defense of disputes, or potential disputes, resulting from questions of insurance or reinsurance coverage or claims activities. Pursuant to insurance and reinsurance arrangements, many of these disputes are resolved by arbitration or other forms of alternative dispute resolution. Such legal proceedings are considered in connection with estimating the Company's Insurance Reserves — Loss and Loss Adjustment Expenses, as provided on the Company's consolidated balance sheet.

In some jurisdictions, noticeably the U.S., a failure to deal with such disputes or potential disputes in an appropriate manner could result in an award of "bad faith" punitive damages against the Company's Operating Subsidiaries. In accordance with ASC 450-20-50-4b, for (a) reasonably possible losses for which no accrual is made because any of the conditions for accrual in ASC 450-20-25-2 are not met and (b) reasonably possible losses in excess of the amounts accrued pursuant to ASC 450-20-30-1, the Company will provide an estimate of the possible loss or range of possible loss or state that such an estimate cannot be made.

As at December 31, 2021, it was the opinion of the Company's management based on available information that the probability of the ultimate resolution of pending or threatened litigation or arbitrations having a material effect on the Company's financial condition, results of operations or liquidity would be remote.

21. Concentrations of Credit Risk

The Company is potentially exposed to concentrations of credit risk in respect of amounts recoverable from reinsurers, investments and cash and cash equivalents, and insurance and reinsurance balances owed by the brokers with whom the Company transacts business.

The Company defines credit risk tolerances in line with the risk appetite set by our Board and they, together with the group's risk management function, monitor exposures to individual counterparties. Any exceptions are reported to senior management and the Risk Committee of the Board of Directors.

Reinsurance recoverables

The total amount recoverable by the Company from reinsurers as at December 31, 2021 was \$3,298.1 million (2020 — \$3,195.2 million) of which \$1,981.4 million was uncollateralized (2020 — \$2,010.0 million). As at December 31, 2021, of the Company's uncollateralized reinsurance recoverables 10.8% (2020 — 11.0%) were with Munich Re which is rated A+ by A.M. Best and AA- by S&P, 15.9% (2020 — 13.4%) were with Everest Re which is rated A+ by A.M. Best and A+ by S&P, and 9.3% (2020 — 9.2%) were with Lloyd's which is rated A by A.M. Best and A+ by S&P. These are the Company's largest exposures to individual reinsurers.

On June 16, 2016, the FASB issued ASU 2016-13, "*Financial Instruments - Credit Losses (Topic 326)*" which introduced a new impairment model, known as the current expected loss model ("CECL"), which is based on expected losses rather than incurred losses. Under the new credit loss model, the Company would recognize an allowance for its estimate of expected credit losses and this would apply to reinsurance receivables. Following the adoption of this ASU with effect from January 1, 2020, the Company recognized a reduction in the Company's reinsurance recoverables by \$3.8 million. For the twelve months ended December 31, 2021 there was a decrease in the CECL allowance on reinsurance recoverables of \$0.5 million (December 31, 2020 — \$0.1 million increase).

Underwriting premium receivables

The total underwriting premium receivable by the Company as at December 31, 2021 was \$1,304.6 million (2020 — \$1,185.0 million). As at December 31, 2021, \$35.4 million of the total underwriting premium receivable balance has been due for settlement for more than one year. The Company assesses the recoverability of premium receivables through a review of policies and the concentration of receivables by broker. Allowance for credit losses of \$30.2 million as at December 31, 2021 (2020 — \$34.0 million) for underwriting premiums unlikely to be collected.

Investments and cash and cash equivalents

The Company's investment policies include specific provisions that limit the allowable holdings of a single issue and issuer. As at December 31, 2021, there were no investments in any single issuer, other than the U.S. government, U.S. government agencies, U.S. government sponsored enterprises, the Canadian government and the U.K. government in excess of 2% of the aggregate investment portfolio.

Balances owed by brokers

The Company underwrites a significant amount of its business through brokers and a credit risk exists should any of these brokers be unable to fulfill their contractual obligations in respect of insurance or reinsurance balances due to the Company. The following table shows the largest brokers that the Company transacted business within the three years ended December 31, 2021 and the proportion of gross written premiums from each of those brokers.

	Twelve Months Ended December 31,		
	2021	2020	2019
	(in percentages)		
Aon Corporation	17.3 %	15.8 %	13.4 %
Marsh & McLennan Companies, Inc.	17.5	15.4	13.6
Willis Group Holdings, Ltd.	9.6	10.4	10.3
Other brokers/non-broker sources ⁽¹⁾	55.6	58.4	62.7
Total	100.0 %	100.0 %	100.0 %
Gross written premiums (\$ millions)	\$ 3,938.4	\$ 3,698.5	\$ 3,442.4

⁽¹⁾ No other individual broker accounted for more than 10% of total gross written premiums.

22. Reclassifications from Accumulated Other Comprehensive Income

The following table sets out the components of the Company's AOCI that are reclassified into the audited condensed consolidated statement of operations for the twelve months ended December 31, 2021 and 2020:

Details about the AOCI Components	Amount Reclassified from AOCI		Affected Line Item in the Consolidated Statement of Operations
	Twelve Months Ended December 31, 2021	Twelve Months Ended December 31, 2020	
	(\$ in millions)		
Available for sale securities:			
Realized (gains) on sale of securities	\$ (24.8)	\$ (69.3)	Realized and unrealized investment gains
Realized losses on sale of securities	4.4	2.2	Realized and unrealized investment losses
	(20.4)	(67.1)	Income/(loss) from operations before income tax
Tax on net realized gains of securities	—	—	Income tax (expense)/benefit
	<u>\$ (20.4)</u>	<u>\$ (67.1)</u>	Net income/(loss)
Realized derivatives:			
Net realized gains on settled derivatives	(6.2)	0.3	General, administrative and corporate expenses
Tax on settled derivatives	—	—	Income tax (expense)/benefit
	<u>\$ (6.2)</u>	<u>\$ 0.3</u>	Net income/(loss)
Total reclassifications from AOCI to the statement of operations, net of income tax	<u>\$ (26.6)</u>	<u>\$ (66.8)</u>	Net income/(loss)

23. Credit Facility and Long-term Debt

In the normal course of its operations, the Company enters into agreements with financial institutions to obtain financing through secured and unsecured credit facilities.

Credit Agreement. On December 1, 2021, Aspen Holdings and certain of its direct or indirect subsidiaries (collectively, the "Borrowers") entered into a Third Amended and Restated Credit Agreement (the "Credit Agreement") with various lenders and Barclays Bank plc, as administrative agent, which amends and restates the Amended and Restated Credit Agreement, dated as of June 12, 2013 and the Second Amended and Restated Credit Agreement, dated as of March 27, 2017, among Aspen Holdings, certain subsidiaries thereof, various lenders and Barclays Bank plc, as administrative agent. The Credit Agreement will be used by the Borrowers to finance the working capital needs of the Aspen Holdings and its subsidiaries, for letters of credit in connection with the insurance and reinsurance businesses of the Company and its subsidiaries and borrowings for other general corporate purposes. Initial availability under the Credit Agreement is \$300,000,000 and the Company has the right to request (subject to the terms and conditions of the Credit Agreement) an increase to the credit facility by up to \$100,000,000. The Credit Agreement will expire on December 1, 2026.

As at December 31, 2021, \$100,000,000 in borrowings were outstanding under the Credit Agreement. The fees and interest rates on the loans and the fees on the letters of credit payable by the Borrowers under the Credit Agreement are based upon the credit ratings for the Company's long-term unsecured senior, non-credit enhanced debt rating of the Company, as determined by S&P and Moody's. In addition, the fees for a letter of credit vary based upon whether the applicable Borrower has provided collateral (in the form of cash or qualifying debt securities) to secure its reimbursement obligations with respect to such letter of credit.

Under the Credit Agreement, the Company must not permit (a) consolidated tangible net worth as at the last day of each fiscal quarter of the Company to be less than the sum of (i) \$2,019,600,000, (ii) 25% of consolidated net income during the period from January 1, 2021 to and including such last day of such fiscal quarter (if positive) and (iii) 25% of the aggregate net cash proceeds of all issuances by the Company of shares of its capital stock during the period from January 1, 2021 to and including such last day of such fiscal quarter, (b) the ratio of its total consolidated debt to the sum of such debt plus our consolidated tangible net worth to exceed 35% as at the last day of any fiscal quarter of the Company or (c) any material insurance subsidiary to have a financial strength rating of less than "B++" from A.M. Best. The Credit Agreement contains other customary affirmative and negative covenants, including (subject to various exceptions) restrictions on the ability of the Company and its subsidiaries to incur indebtedness, create or permit liens on their assets, engage in mergers or consolidations, dispose of assets, pay dividends or other distributions, purchase or redeem the Company's equity securities, make investments and enter into transactions with affiliates. In addition, the Credit Agreement has customary events of default, including (subject to certain materiality thresholds and grace periods) payment default, failure to comply with covenants, material inaccuracy of representation or warranty, bankruptcy or insolvency proceedings, change of control and cross-default to other debt agreements.

Other Credit Facilities.

(i) On June 26, 2020, Aspen Bermuda and Citibank Europe plc ("Citi Europe") amended the committed letter of credit facility, dated July 30, 2012, as amended with effect on June 30, 2014, June 30, 2016, June 30, 2018 and September 20, 2019 (the "LOC Facility"). The latest amendment to the LOC Facility extends the term to June 30, 2022. The maximum aggregate amount available under the LOC Facility is \$500.0 million. Under the LOC Facility, Aspen Bermuda will pay to Citi Europe (a) a letter of credit fee based on the available amounts of each letter of credit and (b) a commitment fee, which varies based upon usage, on the unutilized portion of the LOC Facility. Aspen Bermuda will also pay interest on the amount drawn by any beneficiary under the LOC Facility at a rate per annum of LIBOR plus 1% (plus reserve asset costs, if any) from the date of drawing until the date of reimbursement by Aspen Bermuda. In addition, Aspen Bermuda and Citi Europe entered into an uncommitted letter of credit facility whereby Aspen Bermuda has the ability to request letters of credit under this facility subject to the prior approval of Citi Europe. The fee associated with the uncommitted facility is a letter of credit fee based on the available amounts of each letter of credit issued under the uncommitted facility. Both the LOC Facility and the uncommitted facility are used to secure obligations of Aspen Bermuda to its policyholders. In addition to these facilities, we also use regulatory trusts to secure our obligations to policyholders.

The terms of a pledge agreement between Aspen Bermuda and Citi Europe (pursuant to an assignment agreement dated October 11, 2006) dated January 17, 2006, as amended, were also amended on December 18, 2014 to change the types of securities or other assets that are acceptable as collateral under the New LOC Facility. All other agreements relating to Aspen Bermuda's LOC Facility, which now apply to the LOC Facility with Citi Europe, as previously filed with the SEC, remain in full force and effect. As at December 31, 2021, we had \$452.4 million of outstanding collateralized letters of credit under the LOC Facility (December 31, 2020 — \$444.2 million).

(ii) On February 7, 2019, Aspen European and Aspen Holdings (acting as guarantor of Aspen European) entered into a letter of credit facility for the purpose of obtaining a letter of credit in favor of Aspen U.K. for a sum not to exceed \$100 million to provide approved regulatory capital for Aspen U.K. A letter of credit was issued in favor of Aspen U.K. for a sum of \$100 million which expires on February 11, 2023.

(iii) On November 1, 2021, AUL and Aspen Holdings (acting as guarantor of AUL), entered into a letter of credit facility agreement for the account of AUL, pursuant to which a syndicate of lenders issued a several letter of credit in an aggregate amount of \$195,000,000, for the benefit of Lloyd's, to support AUL's Funds at Lloyd's requirements in connection with the 2022 year of account at Lloyd's. This replaced the letter of credit facility agreement, dated November 3, 2020, entered into between AUL, Aspen Holdings (acting as guarantor of AUL) and various lenders, for the account of AUL, pursuant to which a lender provided a maximum aggregate amount of \$95,000,000 to support AUL's Funds at Lloyd's requirements in connection with the 2021 year of account at Lloyd's, as amended on May 7, 2021. This letter of credit facility was subsequently increased to \$235,000,000 on May 6, 2022 in connection with the 2022 year of account mid-year capital coming-into-line process.

(iv) On November 30, 2021, AUL and Aspen Holdings (acting as guarantor of AUL) amended a Funds at Lloyd's Facility Agreement dated November 25, 2020, for the account of AUL. This facility provides that a maximum aggregate amount of up to \$80 million of acceptable securities may be deposited with, and for the benefit of, Lloyd's on behalf of AUL to support AUL's Funds at Lloyd's requirements in connection with the 2022 year of account at Lloyd's.

(v) On November 30, 2021, AUL and Aspen Bermuda (acting as AUL's guarantor) amended a Funds at Lloyd's Facility Agreement dated November 30, 2021, for the account of AUL. This facility terminates on November 30, 2022 and provides that a maximum aggregate amount of up to \$150 million of acceptable securities may be deposited with, and for the

benefit of, Lloyd's on behalf of AUL to support AUL's Funds at Lloyd's requirements in connection with the 2022 year of account at Lloyd's. As at December 31, 2021, \$150 million in securities were pledged on behalf of AUL under this facility.

(vi) On November 5, 2021, Aspen Bermuda entered into an uncommitted Continuing Agreement for Standby Letters of Credit and Demand Guarantees, where Aspen Bermuda has the ability to request letters of credit to be used in support of policyholder obligations with the consent of the lender. The fee associated with this facility is a facility fee based on the aggregate face amount of outstanding letters of credit. As at December 31, 2021 we had \$90 million of outstanding collateralized letters of credit under this facility.

(vii) On April 1, 2021, the Company's subsidiaries, AAIC and Aspen Specialty, each established a secured line of credit at Federal Home Loan Bank of Boston ("FHLBB"). Advances may be used to support general corporate purposes. The maximum amount available under these facilities will vary based on the borrower's net admitted assets and the lender's underwriting criteria. Aspen Specialty's maximum borrowing capacity available from the FHLBB is approximately \$182 million. Under Texas state insurance law, without the prior consent of the Texas Department of Insurance, the amount of assets AAIC may pledge to secure debt obligations is limited to 10% of its reserve assets, resulting in a maximum borrowing capacity for AAIC under its FHLBB facility of approximately \$123 million. Neither AAIC nor Aspen Specialty expects to draw on these facilities in the near future.

(viii) On November 5, 2021, Aspen Holdings entered into a letter of credit facility agreement. The letter of credit issued under this facility is for the benefit of Aspen Bermuda, as beneficiary, and has been applied towards the eligible capital of Aspen Bermuda, and classified as ancillary Tier 3 capital of such entity, in accordance with applicable Bermuda laws and regulations. The total commitment under the facility is \$100,000,000.

(ix) On December 29, 2021, Aspen Holdings entered into a committed letter of credit facility agreement. The letter of credit issued under this facility is for the benefit of Aspen Bermuda, as beneficiary, and has been applied towards the eligible capital of Aspen Bermuda, and classified as ancillary Tier 3 capital of such entity, in accordance with applicable Bermuda laws and regulations. The total commitment under the facility is \$75,000,000.

The above credit facilities include certain restrictive covenants customary for facilities of this type, including restrictions on indebtedness, consolidated tangible net worth, and minimum financial strength ratings, with such financial covenants largely consistent with these set forth in the Credit Agreement. In addition, the agreements include default covenants, which could require the Company to fully secure the outstanding amounts thereunder and/or result in the Company not being allowed to issue any new letters of credit.

Long-term Debt. On December 15, 2010, the Company closed its offering of \$250.0 million 6.00% Senior Notes due December 15, 2020. The net proceeds from this offering, before offering expenses, were \$247.5 million. On June 18, 2018, we redeemed \$125.0 million of our 6.00% Senior Notes due 2020 resulting in a realized loss, or make-whole payment, of \$8.6 million. On September 30, 2019, we redeemed the remaining \$125.0 million of our 6.00% Senior Notes due 2020 resulting in a realized loss, or make-whole payment of \$5.5 million.

On November 13, 2013, the Company closed its offering of \$300.0 million 4.65% Senior Notes due November 15, 2023 (the "2023 Senior Notes"). The net proceeds from the 2023 Senior Notes offering, before offering expenses, were \$299.7 million and a portion of the proceeds was used to redeem the then outstanding 2014 Senior Notes. Subject to applicable law, the 2023 Senior Notes will be the senior unsecured obligations of Aspen Holdings and will rank equally in right of payment with all of our other senior unsecured indebtedness from time to time outstanding.

Subject to certain exceptions, so long as any of the senior notes described above remain outstanding, the Company has agreed that neither the Company nor any of its subsidiaries will (i) create a lien on any shares of capital stock of any designated subsidiary (currently Aspen U.K. and Aspen Bermuda, as defined in the Indenture), or (ii) issue, sell, assign, transfer or otherwise dispose of any shares of capital stock of any designated subsidiary. Certain events will constitute an event of default under the Indenture, including default in payment at maturity of any of our other indebtedness in excess of \$50.0 million.

The following table summarizes our contractual obligations under long-term debt as at December 31, 2021.

Payments Due By Period					
Contractual Basis	Less than 1 year	1-3 years	3-5 years	More than 5 years	Total
	(\$ in millions)				
Long-term Debt Obligations	\$ —	\$ 300.0	\$ —	\$ —	\$ 300.0

The Senior Notes obligation disclosed above does not include the \$14.0 million annual interest payable associated with the Senior Notes.

24. Allowance for Expected Credit Losses

The following tables summarize the Company's allowance for expected credit losses for the twelve months ended December 31, 2021 in investments, reinsurance recoverables and receivables following the adoption of ASU 2016-13 *Financial Instruments - Credit Losses (Topic 326)*:

	Twelve Months Ended December 31, 2021			
	(\$ in millions)			
	Investments	Reinsurance Recoverables	Receivables	Total
Opening value as at January 1, 2021	\$ 0.2	\$ 3.8	\$ 34.0	\$ 38.0
Movement of the allowance for credit losses during the year	2.5	(0.5)	(3.8)	(1.8)
Closing value as at December 31, 2021	\$ 2.7	\$ 3.3	\$ 30.2	\$ 36.2

	Twelve Months Ended December 31, 2020			
	(\$ in millions)			
	Investments	Reinsurance Recoverables	Receivables	Total
Opening value as at January 1, 2020	\$ 0.6	\$ 3.7	\$ 23.0	\$ 27.3
Movement of the allowance for credit losses during the year	(0.4)	0.1	11.0	10.7
Closing value as at December 31, 2020	\$ 0.2	\$ 3.8	\$ 34.0	\$ 38.0

5. Subsequent Events

Australian Coverholder and Service Company. Effective January 1, 2022, Aspen Australia Service Company is acting as a coverholder to place business on AMAL, in respect of reinsurance business written via Australia.

Loss Portfolio Transfer Agreement. On January 10, 2022, Aspen Holdings and certain of its subsidiaries (“Aspen”) entered into an Amended and Restated Reinsurance Agreement with a subsidiary of Enstar Group Limited (the “Agreement”), which amends and restates the Adverse Development Cover Agreement, dated as of March 2, 2020 (the “Original Agreement”), previously entered into between the parties. Under the terms of the Agreement, Enstar’s subsidiary will reinsure net losses incurred on or prior to December 31, 2019 on all of Aspen’s net loss reserves of \$3.12 billion as of September 30, 2021. The Agreement provides for a limit of \$3.57 billion in consideration for a premium of \$3.16 billion. The amount of net loss reserves ceded, as well as the premium and limit amounts provided under the Agreement, will be adjusted for claims paid between October 1, 2021 and the closing date of the transaction. The premium includes \$770.0 million of premium previously paid with respect to reserves ceded under the Original Agreement, which will continue to be held in trust accounts to secure the Enstar subsidiary’s obligations under the Agreement. The incremental new premium will initially be held in funds withheld accounts maintained by Aspen but will be released to the trust accounts maintained by the Enstar subsidiary no later than September 30, 2025. The funds withheld by Aspen will be credited with interest at an annual rate of 1.75% plus, for periods after October 1, 2022, an additional amount equal to 50% of the amount by which the total return on Aspen’s investments and cash and cash equivalents exceeds 1.75%. Under the Agreement, the Enstar subsidiary will assume claims control upon closing and entrance into an administrative services agreement.

The Agreement includes customary representations and warranties, indemnification obligations, covenants and termination rights of the parties. Completion of the transaction is subject to regulatory approvals and satisfaction of various other closing conditions. The transaction is expected to close in the first half of 2022. If the transaction cannot be completed, the Original Agreement would remain in effect.

6. Correction of Immaterial Errors

During the current year, management identified immaterial errors which resulted in the revision of the Company's comparative financial statements, as further described below:

Foreign exchange gains and losses. During the second quarter of 2021, the Company identified an error regarding incorrect treatment of foreign exchange gains and losses arising as a result of currency matching issues within Aspen U.K.’s underwriting premiums receivable. The error resulted in previous foreign exchange revaluation and translation amounts, which should have been matched with an underwriting premium receivable payment being carried over, and were incorrectly included in Aspen U.K.’s underwriting premiums receivable, thereby overstating the related asset value. As a result underwriting premiums receivable, retained earnings and accumulated other comprehensive income were corrected downward by \$89.7 million, \$2.1 million and \$87.6 million, respectively as at December 31, 2020.

Income tax expense. During the year, the Company identified an error regarding the completeness and accuracy of the information used in recognizing both current and deferred income taxes on Aspen U.K.’s branches and the associated application thereof in respect of local tax rules in the various jurisdiction. As a result, tax liability increased by \$10.3 million, retained earnings were corrected downward by \$16.0 million and accumulated other comprehensive income being corrected upward by \$5.7 million, respectively as at and for the period December 31, 2020.

Net earned premium. During the year, the Company identified immaterial differences within gross written and re-insurance premium relating to prior year which have been corrected. As a result gross written premium and underwriting premium receivable were corrected downward by \$5.1 million, retained earnings were corrected downward by \$5.3 million and reinsurance premiums payables increased by \$5.3 million, respectively as at December 31, 2020.

The Company has concluded that these errors are immaterial to the prior period financial statements of Aspen Holdings and correcting the income statement errors in the current period would likely materially misstate the current period financial statements. In accordance with U.S. GAAP, we have, therefore, corrected the errors in the comparatives of the 2021 financial statements of Aspen Holdings by adjusting 2020 and 2019 prior period information and adding disclosure of the errors.

The tables below sets out the impact of these corrections to the twelve months ended December 31, 2020 and 2019 relating to these immaterial errors:

	For the Twelve Months Ended December 31, 2020			
	(\$ in millions)			
	As Previously Reported	Corrections	As Currently Reported	
CONSOLIDATED STATEMENTS OF OPERATIONS AND OTHER COMPREHENSIVE INCOME				
Gross written premium	\$ 3,703.6	\$ (5.1)	\$ 3,698.5	
Net realized and unrealized exchange gains/(losses)	(12.4)	(1.4)	(13.8)	
Income tax expense	(8.6)	(9.8)	(18.4)	
Net Loss	\$ (40.1)	\$ (16.3)	\$ (56.4)	
	As at December 31, 2020			
	(\$ in millions)			
	As Previously Reported	Corrections	As Currently Reported	
CONSOLIDATED BALANCE SHEET				
<u>Assets</u>				
Underwriting premium receivables	\$ 1,279.8	\$ (94.8)	\$ 1,185.0	
<u>Liabilities</u>				
Reinsurance premiums payables	\$ 567.5	\$ 5.3	\$ 572.8	
Income taxes payable	\$ 3.7	\$ 5.1	\$ 8.8	
Deferred tax liability	\$ —	\$ 5.2	\$ 5.2	
<u>Equity</u>				
Opening retained earnings	\$ 1,514.6	\$ (12.2)	\$ 1,502.4	
Net (loss) for the year	\$ (40.1)	\$ (16.3)	\$ (56.4)	
<u>Accumulated Other Comprehensive Income</u>				
Cumulative foreign currency translation				
Opening balance	\$ (80.2)	\$ (85.3)	\$ (165.5)	
Changes for the period	\$ (9.6)	\$ (2.3)	\$ (11.9)	
Unrealized appreciation/(depreciation) on investments, net of taxes				
Changes for the period	\$ 102.3	\$ 5.7	\$ 108.5	

CONSOLIDATED STATEMENTS OF CASH FLOWS	As at December 31, 2020				
	(\$ in millions)				
	As Previously Reported		Corrections		As Currently Reported
Cash flows from/(used in) operating activities:					
Net (loss)	\$	(40.1)	\$	(16.3)	\$ (56.4)
Deferred tax (benefit)	\$	(5.7)	\$	4.7	\$ (1.0)
Net realized and unrealized investment foreign exchange (gains)	\$	(23.1)	\$	(2.2)	\$ (25.3)
Changes in:					
Premiums receivable	\$	71.2	\$	8.7	\$ 79.9
Income tax payable	\$	2.5	\$	5.1	\$ 7.6
Net cash from (used in) operating activities	\$	(672.7)	\$	—	\$ (672.7)

CONSOLIDATED STATEMENTS OF OPERATIONS AND OTHER COMPREHENSIVE INCOME	As at December 31, 2019				
	(\$ in millions)				
	As Previously Reported		Corrections		As Currently Reported
Net realized and unrealized exchange gains/(losses)	\$	(11.8)	\$	2.2	\$ (9.6)
Net (loss)	\$	(241.7)	\$	2.2	\$ (239.5)

		As at December 31, 2019		
		(\$ in millions)		
		As Previously Reported	Corrections	As Currently Reported
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS EQUITY				
Equity				
Opening retained earnings	\$	1,791.0	\$ (14.4)	\$ 1,776.6
Net (loss) for the year	\$	(241.7)	\$ 2.2	\$ (239.5)
Accumulated Other Comprehensive Income				
Cumulative foreign currency translation				
Opening balance	\$	(55.4)	\$ (85.1)	\$ (140.5)
Changes for the period	\$	(24.8)	\$ (0.2)	\$ (25.0)
		As at December 31, 2019		
		(\$ in millions)		
		As Previously Reported	Corrections	As Currently Reported
CONSOLIDATED STATEMENTS OF CASH FLOWS				
Cash flows from/(used in) operating activities:				
Net (loss)	\$	(241.7)	\$ 2.2	\$ (239.5)
Net realized and unrealized investment foreign exchange (gains)/losses	\$	28.1	\$ (0.2)	\$ 27.9
Changes in:				
Premiums receivable	\$	144.8	\$ (2.0)	\$ 142.8
Net cash from (used in) operating activities	\$	(337.8)	\$ —	\$ (337.8)

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ASPEN INSURANCE HOLDINGS LIMITED

SCHEDULE I - INVESTMENTS
For the Twelve Months Ended December 31, 2021, 2020 and 2019

The Company's investments comprise investments in subsidiaries.

ASPEN INSURANCE HOLDINGS LIMITED
SCHEDULE II - CONDENSED FINANCIAL INFORMATION OF REGISTRANT
BALANCE SHEETS
As at December 31, 2021 and 2020

	As at December 31, 2021	As at December 31, 2020
	(\$ in millions, except per share amounts)	
ASSETS		
Fixed income maturities (trading)	42.6	—
Cash and cash equivalents	45.0	92.4
Investments in subsidiaries ^{(1) (2)}	3,142.0	3,215.2
Intercompany funds due from affiliates	1.3	0.7
Right-of-use operating lease assets	2.5	1.0
Other assets	8.0	6.4
Total assets	<u>\$ 3,241.4</u>	<u>\$ 3,315.7</u>
LIABILITIES		
Accrued expenses and other payables	25.5	24.3
Intercompany funds due to affiliates	139.0	103.4
Long-term debt	299.9	299.9
Operating lease liabilities	2.2	0.9
Total liabilities	<u>\$ 466.6</u>	<u>\$ 428.5</u>
SHAREHOLDERS' EQUITY		
Ordinary Shares:		
60,395,839 shares of par value \$0.01 each (December 31, 2020 — 60,395,839)	\$ 0.6	\$ 0.6
Additional paid in capital	1,514.7	1,469.7
Retained earnings ⁽²⁾	1,382.5	1,397.2
Accumulated other comprehensive income, net of taxes:		
Unrealized gains on investments	34.6	192.5
(Loss)/gain on derivatives	(1.6)	4.6
Gains on foreign currency translation ⁽²⁾	(156.0)	(177.4)
Total accumulated other comprehensive (loss)/income	(123.0)	19.7
Total shareholders' equity ⁽²⁾	<u>2,774.8</u>	<u>2,887.2</u>
Total liabilities and shareholders' equity	<u>\$ 3,241.4</u>	<u>\$ 3,315.7</u>

⁽¹⁾ The Company's investment in subsidiaries are accounted for under the equity method and adjustments to the carrying value of these investments are made based on the Company's share of capital, including share of income and expenses. Changes in the value were recognized in realized and unrealized investment gains and losses in the statement of operations.

⁽²⁾ Prior period information for the periods ended December 31, 2020 have been restated to account for the corrections identified in Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" as follows:

- Investment in subsidiaries has been restated downward by \$110.4 million as at December 31, 2020
- Total shareholders' equity has been restated downward by \$110.4 million as at December 31, 2020, split between retained earnings and accumulated other comprehensive income totaling \$28.5 million and \$81.9 million, respectively.

ASPEN INSURANCE HOLDINGS LIMITED
SCHEDULE II - CONDENSED FINANCIAL INFORMATION OF REGISTRANT - Continued
STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
For the Twelve Months Ended December 31, 2021, 2020 and 2019

	Twelve Months Ended December 31, 2021	Twelve Months Ended December 31, 2020	Twelve Months Ended December 31, 2019
	(\$ in millions)		
Operating Activities:			
Equity in net earnings/(losses) of subsidiaries and other investments, equity method ⁽¹⁾	\$ (90.5)	\$ (108.4)	\$ (412.9)
Dividend income	193.0	141.5	270.0
Net realized and unrealized investment gains/(losses)	(0.5)	2.5	2.6
Total revenues	<u>102.0</u>	<u>35.6</u>	<u>(140.3)</u>
Expenses:			
General, administrative and corporate expenses	(54.6)	(74.6)	(70.2)
Interest expense	(14.3)	(14.3)	(25.7)
Other expense	(3.3)	(3.1)	(3.3)
Income/(loss) from operations before income taxes	29.8	(56.4)	(239.5)
Income tax expense	—	—	—
Net income /(loss) ⁽¹⁾	29.8	(56.4)	(239.5)
Amount attributable to non-controlling interest	—	—	1.2
Net income/(loss) attributable to Aspen Insurance Holdings Limited ordinary shareholders	<u>29.8</u>	<u>(56.4)</u>	<u>(238.3)</u>
Other comprehensive (loss)/income, net of taxes:			
Change in unrealized (losses)/gains on investments ⁽¹⁾	(158.6)	108.0	151.3
Net change from current period hedged transactions	(6.2)	0.3	4.0
Change in foreign currency translation adjustment ⁽¹⁾	21.4	(11.9)	(25.0)
Other comprehensive (loss)/income, net of tax	<u>(143.4)</u>	<u>96.4</u>	<u>130.3</u>
Comprehensive (Loss) / Income	<u>\$ (113.6)</u>	<u>\$ 40.0</u>	<u>\$ (108.0)</u>

⁽¹⁾ Equity in net earnings/(losses) of subsidiaries and other investments, Net income/ (loss) and accumulated other comprehensive (loss)/income have been restated to account for the corrections of immaterial errors identified in Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" as follows:

- Equity in net earnings/(losses) of subsidiaries and other investments, equity method, has been restated and increased losses by \$16.3 million for the twelve months ended, December 31, 2020. (decreased losses by \$2.2 million for the twelve months ended, December 31, 2019).
- Change in unrealized (losses)/gains on investments has been restated upward by \$5.7 million for the twelve months ended, December 31, 2020.
- Change in foreign currency translation adjustment has been restated downward by \$2.3 million and \$0.2 million for the twelve months ended, December 31, 2020 and 2019.

ASPEN INSURANCE HOLDINGS LIMITED
SCHEDULE II - CONDENSED FINANCIAL INFORMATION OF REGISTRANT - Continued
STATEMENTS OF CASH FLOWS
For the Twelve Months Ended December 31, 2021, 2020 and 2019

	Twelve Months Ended December 31, 2021	Twelve Months Ended December 31, 2020	Twelve Months Ended December 31, 2019
	(\$ in millions)		
Cash Flows From/(Used In) Operating Activities:			
Net income ⁽¹⁾ (excluding equity in net earnings of subsidiaries)	\$ 120.3	\$ 52.0	\$ 174.6
Adjustments:			
Realized and unrealized (gains)/losses	(6.7)	1.5	9.6
Loss/(gain) on derivative contracts	6.2	(0.3)	(4.0)
Amortization of right-to-use operating lease assets	0.5	0.4	0.3
Interest on operating lease liabilities	0.1	(0.4)	0.2
Change in other assets	(1.6)	0.5	2.1
Change in accrued expenses and other payables	1.4	15.9	(51.2)
Change in intercompany activities	35.0	41.6	(59.0)
Change in right-of use assets	(2.0)	—	—
Change in operating lease liabilities	1.5	—	(0.5)
Net cash generated by operating activities	<u>154.7</u>	<u>111.2</u>	<u>72.1</u>
Cash Flows (Used in)/From Investing Activities:			
(Purchases)/proceeds of fixed income securities	(42.6)	75.6	(75.6)
Investment in subsidiaries	(115.0)	(87.3)	(82.7)
Net cash (used in) investing activities	<u>(157.6)</u>	<u>(11.7)</u>	<u>(158.3)</u>
Cash Flows (Used in)/From Financing Activities:			
Proceeds from issuance of ordinary shares, net of issuance costs	—	—	1.4
Proceeds from issuance of preference shares, net of issuance costs	—	—	241.6
Ordinary share repurchase	—	—	(0.1)
Ordinary and preference share dividends paid	(44.5)	(44.5)	(35.9)
Repayment of long-term debt issued by Silverton	—	—	(7.7)
Make-whole payment	—	—	(5.5)
Minority interest buy-out	—	—	(0.8)
Long-term debt redeemed	—	—	(125.0)
Net cash (used in)/from financing activities	<u>(44.5)</u>	<u>(44.5)</u>	<u>68.0</u>
(Decrease)/increase in cash and cash equivalents	(47.4)	55.0	(18.2)
Cash and cash equivalents — beginning of period	92.4	37.4	55.6
Cash and cash equivalents — end of period	<u>\$ 45.0</u>	<u>\$ 92.4</u>	<u>\$ 37.4</u>

⁽¹⁾ Net income has been adjusted for the proportion due to non-controlling interest.

ASPEN INSURANCE HOLDINGS LIMITED
SCHEDULE III - SUPPLEMENTARY INSURANCE INFORMATION
For the Twelve Months Ended December 31, 2021, 2020 and 2019

Supplementary Information
(\$ in millions)

Year Ended December 31, 2021	Deferred Policy Acquisition Costs	Net Reserves for Losses and LAE	Net Reserves for Unearned Premiums	Net Premiums Earned	Net Investment Income	Losses and LAE Expenses	Policy Acquisition Expenses	Net Premium Written	General and Administrative Expenses
Reinsurance	\$ 205.2	\$ 2,148.4	\$ 688.6	\$ 1,118.8		\$ 705.2	\$ 221.6	\$ 1,199.0	\$ 121.3
Insurance	85.6	2,165.3	827.6	1,291.7		988.1	192.5	1,388.7	211.8
Total	\$ 290.8	\$ 4,313.7	\$ 1,516.2	\$ 2,410.5	\$ 147.5	\$ 1,693.3	\$ 414.1	\$ 2,587.7	\$ 333.1

Year to date December 31, 2020	Deferred Policy Acquisition Costs	Net Reserves for Losses and LAE	Net Reserves for Unearned Premiums	Net Premiums Earned ⁽¹⁾	Net Investment Income	Losses and LAE Expenses	Policy Acquisition Expenses	Net Premium Written ⁽¹⁾	General and Administrative Expenses
Reinsurance	\$ 206.8	\$ 2,095.7	\$ 617.6	\$ 1,287.7		\$ 958.6	\$ 246.0	\$ 1,297.7	\$ 110.8
Insurance	99.8	1,874.4	746.1	1,239.8		882.2	219.7	1,280.1	197.2
Total	\$ 306.6	\$ 3,970.1	\$ 1,363.7	\$ 2,527.5	\$ 154.6	\$ 1,840.8	\$ 465.7	\$ 2,577.8	\$ 308.0

Year to date December 31, 2019	Deferred Policy Acquisition Costs	Net Reserves for Losses and LAE	Net Reserves for Unearned Premiums	Net Premiums Earned	Net Investment Income	Losses and LAE Expenses	Policy Acquisition Expenses	Net Premium Written	General and Administrative Expenses
Reinsurance	\$ 210.3	\$ 2,605.9	\$ 599.9	\$ 1,255.2		\$ 917.9	\$ 264.9	\$ 1,251.1	\$ 111.7
Insurance	80.8	2,026.1	694.1	1,038.1		761.8	147.8	1,176.8	229.8
Total	\$ 291.1	\$ 4,632.0	\$ 1,294.0	\$ 2,293.3	\$ 197.3	\$ 1,679.7	\$ 412.7	\$ 2,427.9	\$ 341.5

⁽¹⁾ For the period twelve months ended December 31, 2020 net premiums written and net premiums earned have been corrected downward by \$5.1 million for immaterial errors. Refer to Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" for further details

ASPEN INSURANCE HOLDINGS LIMITED
SCHEDULE IV - REINSURANCE
For the Twelve Months Ended December 31, 2021, 2020 and 2019

Premiums Written

	Direct	Assumed	Ceded	Net Amount
	(\$ in millions)			
2021	\$ 2,341.4	\$ 1,597.0	\$ (1,350.7)	\$ 2,587.7
2020 ⁽¹⁾	\$ 2,042.1	\$ 1,656.4	\$ (1,120.7)	\$ 2,577.8
2019	\$ 1,956.9	\$ 1,485.5	\$ (1,014.5)	\$ 2,427.9

Premiums Earned

	Gross Amount	Assumed From Other Companies	Ceded to Other Companies	Net Amount	Percentage of Amount Assumed to Net
	(\$ in millions, except for percentages)				
2021	\$ 2,139.1	\$ 1,479.2	\$ (1,207.8)	\$ 2,410.5	61.4 %
2020 ⁽¹⁾	\$ 2,026.4	\$ 1,612.0	\$ (1,110.9)	\$ 2,527.5	63.8 %
2019	\$ 1,927.5	\$ 1,494.9	\$ (1,129.1)	\$ 2,293.3	65.2 %

⁽¹⁾ For the period twelve months ended December 31, 2020 net premiums written and net premiums earned have been corrected downward by \$5.1 million for immaterial errors. Refer to Note 26 in these consolidated financial statements, "Correction of Immaterial Errors" for further details

ASPEN INSURANCE HOLDINGS LIMITED
SCHEDULE V - VALUATION AND QUALIFYING ACCOUNTS
For the Twelve Months Ended December 31, 2021, 2020 and 2019

The following table shows the movement in the Company's bad debt provision during the twelve months ended December 31, 2021, 2020 and 2019:

	Balance at Beginning of Year	Charged to Costs and Expenses	Charged to Other Accounts	Deductions	Balance at End of Year
Provisions for Bad Debt	(\$ in millions)				
2021					
Premiums receivable from underwriting activities	\$ 34.0	\$ (3.8)	\$ —	\$ —	\$ 30.2
Reinsurance	\$ —	\$ —	\$ —	\$ —	\$ —
2020					
Premiums receivable from underwriting activities	\$ 23.0	\$ 11.0	\$ —	\$ —	\$ 34.0
Reinsurance	\$ —	\$ —	\$ —	\$ —	\$ —
2019					
Premiums receivable from underwriting activities	\$ 16.2	\$ 6.8	\$ —	\$ —	\$ 23.0
Reinsurance	\$ —	\$ —	\$ —	\$ —	\$ —

REPORT OF THE INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Aspen Insurance Holdings Limited

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Aspen Insurance Holdings Limited and subsidiaries (the “Company”) as of December 31, 2021 and 2020, the related consolidated statements of operations and other comprehensive income, changes in shareholders’ equity, and cash flows for each of the years in the three-year period ended December 31, 2021, and the related notes and financial statement schedules I to V (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Estimate of claims Incurred but not reported

As discussed in Note 2(b) and Note 10 to the consolidated financial statements, the liability for unpaid losses and loss adjustment expense (LAE) represents reserves established for the total unpaid cost of claims in respect of events that have occurred by the balance sheet date, including the Company’s estimate of the total cost of claims incurred but not yet reported (“IBNR”). As of December 31, 2021, the Company’s total liability for unpaid losses and loss adjustment expenses including IBNR is \$7,611.8 million.

We identified the estimate of IBNR included in unpaid losses and LAE as a critical audit matter. Specialized skills and knowledge were required to assess the actuarial methodologies and assumptions used to estimate the IBNR included in unpaid losses and LAE, including loss ratios on the most recent accident years and loss development patterns.

The following are the primary procedures we performed to address this critical audit matter.

We evaluated the design of an internal control related to the Company’s process to estimate IBNR, specifically relating to the reserving methodologies and assumptions applied.

We involved actuarial professionals with specialized skill and knowledge who assisted in:

- developing a range of independent estimates of reserves, including IBNR, for selected lines of business using the Company's actual historical data and loss development patterns, as well as industry data and other benchmarks, and comparing to management's actuarially determined reserve estimates
- evaluating management's actuarial reserving methodologies and actuarial assumptions impacting unpaid losses and loss adjustment expenses, including IBNR, and the consistency of management's approach period-over-period by comparing them to generally accepted actuarial methods
- evaluating the Company's historical ability to estimate unpaid losses by comparing the progression of claims paid against the estimated liability for unpaid losses.

Fair value of privately-held investments

As discussed in Notes 2(c) and 6 to the consolidated financial statements, the Company has established policies and procedures for determining the fair value of privately-held investments. As of December 31, 2021, the recorded balances of the Company's privately-held investments classified as Level 3 in the fair value hierarchy were \$307.1 million. The Company's privately-held investments primarily comprise commercial mortgage loans and middle-market loans.

We identified the assessment of fair value of privately-held investments as a critical audit matter. Due to the significant measurement uncertainty associated with the fair value of such investments, subjective auditor judgement was required to evaluate the models' significant assumptions which were not directly observable in financial markets, such as the discount rate and the timing of cashflows. There was also a high degree of subjectivity and auditor judgement in evaluating the methodology used to develop the discounted cash flow models.

The following are the primary procedures we performed to address this critical audit matter:

We evaluated the Company's methodology and its ability to produce a fair value estimate in accordance with Financial Accounting Standards Board Topic ASC 820, *Fair Value Measurement*, for privately-held investments. We involved financial instrument valuation professionals with specialized skills and knowledge, who assisted in evaluating the reasonableness of the fair value for a selection of privately-held investments by developing an independent estimate and comparing it to the Company's fair value measurement. As part of this independent estimate, the valuation professionals developed certain independent pricing assumptions, such as discount rate and timing of cashflows, based on publicly available market information.

Estimate of reinsurance recoverables on claims incurred but not reported

As discussed in Note 2(b) and Note 7 to the consolidated financial statements, the estimated amounts recoverable from reinsurers on unpaid losses and loss adjustment expenses are reflected as assets in the financial statements. As of December 31, 2021, the Company's total reinsurance recoverables including reinsurance recoverables on claims incurred but not reported ("Ceded IBNR") were \$3,195.2 million.

We identified the estimate of reinsurance recoverables on Ceded IBNR as a critical audit matter. Subjective and complex auditor judgement, including specialized skills and knowledge, was involved in evaluating the assumptions used for net reserving, including net and gross loss ratios, across accident years and lines of business, and allocation of gross losses to underwriting years to apply retroactive contract.

The following are the primary procedures we performed to address this critical audit matter.

We evaluated the design of an internal control related to the estimate of reinsurance recoverables on Ceded IBNR specifically relating to the review of net reserving assumptions applied.

We involved actuarial professionals with specialized skill and knowledge who assisted in:

- assessing the change in Company's ratio of net loss and loss adjustment expenses to gross loss and loss adjustment expenses and net earned premium to gross earned premium, from December 31, 2020 to December 31, 2021 for the re-projected classes by comparing them to those expected from the Company's outwards reinsurance programme

- developing a range of independent estimates of net reserves for selected lines of business using the Company's actual historical data and loss development patterns, including the historical net loss and loss adjustment expense and net earned premium, as well as industry data and other benchmarks and comparing to the Company's actuarially determined estimates
- assessing the Company's ratio of net loss and loss adjustment expenses to gross loss and loss adjustment expenses by comparing against the Company's ratio of net earned premium to gross earned premium by class of business for the re-projected classes
- assessing the allocation of gross losses to 2020 and prior underwriting years to evaluate whether these losses should be covered by Adverse Development Cover retroactive contract

/s/ KPMG LLP

KPMG LLP

We have served as the Company's auditor since 2002.

London, United Kingdom

May 16, 2022

Item 19. Exhibit Index

(a) Financial Statements, Financial Statement Schedules and Exhibits

1. *Financial Statements:* The Consolidated Financial Statements of Aspen Insurance Holdings Limited and related Notes thereto are listed in the accompanying Index to Consolidated Financial Statements and Reports on page F-1 and are filed as part of this Report.

2. *Financial Statement Schedules:* The Schedules to the Consolidated Financial Statements of Aspen Insurance Holdings Limited are listed in the accompanying Index to Schedules to Consolidated Financial Statements on page S-1 and are filed as part of this Report.

3. *Exhibits:*

<u>Exhibit Number</u>	<u>Description</u>
1.1	Certificate of Incorporation and Memorandum of Association (incorporated herein by reference to exhibit 3.1 to the Company's 2003 Registration Statement on Form F-1 (Registration No. 333-110435)).
1.2	Altered Memorandum of Association (incorporated herein by reference to exhibit 3.1 of the Company's Current Report on Form 6-K filed on July 29, 2019)
1.3	Amended and Restated Bye-laws (incorporated herein by reference to exhibit 3.2 of the Company's Current Report on Form 8-K filed on February 15, 2019)
3.1	Indenture, dated August 16, 2005, between the Company and Deutsche Bank Trust Company Americas, as trustee (incorporated herein by reference to exhibit 4.3 to the Company's 2004 Registration Statement on Form F-1 (Registration No. 333-119-314)).
3.2	Third Supplemental Indenture, dated November 13, 2013, between the Company, as issuer, and Deutsche Bank Trust Company Americas, as trustee (incorporated herein by reference to exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 13, 2013)
3.3	Fourth Supplemental Indenture, dated June 27, 2019, between the Company and Deutsche Bank Trust Company Americas, as trustee (incorporated herein by reference to exhibit 4.1 to the Company's Current Report on Form 8-K filed on June 28, 2019)
3.4	Form of Certificate of Designations of the Company's 5.95% Fixed-to-Floating Rate Perpetual Non-Cumulative Preference Shares, dated May 2, 2013 (incorporated herein by reference to exhibit 3.1 to the Company's Current Report on Form 8-K filed on May 2, 2013)
3.5	Specimen Certificate for the Company's 5.95% Fixed-to-Floating Rate Perpetual Non-Cumulative Preference Shares (incorporated herein by reference to the form of which is in exhibit 4.1 to the Company's Current Report on Form 8-K filed on May 2, 2013)
3.6	Form of Certificate of Designation of the Company's 5.625% Perpetual Non-Cumulative Preference Shares, dated September 20, 2016 (incorporated herein by reference to exhibit 3.1 to the Company's Current Report on Form 8-K filed on September 21, 2016)
3.7	Specimen Certificate for the Company's 5.625% Perpetual Non-Cumulative Preference Shares (incorporated herein by reference to the form of which is in exhibit 4.1 to the Company's Current Report on Form 8-K filed on September 21, 2016)
3.8	Form of Certificate of Designation for the Company's 5.625% Perpetual Non-Cumulative Preference Shares represented by Depositary Shares, each such Depositary Share representing a 1/1000th interest in a 5.625% Perpetual Non-Cumulative Preference Share, dated August 13, 2019 (incorporated herein by reference to exhibit 4.1 to the Company's Current Report on Form 6-K filed on August 13, 2019)
3.9	Form of Share Certificate evidencing the 5.625% Perpetual Non-Cumulative Preference Shares represented by Depositary Shares (incorporated herein by reference to exhibit 4.2 to the Company's Current Report on Form 6-K filed on August 13, 2019)
3.10	Deposit Agreement dated as of August 13, 2019 among the Company, Computershare Inc. and Computershare Trust Company, N.A. (incorporated herein by reference to exhibit 4.3 to the Company's Current Report on Form 6-K filed on August 13, 2019)
3.11	Form of Depositary Receipt (incorporated herein by reference to exhibit 4.4 to the Company's Current Report on Form 6-K filed on August 13, 2019)

- 4.1 [Agreement and Plan of Merger, dated as of August 27, 2018, by and among Aspen Insurance Holdings Limited, Highlands Holdings, Ltd. and Highlands Merger Sub, Ltd \(incorporated herein by reference to exhibit 2.1 to the Current Report on Form 8-K filed on August 28, 2018\)](#)
- 4.2 [Service Agreement, dated February 19, 2019, by and among Mark Cloutier, Aspen Insurance Holdings Limited and Aspen Bermuda Limited \(incorporated herein by reference to exhibit 10.1 to the Company's Form 10-K/A filed on April 29, 2019\)*](#)
- 4.3 [Management Consulting Agreement, dated March 28, 2019, between Aspen Insurance Holdings Limited and Apollo Management Holdings, L.P. \(incorporated herein by reference to exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 29, 2019\)](#)
- 4.4 [Aspen Insurance U.S. Services Inc. Nonqualified Deferred Compensation Plan \(incorporated herein by reference to exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the three months ended March 31, 2014, filed on May 1, 2014\)*](#)
- 4.5 [Amended and Restated Aspen Insurance U.S. Services Inc. Nonqualified Deferred Compensation Plan \(incorporated herein by reference to exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the three months ended September 30, 2014, filed on November 7, 2014\)*](#)
- 4.6 [Second Amended and Restated Credit Agreement, dated March 27, 2017, among the Company, various subsidiaries therefor, various lenders and Barclays Bank plc, as administrative agent \(incorporated herein by reference to exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the three months ended March 31, 2017 filed on May 4, 2017\)](#)
- 4.7 [First Amendment to Second Amended and Restated Credit Agreement dated March 11, 2020, among the Company, various lenders and Barclays Bank plc, as administrative agent \(incorporated herein by reference to exhibit 4.13 filed with the Company's Annual Report on Form 20-F for the year ended December 31, 2019 filed on April 6, 2020\).](#)
- 4.8 [Second Amendment to Second Amended and Restated Credit Agreement dated April 28, 2020, among the Company, various lenders and Barclays Bank plc, as administrative agent \(incorporated herein by reference to exhibit 4.8 filed with the Company's Annual Report on Form 20-F for the year ended December 31, 2020 filed on April 9, 2021\).](#)
- 4.9 [Third Amended and Restated Credit Agreement, dated as of December 1, 2021, among the Company, various subsidiaries therefor, various lenders and Barclays Bank plc, as administrative agent \(incorporated herein by reference to exhibit 99.1 of the Company's Current Report on Form 6-K, filed on December 2, 2021\).](#)
- 4.10 [Insurance Letters of Credit - Master Agreement, dated December 15, 2003, between Aspen Bermuda Limited \(formerly known as Aspen Insurance Limited\) and Citibank Ireland Financial Services plc, \(incorporated herein by reference to exhibit 10.2 to the Company's Current Report on Form 8-K, filed on October 13, 2006\)](#)
- 4.11 [Assignment Agreement, dated October 11, 2006, among Aspen Bermuda Limited \(formerly known as Aspen Insurance Limited\), Citibank, N.A., Citibank Ireland Financial Services plc and The Bank of New York \(incorporated herein by reference to exhibit 10.5 to the Company's Current Report on Form 8-K, filed on October 13, 2006\)](#)
- 4.12 [Reinsurance Deposit Agreement, dated October 11, 2006, between Aspen Bermuda Limited \(formerly known as Aspen Insurance Limited\) and Citibank Ireland Financial Services plc, \(incorporated herein by reference to exhibit 10.6 to the Company's Current Report on Form 8-K, filed on October 13, 2006\)](#)
- 4.13 [Committed Letter of Credit Facility, dated July 30, 2012, between Aspen Bermuda Limited and Citibank Europe plc \(incorporated herein by reference to exhibit 10.1 to the Company's Current Report on Form 8-K, filed on July 31, 2012\)](#)
- 4.14 [Committed Letter of Credit Facility, dated June 30, 2014, between Aspen Bermuda Limited and Citibank Europe plc \(incorporated herein by reference to exhibit 10.1 of the Company's Current Report on Form 8-K, filed on July 3, 2014\)](#)
- 4.15 [Committed Letter of Credit Facility, dated June 30, 2016, between Aspen Bermuda Limited and Citibank Europe plc \(incorporated herein by reference to exhibit 10.1 of the Company's Current Report on Form 8-K, filed on June 30, 2016\)](#)
- 4.16 [Deed of Amendment, dated June 29, 2018, between Aspen Bermuda Limited and Citibank Europe plc \(incorporated herein by reference to exhibit 10.1 to the Company's Current Report on Form 8-K, filed on July 3, 2018\)](#)
- 4.17 [Deed of Amendment, dated September 20, 2019, between Aspen Bermuda Limited and Citibank Europe plc, \(incorporated herein by reference to exhibit 4.21 to the Company's Annual Report on Form 20-F for the year ended December 31, 2019 filed on April 6, 2020\).](#)

4.18	Deed of Amendment, dated June 26, 2020, between Aspen Bermuda Limited and Citibank Europe plc (incorporated herein by reference to exhibit 4.17 filed with the Company's Annual Report on Form 20-F for the year ended December 31, 2020 filed on April 9, 2021).
4.19	Amended and Restated Pledge Agreement, dated December 18, 2014, between Aspen Bermuda Limited and Citibank Europe plc, as successor by assignment to Citibank, N.A. (incorporated herein by reference to exhibit 10.1 to the Company's Current Report on Form 8-K, filed on December 18, 2014)
4.20	Outsourcing Agreement, dated April 20, 2018, between Aspen Insurance UK Services Limited, Aspen Insurance U.S. Services, Inc., Aspen Bermuda Limited and Genpact International, Inc. (incorporated herein by reference to exhibit 10.1 of the Company's Current Report on Form 8-K filed on April 26, 2018)
4.21	Novation Agreement, dated June 29, 2018, between Aspen Insurance UK Services Limited, Aspen Insurance U.S. Services Inc., Aspen Bermuda Limited, Genpact International, Inc. and Genpact (UK) Limited (incorporated herein by reference to exhibit 10.1 of the Company's Current Report on Form 8-K filed on July 5, 2018)
4.22	Outsourcing Agreement, dated as of August 31, 2018, between Aspen Insurance UK Services Limited, Aspen Insurance U.S. Services Inc., Aspen Bermuda Limited and Cognizant Worldwide Limited (incorporated herein by reference to exhibit 10.1 to the Company's Current Report on Form 8-K filed on September 7, 2018)
4.23	Amended and Restated Reinsurance Agreement, dated January 10, 2022, among the Company, various subsidiaries therefor, and Enstar Group Limited+
8.1	Subsidiaries of the Company, filed with this report
12.1	Officer Certification of Mark Cloutier, Chief Executive Officer of Aspen Insurance Holdings Limited, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed with this report
12.2	Officer Certification of Christopher Coleman, Chief Financial Officer of Aspen Insurance Holdings Limited, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed with this report
13.1	Officer Certification of Mark Cloutier, Chief Executive Officer of Aspen Insurance Holdings Limited, and Christopher Coleman, Chief Financial Officer of Aspen Insurance Holdings Limited, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, submitted with this report
101.0	The following financial information from Aspen Insurance Holdings Limited's annual report on Form 20-F for the year ended December 31, 2021 formatted in XBRL includes: (i) Consolidated Balance Sheets; (ii) Consolidated Statements of Operations and Comprehensive Income; (iii) Consolidated Statements of Shareholders' Equity; (iv) Consolidated Statements of Cash Flows; and (v) Notes to the Audited Consolidated Financial Statements, tagged as blocks of text and in detail**

* This exhibit is a management contract or compensatory plan or arrangement.

+ Certain portions of this exhibit (indicated by "[***]"), including certain schedules (or similar attachments) thereto, have been redacted. The registrant agrees to furnish a copy of any omitted information schedule to the Securities and Exchange Commission upon request.

** As provided in Rule 406T of Regulation S-T, this information is "furnished" herewith and not "filed" for the purposes of Sections 11 and 12 of the Securities Act and Section 18 of the Exchange Act. Such exhibit will not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act unless Aspen Insurance Holdings Limited specifically incorporates it by reference.

SIGNATURE

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

ASPEN INSURANCE HOLDINGS LIMITED

By: /s/ Christopher Coleman
Name: Christopher Coleman
Title: Chief Financial Officer

Date: May 16, 2022

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED FROM THIS EXHIBIT
BECAUSE IT IS BOTH NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT
TREATS AS PRIVATE OR CONFIDENTIAL

AMENDED AND RESTATED

REINSURANCE AGREEMENT

by and among

ASPEN INSURANCE UK LIMITED,

ASPEN MANAGING AGENCY LIMITED for and on behalf of the UNDERWRITING
MEMBER(S) OF **LLOYD'S SYNDICATE 4711**,

ASPEN BERMUDA LIMITED,

ASPEN AMERICAN INSURANCE COMPANY,

ASPEN SPECIALTY INSURANCE COMPANY,

ASPEN INSURANCE HOLDINGS LIMITED

(solely for the purposes of Sections 11.1, 13.2, 14.1, 16.3, 16.9, 16.12, 16.13 and 16.16)

and

CAVELLO BAY REINSURANCE LIMITED

Dated as of January 10, 2022

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AMENDED AND RESTATED REINSURANCE AGREEMENT

This AMENDED AND RESTATED REINSURANCE AGREEMENT, dated as of January 10, 2022 (this “Agreement”), is made by and among Aspen Insurance UK Limited, a company incorporated in England and Wales, Aspen Managing Agency Limited, a company incorporated in England and Wales, for and on behalf of the underwriting members(s) of Lloyd’s Syndicate 4711, Aspen Bermuda Limited, a company incorporated in Bermuda, Aspen American Insurance Company, a Texas-domiciled insurance company, Aspen Specialty Insurance Company, a North Dakota-domiciled insurance company (individually or collectively, “Aspen”), Aspen Insurance Holdings Limited, a company incorporated in Bermuda (“Aspen Parent”) (solely for the purposes of Sections 11.1, 13.2, 14.1, 16.3, 16.9, 16.12, 16.13 and 16.16) and Cavello Bay Reinsurance Limited, a Bermuda insurance company (the “Reinsurer”). Capitalized terms used but not otherwise defined herein have the respective meanings set forth in Section 1.1.

RECITALS

WHEREAS, Aspen has issued the Reinsured Policies constituting the Subject Business;

WHEREAS, pursuant to that certain Adverse Development Cover Agreement, dated as of March 2, 2020 and amended as of April 15, 2020 (as so amended, the “Original Agreement”), by and among the parties hereto, Aspen ceded, and the Reinsurer assumed, one hundred percent (100%) of the liability of Aspen for covered losses specified therein in excess of the agreed retention and up to the aggregate limit specified therein, subject to the agreed loss corridor and the other terms and conditions thereof;

WHEREAS, this Agreement shall, subject to the terms and conditions hereof (including Section 3.2(b)), amend and restate the Original Agreement in its entirety in order for Aspen to cede, and the Reinsurer to assume, one hundred percent (100%) of the liability of Aspen for all Covered Losses from and after the Effective Date, subject to the terms and conditions hereof; and

WHEREAS, the Parties desire that the terms of the Original Agreement remain in force and to continue to apply in their entirety, until the Closing in accordance with Section 3.2(b) below.

NOW, THEREFORE, in consideration of the representations, warranties, covenants and agreements contained in this Agreement, Aspen, Aspen Parent (solely for the purposes of Sections 11.1, 13.2, 14.1, 16.3, 16.9, 16.12, 16.13 and 16.16) and the Reinsurer (each individually, a “Party” and collectively, the “Parties”) hereby agree as follows:

ARTICLE I

DEFINITIONS

1.1 Definitions. For purposes of this Agreement, the following terms shall have the respective meanings set forth below:

“Administrative Services Agreement” means an administrative services agreement to be entered into by and between certain Affiliates of Reinsurer (collectively, the “Administrator”) and Aspen and certain Affiliates of Aspen with respect to the administration of the Subject Business, which shall be based on the outline of terms attached hereto as Exhibit A and in a form reasonably acceptable to the Reinsurer and Aspen.

“Administrative Rights Triggering Event” shall have the meaning as set forth in Section 4.1(d).

“Affiliate” means, with respect to any Person, another Person that, directly or indirectly, controls, is controlled by, or is under common control with, such first Person, where “control,” including the terms “controlling,” “controlled by” and “under common control,” means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.

“Agent” means Aspen Parent.

“Agreement” has the meaning set forth in the Preamble.

“Agreed Reports” means (a) those internal presentations and reports in form and substance consistent with those provided by Aspen to the Reinsurer pursuant to the Original Agreement and (b) the additional reports described on Exhibit A as to be provided by Aspen to the Reinsurer or the Reinsurer to Aspen, as applicable, in each case, as may be modified from time to time following the Closing by mutual written consent of Aspen and the Reinsurer.

“Allocated Loss Adjustment Expenses” means all reasonable costs and expenses incurred by or on behalf of Aspen paid or payable on or after the Effective Date in connection with any investigation, appraisal, adjustment, audit, negotiation, settlement, litigation, defense or appeal that is allocable to an occurrence or claim made under or in connection with a Reinsured Policy, which shall include (a) outside retained adjusters’ fees, (b) attorneys’, experts’ and consultants’ fees in connection with coverage investigation or analysis and/or actual, anticipated or threatened actions, suits or proceedings, whether declaratory, coercive or otherwise, (c) costs levied in any claim, suit or proceeding (including court costs), (d) costs of supersedeas and appeal bonds, (e) subrogation, salvage and recovery expenses (incurred with respect to Recoverables), (f) to the extent incurred consistent with Aspen’s customary past practice prior to the Effective Date, interinsurer expense-related obligations arising from equitable contribution or similar claims, (g) to the extent incurred consistent with Aspen’s customary past practice prior to the Effective Date, fees (at cost) of staff counsel expressly charged with performing functions generally performed by outside counsel, (h) pre-judgment interest and (i) interest accruing after entry of judgment. Except as otherwise provided in this definition, Allocated Loss Adjustment

Expenses shall not include salaries, benefits and expenses of Aspen's (or any of its Affiliates') employees and other overhead and office expenses of Aspen (or any of its Affiliates), and, for the avoidance of doubt, such costs shall be included in the definition of "ULAE."

"Applicable Aspen Annual Investment Margin" means, as of any date of determination, a percentage equal to (a) 50%, multiplied by (b) (i) the Aspen Annual Investment Return for the applicable Crediting Interest Rate Period, minus (ii) 1.75%; provided that if the foregoing would result in the Applicable Aspen Annual Investment Margin being less than zero (0), then the Applicable Aspen Annual Investment Margin shall be equal to zero (0).

"Applicable Law" means any domestic or foreign, federal, state or local statute, law, ordinance or code, or any written rules or regulations, in each case applicable to any Party, and any Order applicable to any Party.

"Applicable Reserves" means, as of any date, all reserves (including case reserves and incurred-but-not-reported reserves, or provisions for losses, claims, benefits, and Allocated Loss Adjustment Expenses) of Aspen on a net basis allocable to the Subject Business as of such date, calculated in accordance with GAAP and consistent with Aspen's practice since the closing under the Original Agreement. "Net basis" means gross reserves allocable to the Subject Business, excluding any reserves for ULAE and any reserves for Extra Contractual Obligations (other than Reinsured Extra Contractual Obligations), less Third Party Reinsurance Recoverables, in each case as of the date of the determination.

"Aspen" has the meaning set forth in the Preamble.

"Aspen Annual Investment Return" means, with respect to each Crediting Interest Rate Period, the total return on the total investments and cash and cash equivalents of Aspen Parent and all of its subsidiaries during such Crediting Interest Rate Period, in each case, as set forth on the books and records of Aspen Parent. For the avoidance of doubt, such return shall include all net investment income and realized and unrealized gains and losses during each such respective period.

"Aspen Parent" has the meaning set forth in the Preamble.

"Base Crediting Interest Rate" means a rate of 1.75% per annum, compounded daily.

"Base Crediting Interest Rate Accrued Amount" means, with respect to any period, the amount of interest accrued on the applicable Prior Funds Withheld Account Balance Average if interest accrued on such amount at the Base Crediting Interest Rate.

"Books and Records" means originals or copies of all records and all other data and information (in whatever form maintained) in the possession or control of Aspen or its Affiliates to the extent relating to the Subject Business or the Reinsured Policies, including (a) administrative records, (b) claim records, (c) policy files, (d) sales records, (e) files and records relating to Applicable Law, (f) underwriting records and (g) accounting records, but excluding (i) Tax Returns and Tax records and all other information and data with respect to Tax, (ii) files, records, data and information with respect to employees, (iii) records, data and information with

respect to any employee benefit plan, (iv) any materials or other information the disclosure or transfer of which would violate Applicable Law, (v) any materials prepared for the board of directors of Aspen and (vi) any internal drafts, opinions, valuations, correspondence or other materials prepared in connection with the negotiation, valuation and consummation of the transactions contemplated by this Agreement; provided, that the files, records, data and information referenced in clause (ii) or (iii) to the extent related to Transferring Employees shall be included in the definition of “Books and Records” following the mutual agreement of Aspen and the Reinsurer as to which employees of Aspen will become Transferring Employees and entry into the Administrative Services Agreement containing data processing and data sharing provisions reasonably acceptable to Aspen and the Reinsurer.

“Business Day” means any day other than a Saturday, Sunday or a day on which commercial banks in New York, New York or Hamilton, Bermuda are required or authorized by law to be closed.

“Calculation Date” has the meaning set forth in Section 8.3(a).

“Claims” means any monetary demand, obligation, suit, occurrence (as defined in the applicable Reinsured Policy), loss (as defined in the applicable Reinsured Policy) or settlement, actual or alleged, arising out or in connection with the Reinsured Policies (including, for the avoidance of doubt, any extra contractual obligations for which Aspen is liable to an underlying reinsured under the terms of any Reinsured Policy assumed by Aspen from such underlying reinsured).

“Closing” has the meaning set forth in Section 3.2.

“Closing Date” has the meaning set forth in Section 3.2.

“Closing Statement” has the meaning set forth in Section 3.1(a).

“Confidential Information” has the meaning set forth in Section 16.2(d).

“Covered Losses” means those Claims payable by Aspen on or after the Effective Date with respect to the Subject Business, including all amounts payable in respect of Allocated Loss Adjustment Expenses, Reinsured Extra Contractual Obligations, and ex gratia payments for which the Reinsurer has provided its prior written consent or which are made by or at the express written direction of the Administrator; provided, that “Covered Losses” shall not include any Excluded Liabilities.

“Crediting Interest Rate Period” has the meaning set forth in Section 3.4(b).

“Damages” has the meaning set forth in Section 13.1.

“Disclosing Party” has the meaning set forth in Section 16.2(b).

“Disputed Item” has the meaning set forth in Section 8.3(a).

“Effective Date” means October 1, 2021.

“Effective Date Reserve Currency Split” has the meaning set forth in Section 3.5(a).

“Effective Time” means 12:01 a.m. Eastern time on the Effective Date.

“Eligible Assets” means cash (United States legal tender), certificates of deposit (issued by a United States bank and payable in United States legal tender) or investments that comply with the Investment Guidelines.

“Enforceability Exceptions” has the meaning set forth in Section 11.1(b).

“Estimated Initial Required Collateral Amount” has the meaning set forth in Section 3.1(a).

“Estimated New Reinsurance Premium” means an amount equal to (a) \$3,160,000,000, minus (b) the Original Cash Premium, minus (c) the Estimated Roll-forward Amount, plus (d) the Estimated New Reinsurance Premium Accrued Interest, minus (e) the Estimated ULAE Reimbursement Amount.

“Estimated New Reinsurance Premium Accrued Interest” means an amount equal to the interest that would accrue on an amount equal to (a) \$3,160,000,000, minus (b) the Original Cash Premium, minus (c) 50% of the Estimated Roll-forward Amount, minus (d) 50% of the Estimated ULAE Reimbursement Amount for the period beginning on the Effective Date and ending on the Closing Date if interest on such amount accrued at the Full Crediting Interest Rate.

“Estimated Roll-forward Amount” has the meaning set forth in Section 3.1(a).

“Estimated ULAE Reimbursement Amount” has the meaning set forth in Section 3.1(a).

“Excluded Liabilities” has the meaning set forth in Section 2.5.

“Existing Trust Accounts” means the Trust Accounts (as defined in the Original Agreement).

“Extra Contractual Obligations” means all liabilities and any other related expenses (including attorneys’ fees) arising out of or relating to the Reinsured Policies other than those arising under or relating to the express terms of and within the express limits of the Reinsured Policies, whether to principals, obligees, Governmental Authorities or any other Person, which liabilities and expenses shall include losses in excess of policy limits, consequential, compensatory, punitive, exemplary, special, statutory or regulatory damages (or fines, penalties, forfeitures or similar charges of a penal or disciplinary nature), in each case, not within the express terms and limits of the Reinsured Policies, or any other form of extra contractual damages or liabilities arising out of or relating to the Reinsured Policies, including those that arise from any alleged or actual act, error or omission, whether or not intentional, in bad faith or otherwise, including any act, error or omission relating to (a) the marketing, underwriting, production, sale, issuance, cancellation, termination, novation or administration of

the Reinsured Policies, (b) the investigation, defense, trial, settlement or handling of Claims, benefits, or payments arising out of or relating to the Reinsured Policies or (c) the failure to pay, or the delay in payment of, Claims, benefits or any other payments due or alleged to be due under the Reinsured Policies.

“FATCA” has the meaning set forth in Section 15.2.

“Final Closing Statement” has the meaning set forth in Section 3.3(a).

“Full Crediting Interest Rate” means (a) for the period from and after October 1, 2021 until (and including) September 30, 2022, a rate of 1.75% per annum, compounded daily and (b) for any period beginning from and after October 1, 2022, a rate equal to 1.75% plus the Applicable Aspen Annual Investment Margin per annum, compounded daily.

“Full Crediting Interest Rate Accrued Amount” means, with respect to any period, the amount of interest accrued on the applicable Prior Funds Withheld Account Balance Average if interest accrued on such amount at the Full Crediting Interest Rate.

“Funds Withheld Account” has the meaning set forth in Section 3.1(a).

“Funds Withheld Account Balance” means, as of any date of determination, the balance of the Funds Withheld Account after giving effect to the crediting of the Full Crediting Interest Rate pursuant to Section 3.4.

“Funds Withheld Release Date” means the date on which the Parties agree in writing the Funds Withheld Account Balance shall be released to the Reinsurer, which shall (a) not occur later than September 30, 2025 and (b) be subject to the approval of the Reinsurer and 90 days’ advance written notice in the event that Aspen intends to release the Funds Withheld Account Balance earlier than September 30, 2025.

“GAAP” means U.S. generally accepted accounting principles, consistently applied.

“GDPR” means means the EU General Data Protection Regulation 2016/679 (“EU GDPR”) as implemented by countries within the EEA and the EU GDPR as retained as law in England and Wales by the European Union (Withdrawal) Act 2018 (as applicable to the processing).

“Governmental Authority” means any government, political subdivision, court, arbitrator, arbitration panel, mediator, mediation panel, board, commission, regulatory or administrative agency or other instrumentality thereof, whether federal, state, provincial, local or foreign and including any regulatory authority which may be partly or wholly autonomous and including Lloyd’s.

“Incident” has the meaning set forth in Section 16.2(e).

“Independent Actuary” has the meaning set forth in Section 8.3(a).

“Initial Required Collateral Amount” means an amount equal to (a) (i) \$3,120,000,000 (representing the Applicable Reserves relating to the Covered Losses reinsured hereunder as of September 30, 2021), minus (ii) the Roll-forward Amount, multiplied by (b) 102%.

“Investment Guidelines” means the investments specified on Schedule 1.1 attached hereto. For the avoidance of doubt but subject to Section 8.1, the Investment Guidelines shall apply across the assets held in the Trust Accounts in total, rather than at the individual Trust Account level.

“Letters of Credit” means letters of credit posted by the Reinsurer for the benefit of Aspen to secure the Reinsurer’s obligations hereunder in a form and type, and from an institution, reasonably acceptable to Aspen and that satisfies in full all applicable requirements in order to allow the reinsured included in the definition of “Aspen” that is the beneficiary of such letter of credit to take full financial statement and regulatory credit for the reinsurance provided hereunder in all applicable jurisdictions.

“Lloyd’s” has the meaning set forth in Section 11.1(d).

“Market Value” means, as of any time and with respect to any asset, the fair market value thereof as of such time, as determined in accordance with the terms of the applicable Trust Agreement.

“Material Third Party Reinsurance Agreements” means, collectively, all Third Party Reinsurance Agreements as to which there were claim reserves, case-specific reserves for incurred but not reported claims, unearned premiums, refunds or policy reserves, in the aggregate, equal to or exceeding \$10,000,000 as of September 30, 2021.

“Negative Adjustment Amount” has the meaning set forth in Section 3.3(d).

“New Reinsurance Premium” means an amount equal to (a) \$3,160,000,000, minus (b) the Original Cash Premium, minus (c) the Roll-forward Amount, plus (d) the New Reinsurance Premium Accrued Interest, minus (e) the ULAE Reimbursement Amount.

“New Reinsurance Premium Accrued Interest” means an amount equal to the interest that would accrue on an amount equal to (a) \$3,160,000,000, minus (b) the Original Cash Premium, minus (c) 50% of the Roll-forward Amount, minus (d) 50% of the ULAE Reimbursement Amount for the period beginning on the Effective Date and ending on the Closing Date if interest on such amount accrued at the Full Crediting Interest Rate.

“Order” means any order, writ, judgment, injunction, decree, stipulation, determination or award entered by or with any Governmental Authority.

“Original Agreement” has the meaning set forth in the Recitals.

“Original Cash Premium” means \$770,000,000.

“Outside Date” has the meaning set forth in Section 6.3.

“Party” or “Parties” has the meaning set forth in the Recitals.

“Person” means an individual, corporation, partnership, joint venture, limited liability company, association, trust, unincorporated organization, Governmental Authority or other entity.

“Personal Information” means (a) any information which relates to an identified or identifiable individual, or (b) “personal data,” “personal information,” “nonpublic personal information,” or other similar terms as defined by Privacy Laws.

“Positive Adjustment Amount” has the meaning set forth in Section 3.3(d).

“PRA” has the meaning set forth in Section 11.1(d).

“Premiums” means all premiums, retrospective premiums, considerations, deposits and other similar amounts paid or payable by policyholders, other insureds or reinsureds in respect of the Reinsured Policies; provided, however, “Premiums” shall not include any Third Party Reinsurance Recoverables or Recoverables.

“Prior Funds Withheld Balance Account Average” means, as of any date of determination, an amount equal to (a)(i) the Funds Withheld Account Balance as of the first day of the prior calendar quarter, plus (ii) the Funds Withheld Account Balance as of the last day of the prior calendar quarter, divided by (b) two (2).

“Privacy Laws” means any applicable data protection or privacy laws. It shall include, but not be limited to, as applicable: (a) the EU e-Privacy Directive 2002/58/EC (as amended) as implemented by countries within the European Economic Area (“EEA”); (b) the GDPR; (c) the UK Data Protection Act 2018 and the UK Privacy and Electronic Communications (EC Directive) Regulations 2003; (d) U.S. state and federal privacy, data protection, and data breach notification laws and regulations (including, but not limited to, the California Consumer Privacy Act, Cal. Civ. Code § 1798.100, et seq., Federal Trade Commission Act, 15 U.S.C. § 45, et seq., New York Department of Financial Services Cybersecurity Regulation, 23 N.Y.C.R.R. § 500, et seq., and the Gramm-Leach-Bliley Act, 15 U.S.C. § 6801, et seq.); and/or (e) other laws that are similar to, equivalent to, successors to, or that are intended to or implement the laws that are identified in (a) through (d) above.

“Quarterly Report” means a report meeting the specifications set forth in Section 4.2(a).

“Receiving Party” has the meaning set forth in Section 16.2(b).

“Recoverables” has the meaning set forth in Section 9.2.

“Reinsured Extra Contractual Obligations” means those Extra Contractual Obligations (a) that arise from or are related to the handling of any Claim with respect to the Subject Business by the Reinsurer or its Affiliates from and after the Closing Date, (b) with respect to which Aspen has consulted with the Reinsurer after disclosing all relevant material information to the Reinsurer and prior to Aspen taking the course of conduct that gives rise to

such Extra Contractual Obligations and with respect to which the Reinsurer has consented in writing to the course of conduct taken by Aspen, or Aspen has followed the express written direction of the Reinsurer, in each case, giving rise to such Extra Contractual Obligations or (c) any other Extra Contractual Obligation resulting from actions taken by the Reinsurer or its Affiliates.

"Reinsured Policies" means, collectively, each binder, certificate, policy, contract of insurance, treaty, reinsurance agreement or other written evidence of insurance written or assumed by Aspen on or prior to December 31, 2019.

"Reinsurer" has the meaning set forth in the Preamble.

"Reinsurer's Limit" means an amount equal to (a) \$3,570,000,000, plus (b) an amount equal to the aggregate amount of Reinsured Extra Contractual Obligations described under clause (a) or (c) of the definition of "Reinsured Extra Contractual Obligations," minus (c) the Roll-forward Amount.

"Reinsurer's Posted Collateral" has the meaning set forth in Section 8.1(b).

"Reinsurer's Remaining Limit" means, as of any date of determination, an amount equal to (a) the Reinsurer's Limit, less (b) the aggregate Ultimate Net Loss paid by the Reinsurer under this Agreement as of such date.

"Replacement Assets" has the meaning set forth in Section 8.4.

"Representative" means, with respect to any Person, a director, officer, employee, attorney or consultant of such Person or one of its Affiliates.

"Required Collateral Amount" means, as of any date, the Applicable Reserves relating to the Covered Losses reinsured hereunder multiplied by 102%; provided, however, that "Required Collateral Amount" shall not be deemed to require the Reinsurer to post collateral to the extent such posted collateral would exceed 102% of the Reinsurer's Remaining Limit.

"Roll-forward Amount" means an amount equal to Ultimate Net Loss paid by or on behalf of Aspen during the period from (and including) October 1, 2021 to (and including) the Closing Date.

"SAP" means, as to any Person, the accounting principles prescribed by the Governmental Authority(ies) responsible for the regulation and/or supervision of insurance companies and/or Lloyd's syndicates in the jurisdiction in which such Person is domiciled.

"Shared Personal Information" means any Personal Information that Aspen discloses, provides or otherwise makes available to the Reinsurer (either directly or indirectly) under or in connection with this Agreement.

"Subject Business" means the Reinsured Policies; provided, that "Subject Business" shall not include Claims arising out of the Reinsured Policies with dates of loss on or after January 1, 2020 (it being agreed and understood in the case of any continuous trigger

losses, the date of loss shall be the inception date of the Reinsured Policy; provided, that with respect to any Reinsured Policy in force on January 1, 2020, such continuous trigger losses shall be shared proportionately between Aspen and the Reinsurer based on their respective time at risk).

“Tax” means any and all federal, state, foreign or local income, gross receipts, premium, capital stock, franchise, guaranty fund assessment, retaliatory, profits, withholding, social security, unemployment, disability, real property, ad valorem/personal property, stamp, excise, occupation, sales, use, transfer, value added, alternative minimum, estimated or other tax, fee, duty, levy, custom, tariff, impost, assessment, obligation or charge of the same or of a similar nature to any of the foregoing, including any interest, penalty or addition thereto.

“Tax Return” means any report, estimate, extension request, information statement, claim for refund, or return relating to, or required to be filed in connection with, any Tax, including any schedule or attachment thereto, and any amendment thereof.

“Third Party Reinsurance Agreements” means ceded reinsurance related to the Subject Business other than (a) this Agreement and (b) for the avoidance of doubt, the Original Agreement.

“Third Party Reinsurance Recoverables” means recoverables under Third Party Reinsurance Agreements, when and as calculated in accordance with the terms of the applicable Third Party Reinsurance Agreement, with respect to the Subject Business, whether or not billed or collected, by or on behalf of Aspen, less any reinstatement premiums or other loss-triggered additional premiums paid under Third Party Reinsurance Agreements to the extent applicable to Covered Losses, and excluding any recoverables under Third Party Reinsurance Agreements to the extent attributable to Claims paid by Aspen prior to the Effective Date or other amounts paid by Aspen prior to the Closing Date and excluded pursuant to Section 2.5(a). For the avoidance of doubt, any reinstatement premiums or other loss-triggered additional premiums paid under Third Party Reinsurance Agreements to the extent applicable to Covered Losses are for the account of the Reinsurer and may result in the value of the Third Party Reinsurance Recoverables determined in respect of a period being equal to or less than zero (0).

“Transferring Employees” has the meaning set forth on Exhibit A.

“Transaction Agreements” means this Agreement and the other agreements to be entered into in connection with the transactions contemplated by this Agreement as described herein, including each Trust Agreement and the Administrative Services Agreement.

“True-up Dispute Cooling-Off Period” has the meaning set forth in Section 3.3(c).

“True-Up Dispute Notice” has the meaning set forth in Section 3.3(b).

“Trust Account” means any account established pursuant to a Trust Agreement.

“Trust Agreement” means any trust agreement (or other relevant security and custody agreements) to be entered into by and among the Reinsurer, as grantor, a reinsured included in the definition of “Aspen”, as beneficiary, and the Trustee for purposes of providing

security for the Reinsurer's obligations under this Agreement with respect to such reinsured, which shall be substantially in the forms referred to in Exhibit B; provided, that such form shall be amended to the extent reasonably required and reasonably acceptable to the Reinsurer and Aspen to take account of relevant applicable rules and guidance of Governmental Authorities and to ensure that it satisfies in full all applicable requirements in order to allow the reinsured included in the definition of "Aspen" that is the beneficiary of such trust account (or secured party under or in connection with such relevant security and custody agreements) to take full financial statement and regulatory credit for the reinsurance provided hereunder in all applicable jurisdictions (including, without limitation, the jurisdictions in which the relevant reinsured has a branch office that may require localization of assets).

"Trustee" means The Bank of New York Mellon or another trustee and/or custodian reasonably acceptable to the Reinsurer and Aspen.

"ULAE" means unallocated loss adjustment expenses and similar unallocated expenses, including the salaries, benefits and expenses of Aspen's (or any of its Affiliates') employees and other overhead and office expenses (except for fees of staff counsel expressly included in the definition of "Allocated Loss Adjustment Expenses").

"ULAE Reimbursement Amount" means an amount determined pursuant to Schedule 1.2 hereto.

"Ultimate Net Loss" means the sum of (a) Covered Losses actually paid by or on behalf of Aspen, less (b) Recoverables collected by or on behalf of Aspen, less (c) Third Party Reinsurance Recoverables, less (d) Premiums collected by or on behalf of Aspen on or after the Effective Date.

The terms "controller", "data subject", "personal data breach", "processing", and "supervisory authority" shall have the same meanings ascribed to them under the GDPR.

ARTICLE II

REINSURANCE CEDED

2.1 Reinsurance Coverage. Subject to the terms and conditions of this Agreement, from and after the Closing, the Reinsurer shall pay, on the terms and subject to the conditions and limitations set forth in this Agreement, Aspen for all Ultimate Net Loss up to the Reinsurer's Limit. For avoidance of doubt, in no event shall the Reinsurer be required (i) to make aggregate payments under this Agreement in respect of Ultimate Net Loss in excess of the Reinsurer's Limit or (ii) to make aggregate payments (including, for this purpose, by posting collateral) under this Agreement in respect of Ultimate Net Loss in excess of 102% of the Reinsurer's Limit.

2.2 Follow the Fortunes. Except as expressly set forth in Section 2.5, the Reinsurer's liability under this Agreement for Covered Losses shall attach simultaneously with that of Aspen and the attachment of the Reinsurer's liability thereto, and all reinsurance with respect to which the Reinsurer shall be liable shall be subject in all respects to the same risks, terms, rates, conditions, interpretations and waivers, and, subject to the terms of this Agreement,

to the same good faith modifications, alterations, and cancellations, as are the Reinsured Policies to which liability under this Agreement attaches. The true intent of this Agreement being that the Reinsurer shall, in each and every case to which liability under this Agreement attaches, follow the fortunes and settlements of Aspen, and the Reinsurer shall be bound, without limitation, by all payments and settlements entered into by or on behalf of Aspen, subject to the terms, conditions and provisions set forth herein. All of Aspen's liability as determined by a court or arbitration panel or arising from a judgment, settlement, compromise, adjustment, or commutation of claims or losses under the Subject Business, including payments involving coverage issues involving the Reinsured Policies included within the Subject Business, and/or the resolution of whether such claims or losses are required by Applicable Law or Governmental Authority to be covered (or not to be excluded), shall, subject to the terms of this Agreement, be binding on the Reinsurer regardless of whether such court or arbitrational determination, judgment, settlement, compromise, adjustment or commutation is in respect of a liability recognized by or contrary to the governing law of this Agreement.

2.3 Contract Changes. Pursuant to the terms and conditions set forth in this Agreement, the Reinsurer shall reinsure any Covered Losses resulting from any changes in the terms or conditions of any Reinsured Policy that are required by Applicable Law or any Governmental Authority or that are made in compliance with Section 10.4, in each case, on or after the Effective Time.

2.4 Territory. The reinsurance provided under this Agreement shall be coextensive with the territory of the Reinsured Policies.

2.5 Exclusions. Notwithstanding any provision of this Agreement to the contrary, Covered Losses and the reinsurance under this Agreement shall not include:

(a) Any sum paid prior to the Closing Date in settlement or payment of any liability or obligation arising from any of the Reinsured Policies (provided, however, that the foregoing exclusion shall not operate to limit the Roll-forward Amount);

(b) For the avoidance of doubt, insurance liabilities acquired or assumed by Aspen following the Effective Date;

(c) ULAE (provided, however, that the foregoing exclusion shall not operate to limit the ULAE Reimbursement Amount);

(d) Any Taxes imposed on or payable by or on behalf of Aspen (except liabilities of Aspen pursuant to the express terms of the Reinsured Policies);

(e) Any amounts payable under Third Party Reinsurance Agreements (for the avoidance of doubt, certain amounts payable under Third Party Reinsurance Agreements are, to the extent set forth in the definition of "Third Party Reinsurance Recoverables," for the Reinsurer's account);

(f) Any ex gratia payments made by or on behalf of Aspen on or after the Effective Date, unless (i) the Reinsurer has given its prior written consent to such ex gratia

payments or (ii) such ex gratia payment is made by or at the express written direction of the Administrator under the Administrative Services Agreement; and

(g) Any Extra Contractual Obligations other than Reinsured Extra Contractual Obligations (collectively, (a)-(g), "Excluded Liabilities").

2.6 Sanctions Exclusions. The Reinsurer will not be liable to provide any coverage or make any payment hereunder if to do so would be in violation of any sanctions Applicable Law that would expose the Reinsurer or any of its Affiliates to any sanctions, prohibition, restriction or penalty under such sanctions Applicable Law.

ARTICLE III

REINSURANCE CONSIDERATION

3.1 Reinsurance Premium.

(a) No later than five (5) Business Days prior to the anticipated Closing Date, Aspen shall deliver to the Reinsurer a statement in the form of Schedule 3.1(a) (the "Closing Statement") hereto setting forth its good faith estimate of (i) the Estimated New Reinsurance Premium (including the Estimated New Reinsurance Premium Accrued Interest, the Roll-forward Amount and the ULAE Reimbursement Amount used to calculate the Estimated New Reinsurance Premium (the "Estimated Roll-forward Amount" and the "Estimated ULAE Reimbursement Amount," respectively)) and (ii) the Initial Required Collateral Amount (the "Estimated Initial Required Collateral Amount"), in each case, as of the Closing Date. On the Closing Date, Aspen shall pay the Reinsurer the Estimated New Reinsurance Premium by establishing a funds withheld account on its books and records, which shall be clearly designated as a notional account on the books and records of Aspen for the benefit of the Reinsurer (the "Funds Withheld Account") with an initial balance equal to the Estimated New Reinsurance Premium. Aspen shall, in its sole discretion, determine how to allocate the initial Funds Withheld Account Balance among the reinsureds included in the definition of "Aspen."

(b) All amounts held in the Existing Trust Accounts to secure the Reinsurer's obligations under the Original Agreement shall remain in such Existing Trust Accounts or be deposited into the new Trust Accounts as of the Closing Date, in either case, to secure the Reinsurer's obligations under this Agreement. For the avoidance of doubt, the Parties acknowledge that such funds originated from the premium paid under the Original Agreement pursuant to which the Reinsurer assumed a portion of the liabilities being ceded pursuant to this Agreement and, as such, remain premium paid to the Reinsurer (including for U.S. federal tax purposes, except to the extent otherwise required by Applicable Law).

(c) The Reinsurer shall be permitted to instruct any bank issuing a Letter of Credit in support of its obligations under the Original Agreement to redesignate such Letter of Credit as of the Closing Date as being issued in support of the Reinsurer's obligations under this Agreement and Aspen shall provide any consent or other cooperation reasonably required to effect such redesignation. For the avoidance of doubt, the Parties acknowledge that as of the Closing Date, Aspen shall have no right to, and shall not, draw on any Letter of Credit issued in

respect of the Original Agreement and not redesignated as being issued in support of the Reinsurer's obligations under this Agreement.

(d) On the Closing Date, the Reinsurer shall, to the extent necessary, deposit into the Trust Accounts (in accordance with any allocation provided by Aspen), or provide a Letter of Credit with a face amount equal to, an amount such that, following such deposit or Letter of Credit being provided and after giving effect to the transactions contemplated by Section 3.1(a), (b) and (c), the Reinsurer's Posted Collateral equals the Estimated Initial Required Collateral Amount. In the event the Reinsurer's Posted Collateral would exceed the Estimated Initial Required Collateral Amount on the Closing Date, Aspen shall reduce the Funds Withheld Account by the amount of such excess and pay such amount to Reinsurer by wire transfer of immediately available funds.

(e) As additional consideration for the reinsurance provided herein, Aspen shall apply for the benefit of the Reinsurer one hundred percent (100%) of any Recoverables actually received or collected with respect to Covered Losses by or on behalf of Aspen on or after the Effective Date.

3.2 Closing and Effectiveness.

(a) Unless otherwise agreed by Aspen and the Reinsurer, the closing of the transactions contemplated by this Agreement (the "Closing") shall take place on the Business Day after all of the conditions set forth in Sections 12.1 and 12.2 are satisfied or waived by the Party or Parties entitled to waive the same (other than those conditions that by their nature are to be satisfied at Closing, but subject to the satisfaction or waiver of those conditions at Closing) at the offices of Sidley Austin LLP, 787 Seventh Avenue, New York, New York 10019, unless another date, time or place is agreed by the Parties. If and when the Closing is effected, the Parties' rights and obligations under this Agreement shall commence on the Closing Date but shall be effective as of the Effective Date, as set forth herein. Notwithstanding the foregoing, the Closing may occur at such other place, at such other time or on such other date as Aspen and the Reinsurer may mutually agree. Aspen and the Reinsurer agree that the Closing may take place by conference call and electronic or facsimile delivery of signature pages. The date on which the Closing takes place is referred to herein as the "Closing Date." The Closing shall be deemed to have occurred at 12:01 a.m., Eastern Time, on the Closing Date.

(b) Notwithstanding anything to the contrary set forth herein:

(i) the terms of the Original Agreement shall continue to apply until the Closing, at which time the terms of the Original Agreement shall no longer apply; and

(ii) the terms of this Agreement shall not apply until the Closing; provided, however, that the terms of the following shall apply from and after the date hereof: Sections 1.1 (to the extent necessary to give effect to the following Sections and Articles), 3.1(a), 3.2, 4.1(b), 4.1(c), 4.1(e), 4.2(a), 6.2, 6.3, 10.2, 10.3, 10.5, 10.6, 11.1 and 11.2 and ARTICLE XII, ARTICLE XIII, ARTICLE XIV, ARTICLE XV and ARTICLE XVI.

3.3 Post-Closing Adjustment.

(a) No later than forty-five (45) days following the Closing Date, Aspen shall deliver to the Reinsurer a detailed statement in the same form as the Closing Statement (the "Final Closing Statement") setting forth Aspen's good faith calculation of (i) the New Reinsurance Premium (including the New Reinsurance Premium Accrued Interest, the Roll-forward Amount and the ULAE Reimbursement Amount) and (ii) the Initial Required Collateral Amount, in each case, as of the Closing Date, together with all accounting, actuarial and other data and documentation reasonably necessary for the Reinsurer to review Aspen's proposed final calculations of such amounts.

(b) Upon receipt of the Final Closing Statement, the Reinsurer and its authorized Representatives will be given reasonable access to all accounting, actuarial and other data and documentation related to the preparation of the Final Closing Statement for the purpose of, and to the extent reasonably necessary for, verifying the Final Closing Statement; provided, that no independent accountants or independent actuaries of Aspen shall be required to make any work papers available to the Reinsurer unless the Reinsurer has signed a customary agreement relating to such access to work papers in form and substance reasonably acceptable to such independent accountants or independent actuaries, as applicable. Within forty-five (45) days of the Reinsurer's receipt of the Final Closing Statement, the Reinsurer may deliver written notice (the "True-Up Dispute Notice") to Aspen of any objections, specifying in reasonable detail any contested amounts and the basis therefor, which the Reinsurer may have to the Final Closing Statement. The failure of the Reinsurer to deliver such True-Up Dispute Notice within the prescribed time period will constitute the Reinsurer's acceptance as final of the Final Closing Statement as determined by Aspen. Any amounts not disputed in the True-Up Dispute Notice (if one is delivered) shall be deemed to be accepted by the Reinsurer as final, except to the extent that such amounts are affected by any disputed amounts.

(c) If Aspen and the Reinsurer are unable to resolve all disagreements with respect to the Final Closing Statement within thirty (30) days following Aspen's receipt of a True-Up Dispute Notice (the "True-up Dispute Cooling-Off Period"), the items and amounts in dispute shall be submitted for review to the Independent Actuary for final determination within forty-five (45) days after such submission. The Independent Actuary shall decide all matters relating to the procedures to be followed for resolution of the dispute, including those relating to the submission and receipt of information and documents; provided, however, that at the request of either Aspen or the Reinsurer, a meeting shall be held at which the Parties may present their views, that both Aspen and the Reinsurer shall have equal access to the Independent Actuary, and that all information and documents which either Party delivers or makes available to the Independent Actuary shall be furnished to the other Party as well. The review by the Independent Actuary shall be limited solely to the disputed items (and any items affected thereby) and amounts in the True-Up Dispute Notice that remain unresolved. Any determination by the Independent Actuary shall not be outside the range defined by the respective amounts in the Final Closing Statement and the True-Up Dispute Notice, and such determination shall be final and binding upon, and non-appealable by, the Parties and their respective successors and assigns for all purposes of this Agreement, and not subject to collateral attack for any reason absent manifest error or fraud. The fees and expenses of the Independent Actuary arising from such arbitration shall be paid by the Parties pro rata based on where the Independent Actuary's

determination of the New Reinsurance Premium falls in comparison to the amount claimed by Aspen in the Final Closing Statement and the amount claimed by the Reinsurer in the True-Up Dispute Notice.

(d) If the New Reinsurance Premium as finally determined pursuant to this Section 3.3 is (i) greater than the Estimated New Reinsurance Premium (such difference, a “Positive Adjustment Amount”), then Aspen shall pay to the Reinsurer (or to the applicable Trust Accounts, to the extent that the Reinsurer’s Posted Collateral is less than the Initial Required Collateral Amount), by wire transfer of immediately available funds to one or more accounts designated in writing by the Reinsurer, the Positive Adjustment Amount within five (5) Business Days following final determination of the New Reinsurance Premium pursuant to this Section 3.3 or (ii) less than the Estimated New Reinsurance Premium (the absolute value of such difference, a “Negative Adjustment Amount”), then Aspen shall reduce the Funds Withheld Account Balance by the Negative Adjustment Amount.

3.4 Funds Withheld Account Interest and Release.

(a) During the period from the Closing Date to the Funds Withheld Release Date, interest shall accrue daily on the Funds Withheld Account Balance at the Full Crediting Interest Rate, calculated for each calendar quarter using the applicable Prior Funds Withheld Account Balance Average.

(b) Beginning with the period beginning on the Closing Date and ending on September 30 following the Closing Date and continuing for each twelve- (12) month period ending on September 30 thereafter (each such period, a “Crediting Interest Rate Period”):

(i) within five (5) Business Days of the end of any calendar quarter ending within such Crediting Interest Rate Period, the Base Crediting Interest Rate Accrued Amount with respect to such calendar quarter (or shorter, if applicable) shall be paid from the Funds Withheld Account to the Reinsurer; and

(ii) within forty-five (45) calendar days of the end of such Crediting Interest Rate Period, the amount (if any) by which the (A) the Full Crediting Interest Rate Accrued Amount for such Crediting Interest Rate Period exceeds (B) the Base Crediting Interest Rate Accrued Amount for such Crediting Interest Rate Period shall be paid from the Funds Withheld Account to the Reinsurer.

(c) On the Funds Withheld Release Date, Aspen shall pay to the Reinsurer (or, at the direction of the Reinsurer, deposit into one or more Trust Accounts) an amount equal to the Funds Withheld Account Balance as of such date (with such amount denominated in currencies in accordance with the breakdown of currencies of the Applicable Reserves underlying the most recently determined Required Collateral Amount) and, following such payment, Aspen shall have no further obligation to maintain the Funds Withheld Account.

3.5 Reinsurance Premium Currency Allocation.

(a) Aspen represents and warrants to the Reinsurer that Schedule 3.5 hereto sets forth a breakdown of the currencies in which the Applicable Reserves relating to the

Covered Losses reinsured hereunder as of September 30, 2021 were held by Aspen (the “Effective Date Reserve Currency Split”).

(b) Notwithstanding anything to the contrary set forth herein:

(i) the Estimated New Reinsurance Premium allocated to the Funds Withheld Account pursuant to Section 3.1(a) shall be denominated in currencies in accordance with the Effective Date Reserve Currency Split as adjusted to account for the Ultimate Net Loss paid by or on behalf of Aspen during the period from (and including) October 1, 2021 to (and including) the Closing Date (including accounting for the currencies in which such Ultimate Net Loss was paid); and

(ii) for so long as the Funds Withheld Account is maintained, promptly following the final determination of the Required Collateral Amount in accordance with Section 8.3(a) each calendar quarter, Aspen shall cause, after giving effect to the currencies in which the Ultimate Net Loss incurred in such calendar quarter was paid (and any reduction in the assets held in the Funds Withheld Account in connection therewith pursuant to this Agreement, including Section 4.4(a)), the Funds Withheld Account to be denominated in currencies in accordance with the breakdown of currencies of the Applicable Reserves underlying such Required Collateral Amount.

ARTICLE IV

ADMINISTRATION AND REPORTS

4.1 Administration.

(a) At the Closing Date or as soon as reasonably practicable thereafter, the Reinsurer and Aspen will, or will cause their respective Affiliates to, enter into the Administrative Services Agreement pursuant to which the Administrator, on the one hand, and Aspen or its Affiliates, on the other hand, will each provide certain administrative services with respect to the Subject Business as described on Exhibit A. Without limiting the provisions of the Administrative Services Agreement, in the event the Administrator reasonably requests a power of attorney to administer the Subject Business, Aspen shall, to the extent not precluded by Applicable Law, execute and deliver to the Administrator a limited power of attorney solely for the purposes of the administration of the Subject Business pursuant to the Administrative Services Agreement, in customary form.

(b) Until the Administrative Services Agreement has been entered into by the parties thereto, Aspen shall cause the Subject Business to be administered in accordance with Schedule 4.1(b).

(c) Between the date hereof and the date on which the Administrative Services Agreement has been entered into by the parties thereto, (i) Aspen and the Reinsurer shall negotiate the terms of the Administrative Services Agreement in good faith and consistent with the terms set forth on Exhibit A, and (ii) Aspen or the Reinsurer, as applicable, shall provide

the Agreed Reports and Aspen shall provide the transition related services to the Reinsurer and the Administrator set forth on Exhibit A.

(d) If, as of the end of any calendar quarter, (i) the Ultimate Net Loss paid by or on behalf of Aspen plus the Roll-forward Amount is an amount equal to or greater than \$3,000,000,000, and (ii) as of the end of such calendar quarter and each of the two (2) prior calendar quarters, the Ultimate Net Loss paid by or on behalf of Aspen plus the Roll-forward Amount plus the Applicable Reserves is an amount equal to or greater than \$3,650,000,000 (together, an “Administrative Rights Triggering Event”), Aspen shall be entitled to, at Aspen’s election, assume the administrative services required to be performed by the Administrator under the Administrative Services Agreement or hire a third-party administrator to assume such services. Following any such election by Aspen following an Administrative Rights Triggering Event, the Administrator and the Reinsurer shall cooperate and work in good faith to transition such services to Aspen or such third-party administrator, including transitioning any data and documents in the Administrator’s possession or under its control that are reasonably necessary to perform such services and shall, if requested by Aspen, negotiate in good faith a transition services agreement between the Administrator and Aspen or such third-party administrator in order for the Administrator to provide reasonable services for a reasonable period of time in order to transition administration of the Subject Business to Aspen or such third-party administrator.

(e) Each Party shall use its commercially reasonable efforts to cooperate with the other Party as reasonably requested by such other Party in connection with the administration of the Subject Business as contemplated by this Section 4.1, and take such further actions and execute such further documents and agreements as may be necessary to carry out the purpose and intent of this Section 4.1.

4.2 Reports.

(a) Within thirty (30) days of the end of each calendar quarter, Aspen shall provide the Reinsurer with a report in respect of the Subject Business in substantially the same form as the quarterly reports delivered by Aspen under the Original Agreement (a “Quarterly Report”), and which shall include the following quarterly information with respect to the Subject Business (which information shall include a breakdown by currency, as applicable): (i) gross and net paid Covered Losses, (ii) gross and net outstanding case reserves for Covered Losses and gross and net outstanding IBNR reserves for Covered Losses, (iii) applicable reinsurance, subrogation, salvage or other recoveries, (iv) Aspen’s cumulative net paid Covered Losses since the Effective Time, (v) any amounts withdrawn by Aspen from the Funds Withheld Account, any Trust Account or drawn on any Letters of Credit or other form of collateral posted by the Reinsurer, if applicable, (vi) the investment analysis report in connection with the total investments and cash and cash equivalents of Aspen Parent and all of its subsidiaries, and (vii) any amounts due from the Reinsurer pursuant to this Agreement.

(b) Actuaries from the Parties shall meet at least quarterly to discuss the data quality provided by Aspen and the Reinsurer, as applicable, any modifications to the data segmentation or reporting systems, any changes in claims practices and such other information as they mutually agree during the term of this Agreement.

(c) Within forty-five (45) calendar days of the end of each Crediting Interest Rate Period, Aspen shall provide to the Reinsurer a statement of the Aspen Annual Investment Return as of the end of such Crediting Interest Rate Period certified by the chief financial officer, chief investment officer, capital management officer or chief executive officer of Aspen Parent as being determined in accordance with the definition of "Aspen Annual Investment Return" set forth herein. Such statement shall include a summary of the portfolio underlying the Aspen Annual Investment Return.

(d) Without limiting the terms of this ARTICLE IV, Aspen shall provide to Reinsurer such periodic accounting and other reports with respect to the Subject Business and the liabilities reinsured hereunder as the Reinsurer may reasonably request.

4.3 Quarterly Report.

(a) Any balance due by the Reinsurer as set forth in a Quarterly Report shall be remitted by the Reinsurer (including by the Reinsurer directing Aspen to reduce the Funds Withheld Account Balance by such balance) within forty-five (45) days of its receipt of such Quarterly Report. For the avoidance of doubt, any disputes with respect to a Quarterly Report shall be subject to the dispute resolution provisions of the Administrative Services Agreement and the other applicable provisions of this Agreement.

(b) In addition to the payments set forth in Section 4.3(a), upon the mutual written agreement of Aspen and the Reinsurer, an interim payment amount may be calculated by Aspen and provided to the Reinsurer. The net amount due with respect to any such interim payment amount shall be paid by the Reinsurer to Aspen, and shall be reflected in the applicable Quarterly Report for the applicable calendar quarter.

4.4 Remittances.

(a) Notwithstanding anything to the contrary set forth herein, any amounts owed by the Reinsurer hereunder may be satisfied by draws by Aspen from the Funds Withheld Account, the Trust Accounts or the Letters of Credit or any other collateral provided by the Reinsurer pursuant to ARTICLE VIII, and the Reinsurer shall have no obligation to pay settlements hereunder to the extent of amounts so drawn; provided, however, that (i) Aspen shall draw upon the amount held in the Funds Withheld Account (if any) in order to satisfy any amounts owed by the Reinsurer hereunder prior to drawing upon the Trust Accounts, the Letters of Credit or any other collateral provided by the Reinsurer pursuant to ARTICLE VIII and (ii) subject to the foregoing clause (i), to satisfy any amounts owed by the Reinsurer hereunder, Aspen shall draw upon assets denominated in the currency in which such amount is owed (to the extent such assets are available) prior to drawing upon assets denominated in a currency other than the currency in which such amount is owed. Without limiting the obligation of the Reinsurer to provide collateral as set forth in ARTICLE VIII, in no event shall the Reinsurer be obligated to settle balances due hereunder directly with Aspen until such collateral has been fully depleted.

(b) Except as otherwise set forth herein or in the Administrative Services Agreement, settlement with respect to amounts owed hereunder by the Reinsurer to Aspen in

respect of Covered Losses and by Aspen to the Reinsurer in respect of Recoverables may be performed through the direct payment by the Reinsurer (or its Affiliates) of Covered Losses and direct receipt by the Reinsurer (or its Affiliates) of Recoverables on an ongoing basis as may be provided in the Administrative Services Agreement.

ARTICLE V

BOOKS AND RECORDS

5.1 Access to Books and Records.

(a) From time to time Aspen shall: (i) allow the Reinsurer and its designees, upon reasonable notice and during normal business hours and subject to the rules applicable to visitors at Aspen's offices, generally, the right to examine and make copies, at the Reinsurer's expense, of any Books and Records of Aspen and (ii) allow the Reinsurer and its designees to interview Representatives of Aspen, in each case, for any reasonable purpose relating to this Agreement, including the Reinsured Policies and Covered Losses, including in connection with the Reinsurer's preparation of regulatory and statutory filings and financial statements and, in each case, subject to the confidentiality provisions set forth in Section 16.2. Access to Aspen's Representatives and Books and Records and other information shall not unreasonably interfere with the business operations of Aspen or its Affiliates, and shall otherwise be effectuated in a reasonable manner, giving effect to the size and scope of this transaction. The Parties acknowledge that they share a common interest with respect to any privileged matters set forth in the Books and Records of Aspen.

(b) Notwithstanding any other provision of this Agreement to the contrary, Aspen shall not be obligated to provide such access to any Books and Records, Representatives or other information if Aspen determines, in its reasonable judgment, that doing so would violate Applicable Law or a contract, agreement or obligation of confidentiality owing to a third-party, jeopardize the protection of any attorney-client privilege, or expose Aspen to liability for disclosure of sensitive or personal information. The Parties will work in good faith to develop protocols for providing access to Aspen's Books and Records in such circumstances. In addition, the preparation of actuarial reports and analyses involves consultation with internal and external counsel, such that determinations of individual reserve levels including incurred-but-not reported reserves may disclose Aspen's privileged determinations about the strengths of legal coverage defenses in individual matters. To protect such privilege, information on reserves and incurred-but-not reported reserves shall be provided in aggregate and rolled up views. The Parties will cooperate fully to protect such legal privilege to the greatest extent possible while providing reporting and substantiation for the reinsurance provided hereunder. Notwithstanding the foregoing, the Parties acknowledge and agree that they may share a common interest with respect to certain Books and Records and that, accordingly, to the extent they share such common interest, the Parties will cooperate to provide the Reinsurer with access to such Books and Records where such access would, if not for such common interest, jeopardize attorney-client privilege. Further, the Parties acknowledge and agree that the disclosure of Claims-related information to the Reinsurer in the ordinary course of a reinsurer-insured relationship shall not, absent legal advice to the contrary, be deemed to jeopardize the protection of any attorney-client

privilege or expose Aspen to liability for disclosure of sensitive or personal information for purposes of this paragraph.

ARTICLE VI

DURATION AND TERMINATION

6.1 Duration and Termination.

(a) This Agreement shall commence as of the Closing Date (provided that those provisions that, by their nature, are intended to commence as of the date hereof shall commence as of the date hereof) and continue in force until the earlier of the date on which (i) Reinsurer has paid aggregate Covered Losses equal to the Reinsurer's Limit; (ii) Aspen's liability under all of the Reinsured Policies has terminated or extinguished and all amounts due to Aspen under this Agreement with respect to such Reinsured Policies have been paid and (iii) this Agreement is terminated upon a commutation by the mutual written agreement of the Parties. In the event this Agreement is terminated in accordance with the preceding sentence or Section 6.1(b), unless otherwise agreed by the Parties, subject to the payment to Aspen by the Reinsurer of an agreed settlement amount in the event this Agreement is terminated pursuant to clause (iii) of the prior sentence or Section 6.1(b), the Reinsurer shall be entitled to (A) terminate any and all Letters of Credit, (B) the Funds Withheld Account Balance and all assets held in any Trust Account, which shall be released to the Reinsurer, and (C) 100% of all Recoverables owed to the Reinsurer pursuant to the terms hereof that remain outstanding as of the termination date of this Agreement. All provisions hereof relating to collection or application of such Recoverables shall survive termination.

(b) Aspen may terminate this Agreement if (i) the Reinsurer fails to pay any undisputed amounts due and owing under this Agreement where such failure to pay has not been cured within fifteen (15) days following Aspen's notification to the Reinsurer of such failure (and Aspen does not have access to sufficient collateral provided hereunder to pay or recover for such amount owing) or the Reinsurer fails to provide additional collateral as and when required by Section 8.2 or 8.3 (and Reinsurer has not remedied such failure within thirty (30) days of receiving written notice of such failure from Aspen), and/or (ii) the Reinsurer should at any time (whether voluntarily or otherwise) become insolvent or the subject of any liquidation, administration, rehabilitation, receivership, supervision, conservation or bankruptcy action or proceeding (whether judicial or otherwise) or the Reinsurer ceasing to meet its "Enhanced Capital Requirement" as stipulated by the framework of the applicable Governmental Authority of Bermuda (or, where amended or replaced, its equivalent); provided, however, that this Agreement shall terminate automatically in the event that the Reinsurer becomes subject to an order of liquidation, administration or rehabilitation or similar order of a non-United States jurisdiction (in the event of such an order, termination of this Agreement shall be on a clean-cut basis, with the Reinsurer liable on and as of the termination date for all of the Reinsurer's obligations under this Agreement for (i) losses and expenses due from but not recovered from the Reinsurer, (ii) the reserves for losses and expenses reported and outstanding (case reserves) and (iii) the reserves for losses and expenses incurred but not reported (IBNR); provided, for the avoidance of doubt, Aspen shall offset any balances payable by it to the Reinsurer from such forgoing obligations under this Agreement). The Reinsurer may terminate this Agreement if

Aspen fails to pay any undisputed amounts due and owing under this Agreement (including, but not limited to, failing to pay the Funds Withheld Account Balance on the Funds Withheld Release Date pursuant to Section 3.4(c)) where such failure to pay has not been cured within fifteen (15) days following the Reinsurer's notification to Aspen of such failure and in the event of such a termination, termination of this Agreement shall be on a clean-cut basis, with the Reinsurer liable on and as of the termination date for all of the Reinsurer's obligations under this Agreement for (i) losses and expenses due from but not paid by the Reinsurer, (ii) the reserves for losses and expenses reported and outstanding (case reserves) and (iii) the reserves for losses and expenses incurred but not reported (IBNR); provided, for the avoidance of doubt, the Reinsurer shall offset any ceded balances payable by Aspen to the Reinsurer from such forgoing obligations under this Agreement. For purposes of determining the payment to be made in connection with a termination of this Agreement in respect of reserves, the reserves shall be determined using Aspen's historical practice for preparing such reserves and consistent with the definition of "Applicable Reserves".

6.2 Effect of Termination. Notwithstanding the other provisions of this ARTICLE VI, the terms and conditions of ARTICLE I, ARTICLE VI, ARTICLE XIII and the provisions of Sections 16.1, 16.3, 16.8, 16.9, 16.10 and 16.15 shall remain in full force and effect after the termination of this Agreement. Any Letter of Credit posted by the Reinsurer pursuant to this Agreement shall terminate upon the termination of this Agreement. In the event that this Agreement is terminated prior to the occurrence of the Closing, the Original Agreement shall continue in full force and effect in accordance with its terms.

6.3 Outside Date. If the Closing has not occurred on or before the date that is nine (9) months following the date hereof (the "Outside Date"), then either Party may terminate this Agreement by written notice to the other Party; provided, however, that if the sole cause of the Closing not occurring by the Outside Date is the failure to receive all consents, approvals and authorizations of Governmental Authorities required to consummate the transactions contemplated hereby by the Outside Date, the Outside Date shall be automatically extended for an additional thirty (30) days; provided, further, that such right to terminate this Agreement shall not be available to a Party if the failure of the Closing to occur before the Outside Date was primarily due to the failure of such Party to perform any of its obligations under this Agreement.

ARTICLE VII

INSOLVENCY

7.1 Insolvency of Aspen.

(a) The Reinsurer hereby agrees that in the event of the insolvency, liquidation or rehabilitation of Aspen or the appointment of a conservator, liquidator, receiver or statutory successor of Aspen, all amounts due to Aspen under this Agreement shall be payable by the Reinsurer to Aspen or any conservator, liquidator, receiver or statutory successor of Aspen on the basis of the claims allowed against Aspen by any court of competent jurisdiction or by any conservator, liquidator, receiver or statutory successor of Aspen having authority to allow such claims, without diminution because of that insolvency, liquidation, rehabilitation or appointment, or because the conservator, liquidator, receiver or statutory successor has failed to

pay all or a portion of any claims. Payments by the Reinsurer as set forth in this Section 7.1 shall be made directly to Aspen or to its conservator, liquidator, receiver, or statutory successor, provided that such payment may be effected by draw on the amounts held in the Funds Withheld Account or other collateral and the Reinsurer shall be entitled to recoup amounts held by Aspen in the Funds Withheld Account or other collateral against the Reinsurer's obligations to make any such payment, except (i) where this Agreement specifically provides another payee of such reinsurance in the event of the insolvency of Aspen, (ii) if applicable, as provided by Section 4118(a)(1)(A) and 1114(c) of the New York Insurance Law, (iii) where the Reinsurer, with consent of the direct insured(s), has voluntarily assumed such Reinsured Policy obligations of Aspen as direct obligations of the Reinsurer to payees under such Reinsured Policies in substitution for obligations of Aspen to the payees, or (iv) where provided otherwise under Applicable Law. Unless otherwise required by Applicable Law, under no circumstances shall the Reinsurer's liability hereunder be accelerated or enlarged by the insolvency of Aspen.

(b) It is agreed and understood, however, that in the event of the insolvency of Aspen, the liquidator, receiver, conservator or statutory successor of Aspen shall give written notice to the Reinsurer of the pendency of a claim against Aspen for a Covered Loss within a reasonable period of time after such claim is filed in the insolvency, liquidation or rehabilitation proceedings and that during the pendency of such claim the Reinsurer may investigate such claim and interpose, at its own expense, in the proceeding where such claim is to be adjudicated, any defense or defenses which it may deem available to Aspen or its liquidator, receiver, conservator or statutory successor. It is further understood that the expense thus incurred by the Reinsurer shall be chargeable, subject to court approval, against Aspen as part of the expense of administration or liquidation to the extent of a proportionate share of the benefit that may accrue to Aspen solely as a result of the defense undertaken by the Reinsurer.

(c) This ARTICLE VII shall apply severally to each reinsured included in the definition of "Aspen."

ARTICLE VIII

SECURITY

8.1 Security.

(a) The Reinsurer shall take all steps necessary to permit each reinsured included in the definition of "Aspen" to obtain full financial statement and regulatory credit for the reinsurance provided hereunder in all jurisdictions applicable to such reinsured. In the event any of the provisions of this Agreement conflict with or otherwise fail to satisfy the requirements of the appropriate credit for reinsurance Applicable Laws and/or regulatory guidance or directives of any applicable jurisdiction, this Agreement shall be deemed amended to conform to the appropriate Applicable Laws and/or regulatory guidance or directives of such applicable jurisdiction; the intent of this Agreement being that each reinsured included in the definition of "Aspen" shall be permitted to realize full financial statement and regulatory credit for the reinsurance ceded to the Reinsurer under this Agreement at all times, and such collateral held shall be in an amount and form, shall be issued by or held by an acceptable entity, and shall otherwise comply, at all times, with the appropriate Applicable Laws and/or regulatory guidance

or directives concerning credit for reinsurance and collateral required to be held for the benefit of each reinsured included in the definition of "Aspen". Notwithstanding anything to the contrary set forth in this Agreement, the Reinsurer shall not, as of any date of determination, be required to provide an aggregate amount of collateral hereunder, whether through the Funds Withheld Account, the deposit of assets into the Trust Account, the posting of Letters of Credit or otherwise, in excess of the Required Collateral Amount as of such date of determination.

(b) The Reinsurer's obligations under this Agreement may be secured, in whole or in part, by any form of collateral reasonably acceptable to Aspen that satisfies all applicable credit for reinsurance Applicable Laws and/or regulatory guidance or directives of all jurisdictions applicable to the relevant reinsured included in the definition of "Aspen" in order for such reinsured to receive full financial statement and regulatory credit for the reinsurance provided hereunder, which (subject to the foregoing) may include Letters of Credit, the Funds Withheld Account, or assets held in one or more Trust Accounts. As used herein, "Reinsurer's Posted Collateral" means, as of any date of determination, the aggregate amount of (i) the balance of all Letters of Credit provided by the Reinsurer pursuant to this Agreement, (ii) the aggregate Market Value of the assets held in all Trust Accounts, (iii) the Funds Withheld Account Balance, and (iv) the aggregate amount of any other collateral provided by the Reinsurer for the benefit of a reinsured included in the definition of "Aspen" that satisfies the requirements set forth in this Section 8.1(b).

8.2 Collateral Arrangements; Reinsurer's Collateral Obligations.

(a) The Parties shall work together in good faith and use commercially reasonable efforts to put into place, as promptly as practicable following the Closing Date and no later than the Funds Withheld Release Date, collateral arrangements that satisfy the requirements set forth in Section 8.1(b) with respect to each reinsured included in the definition of "Aspen", which may include entering into one or more Trust Agreements establishing one or more Trust Accounts for the sole benefit of one or more reinsureds included in the definition of "Aspen". The Funds Withheld Account Balance shall initially be equal to the Estimated New Reinsurance Premium and the Reinsurer acknowledges that the Estimated New Reinsurance Premium will be held by Aspen on a funds withheld basis as collateral for the performance of the Reinsurer's obligations hereunder. The Funds Withheld Account shall serve as a source of payment of the Reinsurer's obligations to Aspen hereunder. Aspen shall not, and shall cause its Affiliates not to, (i) grant or cause to be created in favor of any Person any security interest whatsoever in the Funds Withheld Account or any assets therein and (ii) use any of the assets in the Funds Withheld Account to provide other security in respect of the Reinsured Policies or otherwise. Five (5) days prior to the Closing Date, Aspen will provide to the Reinsurer a breakdown prepared in good faith of the Applicable Reserves attributable to each reinsured included in the definition of "Aspen" as of the calendar quarter immediately preceding the Closing Date. The Reinsurer will fund its collateral obligations to each such reinsured hereunder in proportion to the breakdown of Applicable Reserves attributable to such reinsured, subject in all events to the additional terms and conditions set forth in this ARTICLE VIII.

(b) In accordance with the terms set forth herein and in any Trust Agreement, and subject to the provisions of Section 8.6 and Section 8.7, the Reinsurer shall ensure that the

Reinsurer's Posted Collateral is greater than or equal to the Required Collateral Amount, if any, as of a date of determination.

(c) The Reinsurer, prior to depositing assets with any Trustee, shall execute assignments or endorsements in blank, or transfer legal title to such Trustee of all shares, obligations or other assets requiring assignments so that such Trustee, upon the direction of the applicable reinsured included in the definition of "Aspen", may negotiate such assets without consent or signature from the Reinsurer or any other Person.

8.3 Ongoing Collateral Obligations.

(a) Within thirty (30) calendar days following the end of each calendar quarter, beginning with the calendar quarter in which the Closing Date occurs, Aspen shall deliver to the Reinsurer a quarterly funding report calculating the Required Collateral Amount as of the end of such calendar quarter (the last day of each calendar quarter, the "Calculation Date"), together with a breakdown prepared in good faith of the Applicable Reserves attributable to each reinsured included in the definition of "Aspen", prepared by Aspen. The funding reports shall contain sufficient detail for the Reinsurer to confirm the calculation of the Applicable Reserves, the Required Collateral Amount and the breakdown of the Applicable Reserves attributable to each reinsured included in the definition of "Aspen." In the event the Reinsurer disagrees with any matters set forth in the funding report, within fifteen (15) days following receipt of the funding report, the Reinsurer shall deliver to Aspen a notice of disagreement specifying in reasonable detail each item it disputes (each, a "Disputed Item"). If the Reinsurer does not deliver a notice of disagreement within such fifteen (15) day period, then the Required Collateral Amount set forth in the funding report shall be final and binding. If the Reinsurer timely submits a notice of disagreement, the Parties shall negotiate in good faith to resolve the Disputed Items for five (5) days following receipt by Aspen of such notice of disagreement. If the Parties cannot resolve the Disputed Items within such five (5) day period, the Parties shall submit the Disputed Items to a mutually acceptable, independent actuarial firm ("Independent Actuary"), with an international reputation, to resolve the Disputed Items. Each Party shall furnish to the Independent Actuary such work papers, books, records and documents and other information pertaining to the Disputed Items as the Independent Actuary may request. The Independent Actuary shall issue its written determination with respect to each of the Disputed Items within ten (10) days after such matters are submitted to the Independent Actuary for review. The costs and expenses of the Independent Actuary shall be split evenly between Aspen and the Reinsurer. The determination by the Independent Actuary shall be binding on the Parties with respect to the Disputed Items solely for the purposes of establishing the applicable Required Collateral Amount.

(b) If the Required Collateral Amount, as determined in accordance with Section 8.3(a), for any calendar quarter exceeds the Reinsurer's Posted Collateral (determined as of the applicable Calculation Date), the Reinsurer shall, within five (5) calendar days after determination of the Required Collateral Amount pursuant to Section 8.3(a), (i) pay an amount in cash to Aspen for deposit into the Funds Withheld Account or (ii) provide additional collateral in a form reasonably acceptable to Aspen that satisfies the requirements set forth in Section 8.1, in either case such that the Reinsurer's Posted Collateral equals or exceeds the Required Collateral Amount. For the avoidance of doubt, the Reinsurer shall not be required to post collateral that,

in the aggregate, exceeds the Required Collateral Amount and in no event shall the Reinsurer be required to post collateral to the extent such posted collateral plus the aggregate Ultimate Net Loss paid by the Reinsurer under this Agreement would exceed 102% of the Reinsurer's Limit.

8.4 Substitution of Trust Assets. The Reinsurer may substitute or exchange assets in any Trust Account, provided (i) any assets to be so substituted or exchanged (the "Replacement Assets") are Eligible Assets, (ii) the Replacement Assets are deposited in such Trust Account on the day of the substitution or exchange and (iii) the aggregate Market Value of the Replacement Assets is at least equal to the aggregate Market Value of the assets being removed from such Trust Account. The Reinsurer shall also be permitted to withdraw assets from any Trust Account immediately following the posting of a Letter of Credit securing the Reinsurer's obligations hereunder in a face amount equal to the Market Value of the assets to be so withdrawn.

8.5 Settlements. Subject to Section 3.5, all settlements of account between the Reinsurer and Aspen shall be made in United States dollars in cash or its equivalent; provided, however, that Ultimate Net Loss shall be settled in the applicable currency in which the amounts underlying such Ultimate Net Loss were paid.

8.6 Withdrawal of Assets by Aspen.

(a) Assets in the Funds Withheld Account, any Trust Account, Letters of Credit and any other collateral provided by the Reinsurer may be drawn upon by Aspen (or any successor by operation of law of Aspen, including any liquidator, rehabilitator, receiver or conservator of Aspen) at any time, and shall be utilized and applied by Aspen (or any successor by operation of law of Aspen, including any liquidator, rehabilitator, receiver or conservator of Aspen), without diminution because of insolvency on the part of Aspen or the Reinsurer, only for one or more of the following purposes:

(i) to pay or reimburse Aspen for the Reinsurer's share of Covered Losses not otherwise paid by the Reinsurer when due;

(ii) to make payment to the Reinsurer of any excess collateral amounts in the event and to the extent that the Reinsurer's Posted Collateral exceeds the Required Collateral Amount, in accordance with Section 8.7; or

(iii) in the case of assets in any Trust Account or Letters of Credit (1) when Aspen has received notification of the termination of the Trust Account or the termination or non-renewal of the Letter of Credit (as applicable) or (2) in the event of any insolvency, bankruptcy or other similar credit event in respect of the Reinsurer or the Trustee, and when any of the Reinsurer's obligations under this Agreement remain unliquidated and undischarged ten (10) calendar days prior to the date of such termination or non-renewal or at the time of such insolvency, bankruptcy or other credit event, to fund a segregated account in the name of Aspen in an amount at least equal to such obligations for reinsurance ceded under this Agreement.

(b) Aspen shall deposit in any Trust Account (in the event of a withdrawal from a Trust Account or a draw against a Letter of Credit) or the Funds Withheld Account (in the event of a withdrawal from the Funds Withheld Account), within five (5) Business Days, assets withdrawn from such Trust Account, amounts drawn against any Letters of Credit or amounts drawn from the Funds Withheld Account in excess of all amounts due under Sections 8.6(a)(i) and (ii) or, in the case of Section 8.6(a)(iii), assets that are subsequently determined not to be due. Any such excess amount shall at all times be held by Aspen (or any successor by operation of law of Aspen, including any liquidator, rehabilitator, receiver or conservator of Aspen) in trust for the sole and exclusive benefit of the Reinsurer and be maintained in a segregated account, separate and apart from any assets of Aspen for the sole purpose of funding the payments and reimbursements described in Section 8.6(a). Aspen shall pay interest in cash to the Reinsurer on the amount withdrawn, equal to the actual amount of interest, dividends, and other income earned on the assets in such segregated account.

8.7 Withdrawal of Assets by the Reinsurer. Aspen shall (if requested in writing by the Reinsurer) promptly pay to the Reinsurer from the Funds Withheld Account, or the Reinsurer may withdraw assets from any Trust Account or cause any Letters of Credit or other forms of collateral provided by the Reinsurer to be amended or terminated, if, but only to the extent that, the Reinsurer's Posted Collateral exceeds the Required Collateral Amount as of any date of determination, as determined in accordance with Section 8.3(a), and Aspen shall take such action as is necessary to make such payment to the Reinsurer or to allow the Reinsurer to so withdraw assets or cause any such Letters of Credit or other forms of collateral to be so amended or terminated.

8.8 Collateral Termination. Promptly following termination of this Agreement and provided that the Reinsurer has paid any and all amounts due to Aspen, Aspen and the Reinsurer shall take all actions necessary to terminate each Trust Account, each Trust Agreement and any Letters of Credit or other form of collateral provided by the Reinsurer pursuant to this ARTICLE VIII. Further, Aspen shall no longer be obligated to maintain the Funds Withheld Account and any balance therein shall be promptly paid to the Reinsurer.

ARTICLE IX

SALVAGE, SUBROGATION AND THIRD PARTY REINSURANCE

9.1 Salvage and Subrogation. The Reinsurer shall be subrogated to all rights of Aspen against any Person who may be legally responsible in damages constituting Covered Losses for which the Reinsurer shall actually pay on or after the Effective Date (but only to the extent of the amount of payment by the Reinsurer).

9.2 Expenses. In determining the amount of salvage or subrogation, there shall not be deducted from any amount recovered the out-of-pocket expenses incurred by Aspen in effecting the recovery (which the Parties acknowledge shall be included in Allocated Loss Adjustment Expenses). All amounts recovered in connection with salvage and subrogation pursuant to this Section 9.2, excluding any amounts recovered that are attributable to Claims paid by Aspen prior to the Effective Date or other amounts paid by Aspen prior to the Closing Date and excluded pursuant to Section 2.5(a), shall be referred to as "Recoverables."

9.3 Third Party Reinsurance. For so long as the Administrative Services Agreement remains in effect, the Reinsurer (or the Administrator) shall have the right in accordance with the terms thereof to collect all Third Party Reinsurance Recoverables on behalf of Aspen and to make any payments due or owing by Aspen to any counterparty pursuant to any Third Party Reinsurance Agreement to the extent applicable to Covered Losses. Notwithstanding the foregoing, with respect to any Third Party Reinsurance Agreements and Third Party Reinsurance Recoverables applicable to both the Subject Business and other business of Aspen ("Shared Outward Reinsurance"), the terms of Schedule 9.3 shall apply.

ARTICLE X

ERRORS AND OMISSIONS; REGULATORY MATTERS; COVENANTS

10.1 Errors and Omissions. Inadvertent delays, errors or omissions made in connection with this Agreement or any transaction hereunder shall not relieve any Party from any liability which would have attached had such delay, error or omission not occurred, provided that such error or omission is promptly rectified after discovery by an officer of such Party, and provided, further, that the Party making such error or omission or responsible for such delay shall be responsible for any additional liability which attaches as a result. If (a) the failure of any Party to comply with any provision of this Agreement is unintentional or the result of a misunderstanding or oversight and (b) such failure to comply is promptly rectified after discovery, the Parties shall be restored as closely as possible to the positions they would have occupied if no error or oversight had occurred.

10.2 Cooperation. Aspen and the Reinsurer shall cooperate with each other in order to accomplish the objectives of this Agreement by furnishing any additional information and executing and delivering any additional documents and taking such other actions as may be reasonably requested by the other to further perfect or evidence the consummation of, or otherwise implement, any transaction contemplated by this Agreement or any other Transaction Agreement, or to aid in the preparation of any regulatory filing or financial statement or original or amended Tax Return; provided, however, that any such additional documents must be reasonably satisfactory to each of the Parties and not impose upon any Party any material liability, risk, obligation, loss, cost or expense not contemplated by this Agreement or the other Transaction Agreements to which it is a party.

10.3 Regulatory Matters.

(a) If Aspen or the Reinsurer receives notice of, or otherwise becomes aware of, any written inquiry, investigation, examination, audit, proceeding or action by Governmental Authorities relating to the Subject Business, the Reinsured Policies or the reinsurance provided hereunder, Aspen and the Reinsurer, as applicable, shall promptly notify the other Party thereof to the extent permitted under Applicable Law, whereupon the Parties shall cooperate in good faith to resolve such matter in a mutually satisfactory manner and shall act reasonably in light of the Parties' respective interests in the matter at issue.

(b) Notwithstanding any other provision in this Agreement or any other Transaction Agreement to the contrary, Aspen shall retain ultimate authority with respect to the handling of all regulatory matters in respect of the Subject Business.

(c) At all times during the term of this Agreement, each of Aspen and the Reinsurer, respectively, agrees that it shall hold and maintain all licenses and authorizations required under Applicable Law to perform its respective obligations under the Transaction Agreements and shall comply in all material respects with all Applicable Law in connection with its performance of such obligations and the Reinsurer shall not (and shall procure that its Affiliates shall not) cause Aspen to breach Applicable Law through the performance of its (or their) obligations under the Administration Services Agreement.

(d) The Parties agree to work together in good faith to amend the terms of the Transaction Agreements to the extent necessary to comply with Applicable Law or other accounting or regulatory requirements applicable to the Parties; provided, subject and without prejudice to the each Party's obligations under ARTICLE VIII, that neither Party shall be required to materially alter the terms of the transactions (including the amount of collateral to be provided and the delivery of any guarantee, keep-well or similar agreement) contemplated by this Agreement or the other Transaction Agreements in connection with the foregoing.

(e) Prior to the Closing, the Parties agree to cooperate and amend this Agreement and the form of Administration Services Agreement with respect to the approach to: (i) the administration of Claims; and/or (ii) the type or form of collateral and security, in each case, to reflect any requirements of applicable Governmental Authorities (including, without limitation, with respect to step-in rights, termination rights and/or retaining certain assets in the Funds Withheld Account after the Funds Withheld Release Date to comply with localization of assets and/or retention of title requirements of Applicable Law). In connection with any required amendment described in this Section 10.3(e), the Parties shall also make any further amendment to this Agreement or any other Transaction Agreement that would be necessary to achieve the original intent and economic effect of the transactions contemplated hereby and thereby to the greatest extent practicable as if such required amendment was not made (including, for example and without limitation, by amending the interest rate credited to any assets retained in the Funds Withheld Account after the Funds Withheld Release Date to reflect the profit or loss that would have been earned on such retained amounts had they been released on the Funds Withheld Release Date and invested in the Trust Accounts).

10.4 Existing Agreements. Aspen shall not amend, waive or terminate the terms of any Reinsured Policy, without the prior written consent of the Reinsurer (such consent not to be unreasonably withheld, delayed or conditioned), except (a) as required by Applicable Law or (b) as would not reasonably be expected to increase the exposure of Aspen under such Reinsured Policy in any material respect or otherwise adversely affect the Reinsurer or the coverage provided hereunder in any material respect.

10.5 Reinsurance of Reinsured Policies. Other than existing reinsurance under the Third Party Reinsurance Agreements or any existing reinsurance between two or more of the Aspen entities, Aspen shall not reinsure any Covered Loss or enter into any agreement that would constitute a Third Party Reinsurance Agreement. Aspen will provide the Reinsurer or a

designated Affiliate thereof a right of first offer with respect to any reinsurance Aspen seeks to acquire for all or any portion of its risk above the Reinsurer's Limit.

10.6 Commercially Reasonable Efforts. Upon the terms and subject to the conditions set forth in this Agreement, between the date of this Agreement and the Closing Date, Aspen and the Reinsurer shall each use their commercially reasonable efforts to promptly obtain from any Governmental Authority any actions, non-actions, clearances, waivers, consents, approvals, permits or orders required to be obtained by such Party or any of its Affiliates in connection with the authorization, execution, delivery and performance of this Agreement and the other Transaction Agreements and the consummation of the transactions contemplated hereby and thereby, including, as promptly as practicable after the date hereof, making any necessary filings with, or notifications to, such Governmental Authorities; provided, subject and without prejudice to each Party's obligations under ARTICLE VIII, that no Party shall be required to materially alter the terms of such transactions (including the amount of collateral to be provided and the delivery of any guarantee, keep-well or similar agreement) contemplated by this Agreement or the other Transaction Agreements in connection with the foregoing.

ARTICLE XI

REPRESENTATIONS AND WARRANTIES

11.1 Aspen Representations and Warranties. Except as set forth in the disclosure letter delivered by Aspen to the Reinsurer on the date hereof, Aspen Parent represents and warrants to the Reinsurer, as of the date hereof and as of the Closing Date (except for representations and warranties which address matters only as of a specific date, which representations and warranties shall be true and correct as of such specific date) and each of the reinsureds included in the definition of "Aspen" represents and warrants to the Reinsurer, separately and not jointly, and only with respect to such reinsured and not to the other reinsureds that comprise the definition of "Aspen" or the Aspen Parent, as of the date such reinsured executes this Agreement and as of the Closing Date (except for representations and warranties which address matters only as of a specific date, which representations and warranties shall be true and correct as of such specific date) as follows:

(a) Organization, Standing and Corporate Power. Aspen and Aspen Parent are each duly organized, validly existing and in good standing under the laws of their respective jurisdictions of formation, and have all requisite corporate power and authority to carry on the operations of their respective businesses as they are now being conducted. As of the Closing Date, Aspen and Aspen Parent will have obtained all authorizations and approvals required under Applicable Law to perform their respective obligations under the Transaction Agreements.

(b) Authority. Aspen and Aspen Parent have the requisite corporate (or other organizational) power and authority to enter into the Transaction Agreements to which they are a party and to consummate the respective transactions contemplated thereby. The execution and delivery by Aspen and Aspen Parent of the Transaction Agreements to which they are a party and the consummation by Aspen and Aspen Parent of the respective transactions contemplated thereby have been and, with respect to the Transaction Agreements to which they are a party to be executed and delivered at or after Closing, will be, duly authorized by all necessary corporate

or other organizational action on the part of Aspen and Aspen Parent. Each of the Transaction Agreements have been or, with respect to the Transaction Agreements to be executed and delivered at or after the Closing, will be, duly executed and delivered by Aspen and Aspen Parent and, assuming the Transaction Agreements constitute valid and binding agreements of the other parties thereto (other than Aspen and Aspen Parent), constitute valid and binding obligations of Aspen and Aspen Parent, enforceable against Aspen and Aspen Parent in accordance with their terms, except that (i) such enforcement may be subject to applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws, now or hereafter in effect, affecting creditors' rights generally and (ii) the remedy of specific performance and injunctive and other forms of equitable relief may be subject to equitable defenses and to the discretion of the court before which any proceeding therefor may be brought (clauses (i) and (ii) shall be referred to as, the "Enforceability Exceptions").

(c) No Conflict or Violation. The execution, delivery and performance by Aspen and Aspen Parent of the Transaction Agreements to which they are a party and the consummation of the respective transactions contemplated thereby in accordance with the respective terms and conditions thereof will not (i) violate any provision of the organizational documents of Aspen and Aspen Parent or (ii) violate any material contract, Applicable Law, Order, license or permit to which Aspen or Aspen Parent is a party or otherwise subject in any material respect.

(d) Consents. Subject to the matters referred to in the next sentence, the execution, delivery and performance by Aspen and Aspen Parent of the Transaction Agreements to which they are a party and the consummation of the respective transactions contemplated thereby in accordance with the respective terms and conditions thereof will not contravene any Applicable Law in any material respect. No consent, approval or authorization of, or declaration or filing with, or notice to, any Governmental Authority, other than (a) filing of a Form 20-F, Form 6-K or other applicable form with the U.S. Securities and Exchange Commission; (b) Form D filings with applicable U.S. insurance regulators; (c) consent or non-objection from the UK Prudential Regulation Authority (the "PRA") and Lloyd's of London ("Lloyd's"); and (d) consents, approvals or non-objections as may be required from the Governmental Authorities in Australia, Bermuda, Canada, Singapore and Switzerland, arising out of or in connection with the transaction contemplated by this Agreement, where such approval(s) are required to be obtained by any applicable reinsured included within the definition of "Aspen", or any other Person is required by or with respect to Aspen or Aspen Parent in connection with the execution and delivery of any Transaction Agreements by Aspen or Aspen Parent, or the consummation by Aspen or Aspen Parent of the transactions contemplated thereby.

(e) Compliance. Aspen and Aspen Parent are in material compliance with each of the following: (i) their respective organizational documents; (ii) all Applicable Law to the extent related to the Reinsured Policies or the Subject Business and (iii) all material permits and licenses issued to them by any Governmental Authority in connection with the Reinsured Policies or the Subject Business.

(f) Brokers. No broker or finder, other than Evercore Partners International LLP (whose fee shall be paid by Aspen), has acted directly or indirectly for Aspen or its Affiliates, and neither Aspen nor any of its Affiliates has incurred any obligation in respect of

any broker or finder, which might be entitled to any fee or commission from the Reinsurer or its Affiliates in connection with the transactions contemplated by this Agreement.

(g) Claims Data. To the knowledge of Aspen Parent, the historical claims data made available to the Reinsurer by Aspen Parent and its subsidiaries as regards the Reinsured Policies is accurate in all material respects as of the date indicated. The reserves and other provisions made for claims, benefits and any other liabilities with respect to the Reinsured Policies, whether reported or incurred but not reported, as established or reflected on Aspen's most recent statutory annual statement and statutory quarterly statement were calculated in all material respects in accordance with (i) statutory accounting principles and generally accepted actuarial principles, in each case consistently applied, (ii) Applicable Law and (iii) otherwise in accordance with the terms of the Reinsured Policies. Aspen Parent has made available to the Reinsurer all information material to the liabilities reinsured hereunder. For the avoidance of doubt, no representation or warranty is made as to the adequacy or sufficiency of reserves as of any date. For the avoidance of doubt, only Aspen Parent is making the representations and warranties set forth in this Section 11.1(g), and no reinsured that comprises the definition of "Aspen" is making, or shall be deemed to be making, the representations and warranties set forth in this Section 11.1(g).

(h) Absence of Certain Changes. Since the Effective Date, (i) the Subject Business has been conducted in all material respects in the ordinary course consistent with past practices and (ii) there has not been any adverse event, change or circumstance that, individually or in the aggregate, has had or would reasonably be expected to have a material adverse effect on the Subject Business or the liabilities reinsured hereunder.

(i) Orders and Proceedings. As of the date hereof, there are no (i) material outstanding Orders relating to the Reinsured Policies or the Subject Business against or involving Aspen, Aspen Parent or any of their assets related to the Reinsured Policies or the Subject Business or (ii) material consent agreements, commitment agreements, capital maintenance or similar written agreements entered into between any Governmental Authority and Aspen or any of its Affiliates that expressly relate to the Reinsured Policies or the Subject Business under which Aspen or any of its Affiliates has any continuing obligations. As of the date hereof, there is no material claim, action, suit, litigation, legal, administrative or arbitration proceeding, regulatory inquiry, investigation or examination relating to the Reinsured Policies or the Subject Business which is pending or threatened against or involving Aspen, Aspen Parent or any of their assets, properties, rights or privileges relating to the Reinsured Policies or the Subject Business that, in each case, challenges or may reasonably be expected to have the effect of preventing or delaying or making unlawful the consummation of the transactions contemplated by the Transaction Agreements.

(j) Reinsured Policies. With respect to each Reinsured Policy, to the knowledge of Aspen and Aspen Parent, (i) the applicable issuing insurance company or entity is not in default under such Reinsured Policy in any material respect and no event has occurred which would create such a default by such company or entity under such Reinsured Policy (it being understood that claims under the Reinsured Policies that are the subject of a good faith dispute shall not constitute defaults under the Reinsured Policies for the purposes of this Section 11.1(j)) and (ii) such Reinsured Policy was issued in compliance in all material respects with

Applicable Law. To the knowledge of Aspen and Aspen Parent, there are no material pending or threatened disputes with respect to the validity of any Reinsured Policy.

(k) Third Party Reinsurance.

(i) As of September 30, 2021, the aggregate value of all Third Party Reinsurance Recoverables was [***], which (A) consisted of [***]for case reserves and [***]for incurred but not reported losses and (B) was calculated in all material respects in accordance with (1) statutory accounting principles and generally accepted actuarial principles, in each case consistently applied, (2) Applicable Law and (3) otherwise in accordance with the terms of the applicable Third Party Reinsurance Agreements. Notwithstanding the foregoing, the Reinsurer acknowledges that none of Aspen or Aspen Parent has made or is making any representation or warranty, express or implied, that [***]of Third Party Reinsurance Recoverables will actually be collected.

(ii) To the knowledge of Aspen and Aspen Parent, other than in regard to net retained line clauses and similar provisions: (A) no Material Third Party Reinsurance Agreement contains any provision under which the reinsurer may terminate such agreement by reason of the transactions contemplated by this Agreement or the agreements contemplated hereby and (B) there has been no separate contract between the applicable ceding company (or its Affiliates) and any other party to such Material Third Party Reinsurance Agreement that would under any circumstances reduce, limit, mitigate or otherwise affect any actual or potential loss to the parties under any such Material Third Party Reinsurance Agreement, other than inuring contracts that are explicitly defined in any such Material Third Party Reinsurance Agreement.

(iii) With respect to each Material Third Party Reinsurance Agreement, to the knowledge of Aspen and Aspen Parent, (A) neither the applicable ceding company (or its Affiliates), on the one hand, nor the reinsurer, on the other, is in default under such Material Third Party Reinsurance Agreement, and no event has occurred which would create a material default or breach by the applicable ceding company (or its Affiliates) under such Material Third Party Reinsurance Agreement, (B) such Material Third Party Reinsurance Agreement is in full force and effect and is valid and enforceable in accordance with its terms subject to the Enforceability Exceptions, and (C) such Material Third Party Reinsurance Agreement complies in all material respects with Applicable Law. To the knowledge of Aspen and Aspen Parent, there are no material pending or threatened disputes with respect to the validity of any Material Third Party Reinsurance Agreement.

(l) [***]

(m) No other Representations or Warranties. Notwithstanding anything contained in this Agreement or the other Transaction Agreements to the contrary, neither Aspen nor any other Person acting on behalf of Aspen has made or is making any other representation

or warranty whatsoever, expressly or implied, beyond those expressly made in this Section 11.1. Without limiting the generality of the foregoing, the Reinsurer acknowledges that no representations or warranties are made with respect to any projections, forecasts, or estimates, except to the extent expressly set forth in Section 11.1(g) or Section 11.1(k), that has or may have been made available to the Reinsurer, its Affiliates or any of their respective Representatives.

(n) Exclusive Remedy. The exclusive remedy for misrepresentation or breach of representations and warranties with respect to this Section 11.1 is a claim for indemnification pursuant to ARTICLE XIII. Any claim for indemnification for a breach of representations or warranties shall be made no later than three (3) years following the Closing Date.

11.2 Reinsurer Representations and Warranties. The Reinsurer represents and warrants to Aspen as of the date hereof and as of the Closing Date (except for representations and warranties which address matters only as of a specific date, which representations and warranties shall be true and correct as of such specific date) as follows:

(a) Organization, Standing and Corporate Power. The Reinsurer is duly organized, validly existing and in good standing under the laws of Bermuda, and has all requisite corporate power and authority to carry on the operations of its business as it is now being conducted. As of the Closing Date, the Reinsurer will have obtained all authorizations and approvals required under Applicable Law to perform its obligations under the Transaction Agreements.

(b) Authority. The Reinsurer has the requisite corporate power and authority to enter into the Transaction Agreements to which it is a party and to consummate the transactions contemplated thereby. The execution and delivery by the Reinsurer of the respective Transaction Agreements to which it is a party and the consummation by it of the respective transactions contemplated thereby have been and, with respect to the Transaction Agreements to which it is a party to be executed and delivered at or after the Closing, will be, duly authorized by all necessary corporate or other organizational action on the part of the Reinsurer. Each of the Transaction Agreements has been or, with respect to the Transaction Agreements to be executed and delivered at or after the Closing, will be, duly executed and delivered by the Reinsurer and, assuming the Transaction Agreements constitute valid and binding agreements of the other parties thereto (other than the Reinsurer), constitute valid and binding obligations of the Reinsurer, enforceable against the Reinsurer in accordance with their terms, subject to the Enforceability Exceptions.

(c) No Conflict or Violation. The execution, delivery and performance by the Reinsurer of the Transaction Agreements to which it is a party and the consummation of the transactions contemplated thereby in accordance with the respective terms and conditions thereof will not (i) violate any provision of the organizational documents of the Reinsurer, or (ii) violate any material contract, Applicable Law, Order, license or permit to which the Reinsurer is a party or otherwise subject in any material respect.

(d) Consents. Subject to the matters referred to in the next sentence, the execution, delivery and performance by the Reinsurer of the Transaction Agreements to which it

is a party and the consummation of the transactions contemplated thereby in accordance with the respective terms and conditions thereof will not contravene any Applicable Law in any material respect. No consent, approval or authorization of, or declaration or filing with, or notice to, any Governmental Authority, other than the Bermuda Monetary Authority, or any other Person is required by or with respect to the Reinsurer in connection with the execution and delivery of the Transaction Agreements by the Reinsurer, or the consummation by the Reinsurer of the transactions contemplated thereby.

(e) Compliance. The Reinsurer is in material compliance with each of the following: (i) its organizational documents, (ii) all Applicable Law and (iii) all material permits and licenses issued to it by any Governmental Authority, except for any non-compliance which would not, individually or in the aggregate, reasonably be expected to impair the ability of the Reinsurer to consummate the transactions contemplated by the Transaction Agreements or perform its obligations thereunder.

(f) Broker. No broker or finder has acted directly or indirectly for the Reinsurer or its Affiliates and the Reinsurer has not incurred any obligation in respect of any broker or finder, which might be entitled to any fee or commission from Aspen or its Affiliates in connection with the transactions contemplated by this Agreement.

(g) No other Representations or Warranties. Notwithstanding anything contained in this Agreement or the other Transaction Agreements to the contrary, neither the Reinsurer nor any other Person acting on behalf of the Reinsurer has made or is making any other representation or warranty whatsoever, expressly or implied, beyond those expressly made in this Section 11.2.

(h) Exclusive Remedy. The exclusive remedy for misrepresentation or breach of representations and warranties with respect to this Section 11.2 is a claim for indemnification pursuant to ARTICLE XIII. Any claim for indemnification for a breach of representations or warranties shall be made no later than three (3) years following the Closing Date.

ARTICLE XII

CLOSING CONDITIONS

12.1 Conditions to Reinsurer's Obligations. The Reinsurer's obligation to consummate the transactions contemplated by the Transaction Agreements is subject to the satisfaction (or waiver, if permissible under Applicable Law) on or prior to the Closing Date of the following conditions:

(a) The representations and warranties of Aspen contained in this Agreement shall be true and correct on the Closing Date (except to the extent that any such representations and warranties are given as of a particular date or relate solely to a particular date or period, in which case such representations and warranties shall be true and correct as of such date or for such period) except as would not have a material adverse effect on the liabilities reinsured hereunder or the ability of Aspen to perform its obligations under this Agreement or the other Transaction Agreements.

(b) Aspen shall have performed and complied in all material respects with all covenants and agreements required by this Agreement to be performed or complied with by Aspen at or prior to the Closing.

(c) The Reinsurer shall have received a certificate, dated as of the Closing Date and signed by a duly authorized officer of Aspen Parent, that each of the conditions set forth in the foregoing clauses (a) and (b) have been satisfied.

(d) There shall be no Order or mandatory requirement of any Governmental Authority restraining, enjoining or otherwise prohibiting the consummation of the transactions contemplated by this Agreement.

(e) The Reinsurer shall have received the approval of the Bermuda Monetary Authority and any other applicable Governmental Authorities (approval from which is required by Applicable Law) to consummate the transactions contemplated hereby.

(f) The Reinsurer shall have received executed copies of each of the Transaction Agreements to be executed and delivered by Aspen or any Affiliate thereof and such other agreements, documents or instruments as the Reinsurer shall reasonably request from Aspen in connection with the transactions contemplated by this Agreement.

12.2 Conditions to Aspen's Obligations. Aspen's obligation to consummate the transactions contemplated by the Transaction Agreements is subject to the satisfaction (or waiver, if permissible under Applicable Law) on or prior to the Closing Date of the following conditions:

(a) The representations and warranties of the Reinsurer contained in this Agreement shall be true and correct on the Closing Date (except to the extent that any such representations and warranties are given as of a particular date or relate solely to a particular date or period, in which case such representations and warranties shall be true and correct as of such date or for such period) except as would not have a material adverse effect on the ability of the Reinsurer to perform its obligations under this Agreement or the other Transaction Agreements.

(b) The Reinsurer shall have performed and complied in all material respects with all covenants and agreements required by this Agreement to be performed or complied with by the Reinsurer at or prior to the Closing.

(c) Aspen shall have received a certificate, dated as of the Closing Date and signed by a duly authorized officer of the Reinsurer, that each of the conditions set forth in the foregoing clauses (a) and (b) have been satisfied.

(d) There shall be no Order or mandatory requirement of any Governmental Authority restraining, enjoining or otherwise prohibiting the consummation of the transactions contemplated by this Agreement.

(e) Aspen (or the applicable reinsured within the definition of "Aspen") shall have received such consents, approvals and/or non-objections from all of the applicable

Governmental Authorities referred to in Section 11.1(d) to consummate the transactions contemplated hereby.

(f) Aspen shall have received executed copies of each of the Transaction Agreements to be executed and delivered by the Reinsurer or any Affiliate thereof and such other agreements, documents or instruments as Aspen shall reasonably request from the Reinsurer in connection with the transactions contemplated by this Agreement.

12.3 Alternative Closing Structure. If at any time following the 90th day after the date hereof (a) the Parties have not yet received any required consents, approvals or non-objections with respect to the transactions contemplated by this Agreement from the applicable insurance regulatory authorities in Australia, Canada, Singapore or Switzerland, and (b) the other conditions to Closing have been satisfied or are capable of being satisfied at the Closing, the Parties shall discuss in good faith proceeding with the Closing with respect to the portion of the Subject Business that is not subject to the regulation of the insurance regulatory authority in any such jurisdiction that has not yet provided its consent, approval or non-objection, with such adjustments to the terms of this Agreement to take into account the exclusion of a portion of the Subject Business. If the Parties agree to effect the Closing with respect to a portion of the Subject Business, they shall remain obligated, pursuant to the terms of this Agreement, to pursue one or more additional closings with respect to the excluded portion of the Subject Business on or prior to the Outside Closing Date.

ARTICLE XIII

INDEMNIFICATION

13.1 The Reinsurer's Obligation to Indemnify. The Reinsurer shall indemnify, defend and hold harmless Aspen and its Affiliates and each of their respective directors, officers, employees, agents, successors and permitted assigns from and against any and all losses, liabilities, claims, expenses (including reasonable attorneys' fees and expenses) and damages ("Damages") actually incurred by Aspen to the extent arising from (a) any breach of the representations, warranties, covenants or obligations of the Reinsurer contained in this Agreement and (b) any successful enforcement of this indemnity. Nothing herein shall be construed to require the Reinsurer to indemnify Aspen to the extent any Damages are attributable to any acts or omissions of a Person who is a director, officer, employee, agent, successor or permitted assign of Aspen or any of its Affiliates, Representatives or agents, unless such Person is acting at the express written direction or written request of the Reinsurer (or any of its Affiliates, Representatives or agents). Damages shall not include punitive, exemplary and consequential damages.

13.2 Aspen Parent's Obligation to Indemnify. Aspen Parent shall indemnify, defend and hold harmless the Reinsurer and its Affiliates and each of their respective directors, officers, employees, agents, successors and permitted assigns from and against any and all Damages actually incurred by the Reinsurer to the extent arising from (a) any breach of the representations, warranties, covenants or obligations of Aspen contained in this Agreement, (b) the Excluded Liabilities, and (c) any successful enforcement of this indemnity. Nothing herein shall be construed to require Aspen Parent to indemnify the Reinsurer to the extent any Damages

are attributable to any acts or omissions of a Person who is a director, officer, employee, agent, successor or permitted assign of the Reinsurer or any of its Affiliates, Representatives or agents, unless such Person is acting at the express written direction or written request of Aspen Parent (or any of its Affiliates, Representatives or agents). Damages shall not include punitive, exemplary and consequential damages.

ARTICLE XIV

UTMOST GOOD FAITH

14.1 Utmost Good Faith and Fair Dealing. The relationship of the Parties with respect to the matters covered by this Agreement shall be in accordance with the principles of utmost good faith and fair dealing; provided, that, notwithstanding anything contained herein or in any other Transaction Agreement to the contrary, each of the Reinsurer, Aspen Parent and Aspen absolutely and irrevocably waives resort to the duty of “utmost good faith” or any similar principle in connection with the negotiation or execution of this Agreement. For the avoidance of doubt, this waiver shall not apply to any such duty as may exist with respect to matters arising, and actions taken, on or after the date hereof.

ARTICLE XV

TAXES

15.1 Federal Excise Tax. Aspen will pay all Federal excise tax applicable to the New Reinsurance Premium (including, for purposes of this Section 15.1, any interest credited to the Funds Withheld Account Balance in accordance with Section 3.4), to the extent the New Reinsurance Premium is subject to such excise tax; provided, that notwithstanding anything herein to the contrary, Aspen shall be entitled to deduct from such New Reinsurance Premium an amount equal to fifty percent (50%) of the Federal excise tax applicable to such New Reinsurance Premium up to an amount not to exceed [***]. The parties hereto acknowledge and agree that the amount of the New Reinsurance Premium that is subject to such excise tax shall be determined in accordance with the allocation referenced in Section 3.1(a) hereof.

15.2 FATCA and Withholding. The Reinsurer shall provide or otherwise make available to Aspen, on or before the Closing Date, documentation on forms approved by the United States Internal Revenue Service establishing an exemption from withholding of premium or other amounts payable hereunder in accordance with the United States Internal Revenue Code, including the Foreign Account Tax Compliance Act (“FATCA”), and the Reinsurer shall provide or otherwise make available updated documentation to Aspen upon request therefor. In the event that the Reinsurer fails to do so or ceases to be exempt from withholding in accordance with FATCA, or if withholding is otherwise required by Applicable Law, Aspen shall withhold the applicable percentage of premium or other amount payable hereunder, and the Reinsurer shall allow such withholding. Interest shall not be payable on any amounts withheld in accordance with this Section 15.2, nor shall any such amounts be subject to offset. The Reinsurer agrees to indemnify Aspen for any liability, incurred in whatever form, on account of the Reinsurer’s failure to properly comply with its obligations under FATCA, any other withholding Tax requirement or the provisions of this Section 15.2.

ARTICLE XVI

MISCELLANEOUS PROVISIONS

16.1 Notices. Any notice, request, demand, waiver, consent, approval or other communication required or permitted to be given by any Party hereunder shall be in writing and shall be delivered personally, sent by registered or certified mail, postage prepaid, sent by a standard overnight courier of national reputation with written confirmation of delivery or sent by e-mail. Any such notice shall be deemed given when so delivered personally, or if mailed, on the date shown on the receipt therefor, or if sent by overnight courier, on the date shown on the written confirmation of delivery, or if sent by e-mail, at the time of completion of the transmission by the sender and, where transmitted other than on a Business Day or outside of normal hours of the recipient, on the next Business Day of the recipient. Such notices shall be given to the following address:

If to Aspen:

Aspen Insurance Holdings Limited
141 Front Street
Hamilton, HM19
Bermuda
Attn: David Amaro; Group Head of Legal
Email: David.Amaro@Aspen.co

with copies (which shall not constitute notice) to:

Sidley Austin LLP
One South Dearborn Street
Chicago, IL 60603
Attention: Sean Carney; Jennifer Norris
Email: scarney@sidley.com; jnorris@sidley.com

If to the Reinsurer:

Cavello Bay Reinsurance Limited
Windsor Place, 3rd Floor
22 Queen Street
Hamilton, HM11
Bermuda
Attention: Paul J. O'Shea
Email: Paul.OShea@enstargroup.com

with copies (which shall not constitute notice) to:

Hogan Lovells US LLP
1735 Market Street, Suite 2300
Philadelphia, PA 19103-6996
Attention: Robert C. Juelke
Telephone: 267-675-4615
Email: bob.juelke@hoganlovells.com

Each Party may change its notice provisions on fifteen (15) calendar days' advance notice in writing to the other Party.

16.2 Confidentiality; Public Announcements.

(a) The confidentiality agreement entered into by the Parties (or their Affiliates), dated September 10, 2021, shall survive the execution and delivery of this Agreement in accordance with its terms.

(b) The Parties (each, the "Receiving Party") hereby covenant and agree, each on behalf of itself and on behalf of its Affiliates, that from and after the date hereof, the Receiving Party and its Affiliates will not disclose, give, sell, process, use or otherwise divulge any Confidential Information (as defined below) of the other Party (the "Disclosing Party") or permit their respective Representatives to do the same, except that each Receiving Party may disclose such Confidential Information or portions thereof (i) if legally compelled to do so or as required in connection with an examination by an insurance regulatory authority, (ii) to the extent necessary for the performance of such Receiving Party's and its Affiliates' obligations under this Agreement or under any other Transaction Agreement, (iii) to enforce the rights of such Receiving Party or its Affiliates under this Agreement or under any other Transaction Agreement, (iv) to those of such Receiving Party's Affiliates, and to their respective Representatives, in each case, who need to know such information for the foregoing purposes, (v) as required under any Applicable Law, (vi) as required by a tax authority to support a position taken on any tax return or (vii) as required by the rules of any stock exchange on which the stock of a Receiving Party's Affiliate is traded, as applicable. If the Receiving Party or its Affiliates, or any of their respective Representatives, become legally compelled to disclose any Confidential Information (other than as required in connection with an examination by an insurance regulatory authority or as required to a tax authority to support a position taken on any tax return), the Receiving Party shall provide the Disclosing Party with prompt written notice of such requirement (if permitted by Applicable Law) so that the Disclosing Party may seek a protective order or other remedy or waive compliance with this Section 16.2(b). In the event that such protective order or other remedy is not obtained, or the Disclosing Party waives compliance with this Section 16.2(b), the Receiving Party or its Affiliates, as applicable, shall furnish only that portion of Confidential Information which is legally required to be provided and exercise its commercially reasonable efforts to obtain assurances that appropriate confidential treatment will be accorded to the Confidential Information.

(c) The Receiving Party, on behalf of itself and on behalf of its Affiliates and their respective Representatives, acknowledges that a breach of its obligations under this Section

16.2 may result in irreparable injury to the Disclosing Party. In the event of the breach by the Receiving Party or any of its Affiliates or their respective Representatives of any of the terms and conditions of this Section 16.2(b), the Disclosing Party shall be entitled to seek equitable relief, including injunctive relief and specific performance, in addition to any other remedies available under this Agreement or otherwise available in equity or at law.

(d) For the purposes of this Agreement, “Confidential Information” means all confidential information (irrespective of the form of such information) of any kind, including any analyses, compilations, data, studies, notes, translations, memoranda or other documents, concerning the Disclosing Party or any of its Affiliates obtained directly or indirectly from the Disclosing Party or any of its Affiliates or Representatives in connection with the transactions contemplated by this Agreement and the other Transaction Agreements, including any information regarding the Subject Business or provisions or terms of this Agreement or the other Transaction Agreements (provided that, notwithstanding the foregoing, each Party may make such disclosures in its filings with the U.S. Securities and Exchange Commission as it believes are required), except information (i) which, at the time of the disclosure, was ascertainable or available to the public (other than as a result of a disclosure directly or indirectly by the Receiving Party or any of its Affiliates or Representatives in breach hereof), (ii) that is or becomes available to the Receiving Party on a non-confidential basis from a source other than the Disclosing Party or any of its Affiliates or Representatives; provided that, to the knowledge of such Receiving Party, such source was not prohibited from disclosing such information to the Receiving Party by a legal, contractual or fiduciary obligation owed to another Person, (iii) that the Receiving Party can establish is already in its possession or the possession of any of its Affiliates or Representatives (other than information furnished by or on behalf of the Disclosing Party) or (iv) that is independently developed by the Receiving Party or its Affiliates without the use or benefit of any information that would otherwise be Confidential Information.

(e) Each Party acknowledges that where it processes Shared Personal Information under this Agreement it alone determines the purposes and means of such processing as a controller. The Reinsurer hereby acknowledges and agrees that it shall process Shared Personal Information only in connection with the objectives and purposes for which Aspen and the Reinsurer have entered into this Agreement and/or to comply with Applicable Law. The Reinsurer confirms that it shall process the Shared Personal Information at all times in compliance with Privacy Laws and that it has in place written and up-to-date administrative, organizational, technical and physical safeguards to protect the security, availability, integrity and confidentiality of Shared Personal Information in accordance with Privacy Laws to the extent relevant to this Agreement. Should the Reinsurer learn or have reason to believe that Shared Personal Information has been processed in a manner contrary to Privacy Laws and/or the subject of a personal data breach (collectively, an “Incident”), the Reinsurer, upon learning of such Incident, shall give Aspen immediate written notice of such Incident, and the Reinsurer, at its own expense, shall take immediate action to remedy any such Incident to the extent reasonably required and fully cooperate with Aspen regarding any investigation of the Incident. The Reinsurer shall notify Aspen immediately of any communication or request received by the Reinsurer from a data subject and/or supervisory authority and shall provide such assistance to Aspen as is reasonably required to enable Aspen to respond to such communication or request within the time limits imposed by Privacy Laws. The Reinsurer shall not, by act or omission, cause Aspen to violate any Privacy Laws, notices provided to, or any consents obtained from,

data subjects, in each case, in connection with processing Shared Personal Information under this Agreement. The Parties agree that Aspen will not transfer and/or otherwise make available any Personal Information to the Reinsurer until such time as the Parties have entered into standard contractual clauses (or equivalent) to legitimize such international transfers of Personal Information.

(f) Each Party and its respective Affiliates shall consult with each other before issuing, and provide each other the opportunity to review and comment upon, any press release or other public statement with respect to the transactions contemplated by the Transaction Agreements and shall not issue any such press release or make any such public statement with respect to such matters without the advance approval of the other Parties following such consultation (such approval not to be unreasonably withheld, delayed or conditioned), except as may be required by Applicable Law or by the requirements of any securities exchange; provided that, in the event that any Party is required by Applicable Law or the requirements of any securities exchange to issue any such press release or make any public statement and it is not feasible to obtain the advance approval of the other Parties as required by this Section 16.2(f), the Party that issues such press release or makes such public statement shall provide the other Parties with notice and a copy of such press release or public statement as soon as reasonably practicable thereafter.

16.3 Agent. The Agent shall be deemed the agent of each entity that constitutes “Aspen” for purposes of this Agreement and the transactions contemplated hereby, including for purposes of sending or receiving notices required by the terms and conditions of this Agreement.

16.4 Entire Agreement. This Agreement (including the exhibits and schedules hereto), the other Transaction Agreements and any other documents delivered pursuant hereto and thereto constitute the entire agreement among the Parties and their respective Affiliates with respect to the subject matter hereof and thereof and supersede all prior negotiations, discussions, writings, agreements and understandings, oral and written, among the Parties with respect to the subject matter hereof and thereof.

16.5 Waiver and Amendment. This Agreement may be amended, superseded, canceled, renewed or extended, and the terms hereof may be waived, only by an instrument in writing signed by the Parties, or, in the case of a waiver, by the Party waiving compliance. No delay on the part of any Party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other such right, power or privilege. The failure of any Party to insist on compliance with any obligation contained in this Agreement or to exercise any right or remedy hereunder shall not constitute a waiver of any right or remedy contained herein nor stop any Party from thereafter demanding full and complete compliance nor prevent any Party from exercising such right or remedy in the future. No waiver of any breach of this Agreement shall be held to constitute a waiver of any other or subsequent breach.

16.6 Successors and Assigns. The rights and obligations of the Parties under this Agreement shall not be subject to assignment without the prior written consent of the other Parties, and any attempted assignment without the prior written consent of the other Parties shall be invalid ab initio. The terms of this Agreement shall be binding upon, inure to the benefit of

and be enforceable by and against the successors and permitted assigns of the Parties. Notwithstanding the foregoing, the Reinsurer shall have the right to reinsure or otherwise share the losses reinsured hereunder, solely with the consent of Aspen (other than with respect to reinsurance to or sharing with affiliates of the Reinsurer), which consent shall not be unreasonably withheld, conditioned or delayed and provided that in no way shall such reinsurance or other sharing of losses lessen or in any way diminish the Reinsurer's obligations to Aspen hereunder.

16.7 Headings. The headings and table of contents of this Agreement are for convenience of reference only and shall not define or limit any of the terms or provisions hereof.

16.8 Governing Law; Specific Performance.

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of New York without regard to such state's principles of conflict of laws that could compel the application of the laws of another jurisdiction.

(b) Notwithstanding any other provision to the contrary herein, each Party acknowledges that the breach of certain obligations may cause irreparable injury and damages, which may be difficult to ascertain. Without regard to paragraph (a) above, each Party immediately shall be entitled to seek injunctive relief with respect to such breaches by the other Parties and without the requirement of posting a bond. This provision shall not in any way limit such other remedies as may be available to any Party at law or in equity.

16.9 Service of Suit.

(a) In the event of the failure of Aspen or Aspen Parent to perform their respective obligations hereunder, they, at the request of the Reinsurer, shall submit to the jurisdiction of a court of competent jurisdiction within the United States. Nothing in this Section 16.9 constitutes or should be understood to constitute a waiver of Aspen's or Aspen Parent's rights to commence an action in any court of competent jurisdiction in the United States, to remove an action to a United States District Court, or to seek a transfer of a case to another court as permitted by the laws of the United States or any state in the United States. Aspen and Aspen Parent, once the appropriate court is selected, whether such court is the one originally chosen by the Reinsurer and accepted by Aspen or Aspen Parent, as applicable, or is determined by removal, transfer, or otherwise, as provided for above, shall comply with all requirements necessary to give said court jurisdiction and, in any suit instituted against Aspen or Aspen Parent, as applicable, under this Agreement, shall abide by the final decision of such court or of any appellate court in the event of an appeal.

(b) Unless Aspen or Aspen Parent designates a different party in writing, service of process in such suit may be made upon Aspen Parent at Aspen Specialty Insurance Company, 400 Capital Boulevard, Rocky Hill, CT 06067, United States of America, which is hereby authorized and directed to accept service of process on behalf of Aspen and Aspen Parent in any such suit.

(c) In the event of the failure of the Reinsurer to perform its obligations hereunder, the Reinsurer, at the request of Aspen, shall submit to the jurisdiction of a court of

competent jurisdiction within the United States. Nothing in this Article constitutes or should be understood to constitute a waiver of the Reinsurer's rights to commence an action in any court of competent jurisdiction in the United States, to remove an action to a United States District Court, or to seek a transfer of a case to another court as permitted by the laws of the United States or any state in the United States. The Reinsurer, once the appropriate court is selected, whether such court is the one originally chosen by Aspen and accepted by the Reinsurer or is determined by removal, transfer, or otherwise, as provided for above, shall comply with all requirements necessary to give said court jurisdiction and, in any suit instituted against the Reinsurer under this Agreement, shall abide by the final decision of such court or of any appellate court in the event of an appeal.

(d) Unless the Reinsurer designates a different party in writing, service of process in such suit may be made upon Enstar (US) Inc., 411 Fifth Avenue, Fl. 5, New York, NY 10016, Attention: Senior Vice President, Legal Director US, which is hereby authorized and directed to accept service of process on behalf of the Reinsurer in any such suit.

(e) Further, pursuant to any statute of any State, Territory or District of the United States which makes provision therefor, the Reinsurer hereby designates the Superintendent, Commissioner or the Director of Insurance or other officer specified for that purpose in the statute, or his successor or successors in office, as its true and lawful attorney upon whom may be served any lawful process in any action, suit or proceeding instituted by or on behalf of Aspen or any beneficiary hereunder arising out of this Agreement and hereby designates the above-named entity as the entity to whom the said officer is authorized to mail such process or a true copy thereof; provided that process is concurrently served upon the Reinsurer in accordance with Section 16.9(d).

16.10 No Third Party Beneficiaries. Nothing in this Agreement is intended or shall be construed to give any Person, other than the Parties, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision contained herein.

16.11 Counterparts. This Agreement may be executed by the Parties in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument binding upon all of the Parties notwithstanding the fact that all Parties are not signatory to the original or the same counterpart. Each counterpart may consist of a number of copies hereof each signed by less than all, but together signed by all, of the Parties. Each counterpart may be delivered by facsimile or electronic transmission, which transmission shall be deemed delivery of an originally executed document.

16.12 Severability. Any term or provision of this Agreement which is invalid or unenforceable in any jurisdiction shall, as to that jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Agreement or affecting the validity or enforceability of any of the terms or provisions of this Agreement in any other jurisdiction, so long as the economic or legal substance of the transactions contemplated hereby is not affected in any manner materially adverse to any Party. If any provision of this Agreement is so broad as to be unenforceable, that provision shall be interpreted to be only so broad as is enforceable. In the event of such invalidity or

unenforceability of any term or provision of this Agreement, the Parties shall use their commercially reasonable efforts to reform such terms or provisions to carry out the commercial intent of the Parties as reflected herein, while curing the circumstance giving rise to the invalidity or unenforceability of such term or provision.

16.13 Offset. The Reinsurer may offset any amount due to the Aspen Parent and any reinsured included in the definition of "Aspen" under this Agreement against any amounts owed or alleged to be owed from the Aspen Parent or such reinsured included in the definition of "Aspen" under this Agreement, but only against amounts owed or allegedly owed from such specific entity. For the avoidance of doubt, the Reinsurer shall not be permitted to offset an amount due to one reinsured included in the definition of "Aspen" under this Agreement against any amounts owed or allegedly to be owed from a different reinsured included in the definition of "Aspen" or the Aspen Parent. Each of the Aspen Parent and each reinsured included in the definition of "Aspen" may offset any amount due to the Reinsurer under this Agreement against any amounts owed or alleged to be owed from the Reinsurer under this Agreement, but only against amounts owed or allegedly owed to such specific entity. To the maximum extent permitted by Applicable Law, this Section 16.13 shall apply notwithstanding the insolvency, liquidation, rehabilitation, conservation, supervision or similar proceeding by or against any Party or any Party's Affiliates.

16.14 Currency. Subject to Sections 3.5 and 8.5 and except as otherwise required hereby, all financial data required to be provided pursuant to the terms of this Agreement shall be expressed in United States dollars. Subject to Sections 3.5, 4.4 and 8.5 and except as otherwise required hereby, all payments and all settlements of account between the Parties shall be in United States currency unless otherwise agreed by the Parties. For purposes of determining the erosion of the Reinsurer's Limit and the Reinsurer's Remaining Limit hereunder, Ultimate Net Loss paid by the Reinsurer under this Agreement in currencies other than United States dollars shall be converted into United States dollars using the applicable exchange rate used on the books and records of Aspen in the ordinary course of business at the time of such payment.

16.15 Interpretation. Interpretation of this Agreement shall be governed by the following rules of construction: (a) words in the singular shall be held to include the plural and vice versa, and words of one gender shall be held to include the other gender as the context requires; (b) references to the terms Article, Section, paragraph, exhibits and schedules are references to the Articles, Sections, paragraphs, exhibits and schedules of or to this Agreement, unless otherwise specified; (c) the terms "hereof," "herein," "hereby," "hereto," and derivative or similar words refer to this entire Agreement, including the exhibits and schedules hereto; (d) references to "\$" shall mean United States dollars; (e) the word "including" and words of similar import when used in this Agreement shall mean "including without limitation," unless otherwise specified; (f) the word "or" shall not be exclusive; (g) except as otherwise provided herein, references to "written" or "in writing" include in electronic form; (h) the headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement; (i) a reference to any Person includes such Person's successors and permitted assigns; (j) a reference to an agreement or other document includes amendments to or restatements of such agreement or other document; (k) any reference to "days" means calendar days unless Business Days are expressly specified; and (l) when calculating the period

of time before which, within which or following which any act is to be done or step taken pursuant to this Agreement, the date that is the reference date in calculating such period shall be excluded, if the last day of such period is not a Business Day, the period shall end on the next succeeding Business Day. This Agreement shall take precedence over any exhibits or schedules hereto, to the extent of any conflict.

16.16 Execution. Aspen Parent shall hereby execute this Agreement on behalf of itself and on behalf of Aspen, it being understood that each reinsured included in the definition of "Aspen" will be, and is, party to this Agreement and shall execute this Agreement promptly after the date hereof.

(remainder of page intentionally left blank)

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives, all as of the date first written above.

ASPEN INSURANCE HOLDINGS LIMITED

By: /s/Mark Cloutier
Name: Mark Cloutier
Title: Group Chief Executive Officer

ASPEN INSURANCE UK LIMITED

By: /s/R.T. Milner
Name: R.T. Milner
Title: CEO, Aspen Insurance UK Limited

ASPEN MANAGING AGENCY LIMITED for
and on behalf of the UNDERWRITING
MEMBER(S) OF LLOYD'S SYNDICATE 4711

By: /s/R.T. Milner
Name: R.T. Milner
Title: CEO, Aspen Managing Agency Limited

ASPEN BERMUDA LIMITED

By: /s/Mark Pickering
Name: Mark Pickering
Title: Chief Executive Officer

ASPEN AMERICAN INSURANCE COMPANY

By: /s/Tim Kenefick
Name: Tim Kenefick
Title: CFO - Insurance

ASPEN SPECIALTY INSURANCE COMPANY

By: /s/Tim Kenefick
Name: Tim Kenefick
Title: CFO - Insurance

CAVELLO BAY REINSURANCE LIMITED

By: /s/Paul C. Bohus
Name: Paul C. Bohus
Title: CEO

Schedule 1.1

Investment Guidelines

[***]

Schedule 1.2

Schedule 3.1(a)

Form of Closing Statement

Schedule 3.5

Reinsurance Premium Currency Allocation

Schedule 4.1(b)

Interim Administration

Schedule 9.3

Shared Outward Reinsurance

EXHIBIT A

Administration and Transition Principles

[***]

EXHIBIT B

Form of Trust Agreement

[***]

SUBSIDIARIES OF THE COMPANY

NAME OF SUBSIDIARY	JURISDICTION OF INCORPORATION
Acorn Limited	Bermuda
AIUK Trustees Limited	United Kingdom
APJ Asset Protection Jersey Limited	Jersey
Aspen (UK) Holdings Limited	United Kingdom
Aspen (US) Holdings Limited	United Kingdom
Aspen American Insurance Company	Texas
Aspen Australia Service Company Pty Ltd	Australia
Aspen Bermuda Limited	Bermuda
Aspen Capital Advisors Inc.	Delaware
Aspen Capital Management, Ltd	Bermuda
Aspen Cat Fund Limited	Bermuda
Aspen European Holdings Limited	United Kingdom
Aspen Insurance U.S. Services Inc.	Delaware
Aspen Insurance UK Limited	United Kingdom
Aspen Insurance UK Services Limited	United Kingdom
Aspen Managing Agency Limited	United Kingdom
Aspen Re America, Inc.	Delaware
Aspen Recoveries Limited	United Kingdom
Aspen Risk Management Limited	United Kingdom
Aspen Singapore Pte. Ltd.	Singapore
Aspen Specialty Insurance Company	North Dakota
Aspen Specialty Insurance Management, Inc.	Massachusetts
Aspen Specialty Insurance Solutions LLC	California
Aspen U.S. Holdings, Inc.	Delaware
Aspen UK Syndicate Services Limited	United Kingdom
Aspen Underwriting Limited	United Kingdom
Blue Waters Insurers, Corp.	Puerto Rico
Peregrine Reinsurance Ltd	Bermuda
Silverton Re Ltd.	Bermuda

CERTIFICATION

I, Mark Cloutier, certify that:

1. I have reviewed this annual report on Form 20-F of Aspen Insurance Holdings Limited;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting.
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ Mark Cloutier

Name: Mark Cloutier

Title: Chief Executive Officer

Date: May 16, 2022

CERTIFICATION

I, Christopher Coleman, certify that:

1. I have reviewed this annual report on Form 20-F of Aspen Insurance Holdings Limited;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting.
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ Christopher Coleman

Name: Christopher Coleman

Title: Chief Financial Officer

Date: May 16, 2022

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with this annual report on Form 20-F of Aspen Insurance Holdings Limited (the “Company”) for the twelve months ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Mark Cloutier as Chief Executive Officer of the Company and Christopher Coleman as Chief Financial Officer, each hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 16, 2022

By: /s/ Mark Cloutier

Name: Mark Cloutier

Title: Chief Executive Officer

Date: May 16, 2022

By: /s/ Christopher Coleman

Name: Christopher Coleman

Title: Chief Financial Officer