

Validus Reinsurance, Ltd.

Incorporated in Bermuda

Consolidated Financial Statements

As at and for the years ended

December 31, 2021 and 2020

Expressed in thousands of U.S. dollars, except share amounts

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April 26, 2022

Report of Independent Auditors

To the Board of Directors and Shareholder of Validus Reinsurance, Ltd.

Opinion

We have audited the accompanying consolidated financial statements of Validus Reinsurance, Ltd. and its subsidiaries (the “Company”), which comprise the consolidated balance sheets as of December 31, 2021 and 2020, and the related consolidated statements of income and comprehensive income, shareholder’s equity and of cash flows for the years then ended, including the related notes (collectively referred to as the “consolidated financial statements”).

In our opinion, the accompanying 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 the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (US GAAS). Our responsibilities under those standards are further described in the *Auditors’ responsibilities for the audit of the consolidated financial statements* section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of management for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company’s ability to continue as a going concern for one year after the date the consolidated financial statements are available to be issued.

Auditors’ responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error and to issue an auditors’ report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgement made by a reasonable user based on the consolidated financial statements.



In performing an audit in accordance with US GAAS, we:

- Exercise professional judgement and maintain professional scepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgement, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required supplemental information

Accounting principles generally accepted in the United States of America require that the required supplemental information pertaining to *Short-Duration Contracts* disclosures labelled as "Unaudited" within Note 10 on pages 38 to 40 be presented to supplement the basic consolidated financial statements. Such information is the responsibility of management and, although not a part of the basic consolidated financial statements, is required by the Financial Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic consolidated financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplemental information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic consolidated financial statements, and other knowledge we obtained during our audit of the basic consolidated financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

PricewaterhouseCoopers Ltd.

Chartered Professional Accountants

Validus Reinsurance, Ltd.

Consolidated Balance Sheets

As at December 31, 2021 and 2020

Expressed in thousands of U.S. dollars, except share amounts

	2021	2020
	\$	\$
Assets		
Fixed maturity investments trading, at fair value (amortized cost: 2021 - \$4,098,663; 2020 - \$3,115,587)	4,091,386	3,204,643
Short term investments trading, at fair value	293,669	92,213
Other investments, at fair value	-	240,630
Cash and cash equivalents	255,085	376,821
Restricted cash	138,589	121,164
Total investments and cash	4,778,729	4,035,471
Investments in operating affiliates, equity method	6,662	118,356
Structured notes receivable from AlphaCat ILS fund	12	10,365
Premiums receivable	1,227,289	886,647
Deferred acquisition costs	295,290	195,623
Prepaid reinsurance premiums	105,283	57,082
Loss reserves recoverable	2,140,746	1,074,617
Paid losses recoverable	36,151	23,282
Income taxes recoverable	7,940	6,175
Deferred tax asset	66,750	68,010
Balances due from affiliates	1,034,572	1,006,507
Accrued investment income	14,141	14,786
Funds withheld	148,104	134,678
Other assets	10,449	21,247
Total assets	9,872,118	7,652,846
Liabilities		
Reserve for losses and loss expenses	4,733,761	3,211,396
Unearned premiums	1,241,697	855,093
Reinsurance balances payable	263,736	39,449
Income taxes payable	3,879	3,740
Deferred tax liability	-	625
Payable for investments purchased	5,295	1,739
Balances due to affiliates	61,114	71,278
Funds withheld liability	2,807	2,019
Accounts payable and accrued expenses	11,876	28,457
Total liabilities	6,324,165	4,213,796
Shareholder's equity		
Common shares, 1,000,000 authorized, par value \$1.00 Issued and outstanding (2021 and 2020 - 1,000,000)	1,000	1,000
Additional paid-in capital	2,961,434	2,960,939
Accumulated other comprehensive income	173	173
Retained earnings	585,346	476,938
Total shareholder's equity	3,547,953	3,439,050
Total liabilities and shareholder's equity	9,872,118	7,652,846

Approved by the Board of Directors


 Christopher Schaper
 Director


 Patrick Boisvert
 Director

Validus Reinsurance, Ltd.**Consolidated Statements of Income and Comprehensive Income**

For the years ended December 31, 2021 and 2020

Expressed in thousands of U.S. dollars

	2021	2020
	\$	\$
Revenues		
Gross premiums written	3,171,374	2,409,467
Reinsurance premiums ceded	(719,266)	(586,263)
Net premiums written	2,452,108	1,823,204
Change in unearned premiums	(338,403)	(180,355)
Net premiums earned	2,113,705	1,642,849
Net investment income	110,714	110,589
Net realized gains on investments	146,603	699
Net change in unrealized (losses) gains on investments	(154,677)	58,874
Other insurance-related income and other income	10,377	12,750
Foreign exchange gains (losses)	34,264	(18,517)
Total revenues	2,260,986	1,807,244
Expenses		
Losses and loss expenses	1,530,837	1,271,712
Policy acquisition costs	487,570	354,757
General and administrative expenses	115,632	100,760
Share compensation expenses	1,310	1,686
Finance expenses	5,800	3,290
Transaction expenses	92	504
Total expenses	2,141,241	1,732,709
Income before taxes and (loss) income from operating affiliates and structured notes		
	119,745	74,535
Tax benefit	3,702	8,437
(Loss) income from operating affiliates	(14,866)	8,245
(Loss) income from structured notes receivable from AlphaCat ILS fund	(173)	580
Net income and comprehensive income	108,408	91,797

Validus Reinsurance, Ltd.

Consolidated Statements of Shareholder's Equity

For the years ended December 31, 2021 and 2020

Expressed in thousands of U.S. dollars

	2021	2020
	\$	\$
Common shares		
Balance, beginning and end of year	1,000	1,000
Additional paid-in capital		
Balance, beginning of year	2,960,939	2,960,939
Contributions from parent company	495	-
Balance, end of year	2,961,434	2,960,939
Accumulated other comprehensive income		
Balance, beginning and end of year	173	173
Retained earnings		
Balance, beginning of year	476,938	485,141
Dividends declared	-	(100,000)
Net income	108,408	91,797
Balance, end of year	585,346	476,938
Total shareholder's equity	3,547,953	3,439,050

Validus Reinsurance, Ltd.
Consolidated Statements of Cash Flows
For the years ended December 31, 2021 and 2020
Expressed in thousands of U.S. dollars

	2021	2020
	\$	\$
Cash flows provided by operating activities		
Net income	108,408	91,797
Adjustments to reconcile net income and comprehensive income to net cash provided by operating activities:		
Share compensation expenses	1,310	1,686
Change in net realized and unrealized losses (gains) on investments	8,074	(59,573)
Decrease in net asset value of structured notes	353	-
Loss (income) from operating affiliates	14,866	(8,245)
Foreign exchange (gains) losses included in net income	(34,264)	18,517
Amortization of premium on fixed maturity investments	18,573	14,147
Transaction expenses	92	504
Change in operational balance sheet items:		
Premiums receivable	(355,198)	(153,580)
Deferred acquisition costs	(99,667)	(44,395)
Prepaid reinsurance premiums	(48,201)	5,226
Loss reserves recoverable	(1,066,129)	45,090
Paid losses recoverable	(14,254)	69,624
Reserve for losses and loss expenses	1,573,306	452,445
Unearned premiums	386,604	175,129
Reinsurance balances payable	224,084	(59,385)
Funds withheld	(13,426)	(90,431)
Other operational balance sheet items, net	(24,575)	21,573
Net cash provided by operating activities	679,956	480,129
Cash flows used in investing activities		
Proceeds on sales of investments	2,107,610	100,159
Proceeds on maturities of investments	928,359	757,158
Purchases of fixed maturity investments	(4,030,439)	(1,228,488)
Purchases of short-term investments, net	(201,456)	(29,410)
Sales of other investments, net	325,320	47,850
Purchase of shares in operating affiliates	(15,000)	(15,000)
Redemption of shares from operating affiliates	12,883	28,861
Sales of investment in operating affiliates	98,945	-
Redemptions of structured notes from AlphaCat ILS fund	10,000	10,544
Sales of structured notes from AlphaCat ILS fund	10,000	-
Purchases of structured notes from AlphaCat ILS fund	(10,000)	(10,000)
Deployment of investments with AlphaCat ILS fund	(12,500)	-
Net cash used in investment activities	(776,278)	(338,326)
Cash flow used in financing activity		
Dividends paid	-	(100,000)
Cash flow used in financing activity	-	(100,000)
Effect of foreign currency rate changes on cash and cash equivalents and restricted cash	(7,989)	11,767
Net (decrease) increase in cash and cash equivalents and restricted cash	(104,311)	53,570
Cash and cash equivalents and restricted cash - beginning of year	497,985	444,415
Cash and cash equivalents and restricted cash - end of year	393,674	497,985
Supplemental information		
Taxes paid during the year	673	151

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2021 and 2020

Expressed in thousands of U.S. dollars, except share amounts

1. Nature of the business

Validus Reinsurance, Ltd. (the “Company” or “Validus Re”) was incorporated under the laws of Bermuda on October 19, 2005. The Company is 100% owned by Validus Holdings, Ltd. (the “parent company” or “Validus Holdings”) which was also incorporated under the laws of Bermuda on October 19, 2005. Validus Re is registered as a Class 4 insurer under The Insurance Act 1978 of Bermuda, amendments thereto and the Insurance Account Rules 2016 (the “Legislation”). The Company primarily offers treaty reinsurance coverage on a global basis in the Property and Specialty lines markets.

On July 18, 2018, Validus Holdings completed its definitive agreement and plan of merger (the “Merger Agreement”) with American International Group, Inc. (“AIG”) in accordance with Section 105 of the Bermuda Companies Act 1981. Pursuant to the Merger Agreement, Validus Holdings merged with an existing AIG subsidiary, with Validus Holdings continuing as the surviving corporation and as a wholly owned subsidiary of AIG.

The Company’s Canada branch office commenced writing underwriting business on January 1, 2020.

2. Basis of preparation and consolidation

These Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”). The Company consolidates in these Consolidated Financial Statements the results of operations and financial position of all voting interest entities (“VOE”) in which the Company has a controlling financial interest and all variable interest entities (“VIE”) in which the Company is considered to be the primary beneficiary. The consolidation assessment, including the determination as to whether an entity qualifies as a VIE or VOE, depends on the facts and circumstances surrounding each entity.

All significant intercompany accounts and transactions have been eliminated.

The preparation of these Consolidated Financial Statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. While the amounts included in the Consolidated Financial Statements reflect management’s best estimates and assumptions, actual results could differ materially from those estimates. The Company’s principal estimates include:

- the reserve for losses and loss expenses;
- the premium written on a line slip or proportional basis;
- the loss reserves recoverable, including the provision for uncollectible amounts; and
- the valuation of invested assets and other financial instruments.

The term “ASC” used in these notes refers to Accounting Standard Codification issued by the United States Financial Accounting Standards Board (the “FASB”).

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2021 and 2020

Expressed in thousands of U.S. dollars, except share amounts

3. Significant accounting policies

The following is a summary of significant accounting policies adopted by the Company:

Premiums

Reinsurance contracts can be written on a risks attaching or losses occurring basis. Under risks attaching reinsurance contracts, all claims from cedants' underlying policies incepting and attaching during the reinsurance contract period are covered, even if they occur after the expiration date of the reinsurance contract and before the expiration date of the attaching policy. In contrast, losses occurring reinsurance contracts cover all claims occurring during the coverage period of the reinsurance contract, regardless of the inception dates of the underlying policies. Any claims occurring after the expiration of the losses occurring contract are not covered.

Reinsurance premiums written are recorded at the inception of the policy. Premiums are estimated based on information received from brokers, ceding companies and reinsureds, and any subsequent differences arising on such estimates are recorded in the periods in which they are determined.

Premiums written are earned on a pro-rated basis over the term of the related policy or contract. For losses occurring reinsurance contracts, the earnings period is generally the same as the term of the related contract or policy. For reinsurance contracts written on a risks attaching basis, the earnings period is based on the terms of the underlying contracts and policies and is generally 24 months. The portion of the premiums written applicable to the unexpired terms of the underlying contracts and policies in force is recorded as unearned premiums.

Reinstatement premiums are recorded at the time a loss event occurs and coverage limits for the remaining life of the contract are reinstated under predefined contract terms. The accrual of reinstatement premiums is based on our estimate of losses and loss expenses, which reflects management's judgment, as described in "*Reserve for losses and loss expenses*" below.

Policy acquisition costs

Policy acquisition costs are costs that vary with, and are directly related to, the successful production of new and renewal business, and consist principally of commissions and brokerage expenses. These costs are deferred and amortized over the period in which the related premiums are earned. Acquisition costs are shown net of commissions earned on reinsurance ceded. However, if the sum of a contract's expected losses and loss expenses and deferred acquisition costs exceeds related unearned premiums, a premium deficiency is determined to exist. In this event, deferred acquisition costs are immediately expensed to the extent necessary to eliminate the premium deficiency. If the premium deficiency exceeds deferred acquisition costs then a liability is accrued for the excess deficiency. There were no premium deficiency adjustments recognized during the periods presented herein.

Policy acquisition costs also include profit commissions, which are recognized on a basis consistent with our estimate of losses and loss expenses.

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2021 and 2020

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3. Significant accounting policies (continued)

Reserve for losses and loss expenses

The reserve for losses and loss expenses includes reserves for unpaid reported losses (“case reserves”) and for losses incurred but not reported (“IBNR”). Case reserves are established by management based on reports from brokers, ceding companies and insureds and represents the unpaid portion of the estimated ultimate cost of events or conditions that have been reported to, or specifically identified by, the Company. IBNR reserves are established by management based on actuarially determined estimates of ultimate losses and loss expenses. Inherent in the estimate of ultimate losses and loss expenses are expected trends in claim severity and frequency and other factors, which may vary significantly as claims are settled.

The period of time from the occurrence of a loss to the reporting of a loss to the Company and to the settlement of the Company’s liability may be several months or years. During this period, additional facts and trends may be revealed. Accordingly, losses and loss expenses ultimately paid may differ materially from the amounts recorded in the Consolidated Financial Statements. These estimates are reviewed regularly and, as experience develops and new information becomes known, the reserves are adjusted as necessary. These adjustments sometimes lead to an increase or decrease in ultimate losses, and at other times lead to a reallocation between IBNR and specific case reserves. Adjustments to ultimate loss estimates, if any, are recorded in earnings in the period in which they become known. Prior period development arises from changes to these estimates recognized in the current year that relate to losses and loss expenses that were incurred in previous calendar years.

Although there is normally a lag in receiving reinsurance data from cedants, the Company currently has adequate procedures in place regarding the timeliness related to the processing of assumed reinsurance information and there is no significant backlog. The Company actively manages its relationships with brokers and clients and considers existing disputes with counterparties to be in the normal course of business.

Reinsurance

The Company enters into retrocession agreements in order to mitigate its accumulation of loss, reduce its liability on individual risks, enable it to underwrite policies with higher limits and increase its aggregate capacity. Premiums ceded are recognized over the period of exposure to risk, with the unearned portion being deferred in the Consolidated Balance Sheets as Prepaid reinsurance premiums.

Loss reserves recoverable on unpaid losses represent amounts that will be collectible from reinsurers once the losses are paid. Reinsurance recoverable on paid losses represents amounts currently due from reinsurers. The recognition of reinsurance recoverable requires two key judgments: Firstly, the determination of gross assumed IBNR, and secondly the amount of gross IBNR that can be ceded to retrocessionaires based on the reinsurance agreements in place. The ceded IBNR is developed as part of the Company’s loss reserving process and consequently its estimation is subject to risks and uncertainties similar to the estimation of gross IBNR.

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2021 and 2020

Expressed in thousands of U.S. dollars, except share amounts

3. Significant accounting policies (continued)

Funds withheld

The Company writes and cedes certain business on a funds withheld basis. Under these contractual arrangements, the cedants withhold premiums for the purpose of paying claims. The remaining net funds will be remitted to or paid by the Company after all policies have expired and all claims have been settled.

Investments

The Company classifies its fixed maturity and short-term investments as trading and accounts for its other investments in accordance with ASC Topic 825, *“Financial Instruments”*. As such, all investments are carried at fair value. Investments in fixed maturity securities are recorded on a trade-date basis with balances pending settlement reflected as a receivable for investments sold or a payable for investments purchased.

Net investment income includes interest and dividend income along with amortization of premium or accretion of discount. Interest on fixed maturity securities is recorded in net investment income when earned. Realized gains and losses on the sale of investments are determined on the basis of amortized cost.

For investments in certain structured securities, prepayment assumptions are evaluated and revised as necessary. Any adjustments required due to the resultant change in effective yields and maturities are recognized retrospectively. Prepayment fees or call premiums that are only payable to the Company when a security is called prior to its maturity are earned when received and reflected in net investment income.

Short-term investments primarily comprise investments with a remaining maturity of less than one year at time of purchase and money market funds held at the Company’s investment managers.

The fair value of other investments is generally recorded on the basis of the net asset valuation criteria established by the managers of the investments, normally based upon the governing documents of such investments. Due to a lag in reporting, some of the fund managers, fund administrators, or both, are unable to provide final fund valuations as of the Company’s reporting date. In these circumstances, the Company estimates the fair value of these funds by starting with the prior quarter’s fund valuation, adjusting these valuations for capital calls, returns of capital or distributions, and then estimating the return for the current period.

In circumstances in which the Company estimates the return for the current period, it uses all credible information available. This includes utilizing preliminary estimates reported by its fund managers, obtaining the valuation of underlying portfolio investments where such underlying investments are publicly traded and therefore have a readily observable price, using information that is available to the Company with respect to the underlying investments, reviewing various indices for similar investments or asset classes, as well as estimating returns based on the results of similar types of investments for which the Company has reported results, or other valuation methods, as necessary. Actual final fund valuations may differ materially from the Company’s estimates and these differences are recorded in the period they become known as a change in estimate.

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2021 and 2020

Expressed in thousands of U.S. dollars, except share amounts

3. Significant accounting policies (continued)

Investments (continued)

Investments in operating affiliates in which the Company has significant influence over the operating and financial policies of the investee are accounted for under the equity method of accounting. Under this method, the Company records its proportionate share of income or loss from such investments in its results for the period. Due to a lag in reporting, the fund managers are unable to provide final investment statements as of the Company's reporting date. In these circumstances, the Company estimates its proportionate share of income or loss from such investments by starting with the prior month's investment statement, adjusting for capital calls, redemptions or distributions, and then estimating the return for the current period. In circumstances in which the Company estimates the return for the current period, it applies the same methodology as for other investments.

Fair value of financial instruments

Fair value is defined as the price received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASC Topic 820, "Fair Value Measurement and Disclosure", provides a framework for measuring fair value by creating a hierarchy of fair value measurements that distinguishes market data between observable independent market inputs and unobservable market assumptions by the reporting entity. The guidance further expands disclosures about such fair value measurements. The guidance applies broadly to most existing accounting pronouncements that require or permit fair value measurements (including both financial and non-financial assets and liabilities) but does not require any new fair value measurements. The Company has adopted all authoritative guidance in effect as of the balance sheet date regarding certain market conditions that allow for fair value measurements that incorporate unobservable inputs where active market transaction based measurements are unavailable.

Derivative instruments

The Company enters into various derivative instruments in the form of foreign exchange contracts and commodity derivative instruments. Foreign exchange derivatives (principally foreign exchange forwards) are used to economically mitigate risk associated with exchange rate fluctuations on non-U.S. dollar foreign currency transactions and foreign denominated investments. Commodity derivatives are used to mitigate financial risk associated with certain agricultural insurance liabilities. The Company's derivative financial instruments are recorded on a trade-date basis and carried at fair value in the Consolidated Balance Sheets. The effect on earnings from recognizing the fair values of these derivative financial instruments depends on their intended use, their hedge designation, and their effectiveness in offsetting changes in the fair values of the exposures they are hedging.

Derivatives not designated as hedging instruments

Changes in the fair values of derivative instruments that are not designated as hedges are reported currently in earnings. Refer to Note 8, "Derivative instruments", for further details.

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2021 and 2020

Expressed in thousands of U.S. dollars, except share amounts

3. Significant accounting policies (continued)

Cash and cash equivalents

The Company considers time deposits and money market funds with an original maturity of one month or less as equivalent to cash.

Restricted cash

Restricted cash primarily relates to funds held in trust in support of collateralized reinsurance transactions.

Foreign exchange

The U.S. dollar is the functional currency of the Company and its subsidiaries. For these companies, monetary assets and liabilities denominated in foreign currencies are revalued at the exchange rates in effect at the balance sheet date and revenues and expenses denominated in foreign currencies are translated at the prevailing exchange rate on the transaction date with the resulting foreign exchange gains and losses included in earnings. Non-monetary assets and liabilities denominated in foreign currencies are revalued at the exchange rate in effect at the time of the underlying transaction.

Stock plans

AIG accounts for their stock plans in accordance with the ASC Topic 718, *“Compensation - Stock Compensation”*. Accordingly, AIG recognizes the compensation expense for stock option grants, restricted share grants and performance share grants based on the fair value of the award on the date of grant over the requisite service period, and allocates the expense to its subsidiaries, including the Company, based on the location of employees. Under the AIG stock plan, the expense allocated to each subsidiary, including the Company, is settled in cash, payable to AIG upon the date of vest. The difference in share price between the fair value determined on the grant date and the cash settlement date is recognized in additional paid-in capital as a contribution or distribution to parent company.

For the awards granted under the AIG stock plan, no forfeiture rate is applied, and the compensation expense for forfeited awards is reversed on occurrence.

Income taxes and uncertain tax provisions

Deferred tax assets and liabilities are recorded in accordance with ASC Topic 740, *“Income Taxes”*. Consistent with ASC 740, the Company records deferred income taxes which reflect operating losses and tax credits carried forward and the tax effect of the temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and their respective tax bases.

The Company and its Bermuda domiciled subsidiaries are not subject to any income, withholding or capital gains taxes under current Bermuda law. The Company has operating subsidiaries and branch offices in various other jurisdictions around the world, including but not limited to Luxembourg, Switzerland, Singapore and Canada that are subject to relevant taxes in those jurisdictions.

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2021 and 2020

Expressed in thousands of U.S. dollars, except share amounts

3. Significant accounting policies (continued)

Income taxes and uncertain tax provisions (continued)

The Company recognizes the tax benefits of uncertain tax positions only where the position is more likely than not to be sustained upon examination by tax authorities based upon the technical merits of the position. Based on the more-likely-than-not recognition threshold, the Company must presume that the tax position will be subject to examination by a taxing authority with full knowledge of all relevant information. If the recognition threshold is met, then the tax position is measured at the largest amount of benefit that is more than 50% likely of being realized upon ultimate settlement. The Company classifies all interest and penalties related to uncertain tax positions in income tax expenses.

Variable interest entities

The Company determines whether it has relationships with entities defined as VIEs in accordance with ASC Topic 810, "Consolidation". A VIE is consolidated by the variable interest holder that is determined to be the primary beneficiary.

An entity in which the Company holds a variable interest is a VIE if any of the following conditions exist: (a) the total equity investment at risk is not sufficient to permit the entity to finance its activities without additional subordinated financial support, (b) as a group, the holders of equity investment at risk lack either the direct or indirect ability through voting rights or similar rights to make decisions about an entity's activities that most significantly impact the entity's economic performance or the obligation to absorb the expected losses or right to receive the expected residual returns, or (c) the voting rights of some investors are disproportionate to their obligation to absorb the expected losses of the entity, their rights to receive the expected residual returns of the entity, or both and substantially all of the entity's activities either involve or are conducted on behalf of an investor with disproportionately few voting rights.

The primary beneficiary is defined as the variable interest holder that is determined to have both (a) the power to direct the activities of a VIE that most significantly impact the economic performance of the VIE and (b) the obligation to absorb losses or right to receive benefits from the VIE that could potentially be significant to the VIE. At inception of the VIE, as well as following an event that requires reassessment, the Company determines whether it is the primary beneficiary based on the facts and circumstances surrounding each entity.

Transfers of financial assets

The Company accounts for transfers of financial assets as sales when it has surrendered control over the related assets. Whether control has been relinquished requires, among other things, an evaluation of relevant legal considerations and an assessment of the nature and extent of the Company's continuing involvement, if any, with the assets transferred. Gains and losses stemming from transfers of other investments accounted for as sales are included in "Net realized gains on investments" in the Consolidated Statements of Income and Comprehensive Income. Gains and losses stemming from transfers of investments in operating affiliates and structured notes receivable from AlphaCat ILS Fund accounted for as sales are included in "(Loss) income from operating affiliates" and "(Loss) income from structured notes receivable from AlphaCat ILS Fund," respectively. Assets obtained and liabilities incurred in connection with transfers reported as sales are initially recognized in the balance sheet at fair value.

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2021 and 2020

Expressed in thousands of U.S. dollars, except share amounts

3. Significant accounting policies (continued)

Comparatives

Certain prior year amounts have been reclassified for consistency with the current year presentation. These reclassifications had no effect on the reported consolidated total assets, total liabilities, and results of operations or cash flows.

4. Recent accounting pronouncements

Accounting standard adopted in 2021

Considering Indirect Interests in Consolidation Assessments

In October 2018, the FASB issued ASU 2018-17, "Consolidation (Topic 810)". The amendments in this update improve the accounting for (1) applying the variable interest entity (VIE) guidance to non-public entities under common control; and (2) the consideration of indirect interests held through related parties under common control for determining whether fees paid to decision makers and providers are variable interests.

The amendments in this update were effective for fiscal years beginning after December 15, 2020. The adoption of this update did not have a material impact on the Company's Consolidated Financial Statements.

Accounting standards not yet adopted

Financial instruments - Credit losses

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326)", which will change how entities account for credit losses for most financial assets, trade receivables and reinsurance receivables. The standard will replace the existing incurred loss impairment model with a new "current expected credit loss model" that generally will result in earlier recognition of credit losses. The standard will apply to financial assets subject to credit losses, including loans measured at amortized cost, reinsurance receivables and certain off-balance sheet credit exposures. During 2018, 2019 and 2020, the FASB issued a number of amendments and targeted improvements to ease with the application of the standard. These updates are effective in line with the effective date of ASU 2016-13.

This standard is effective for non-public entities for fiscal years beginning after December 15, 2021. The Company is currently assessing the impact of this guidance. Although the Company does not anticipate the adoption of this standard to have a material impact on the Consolidated Financial Statements, the quantitative impact of any change will be dependent on the Company's portfolio at the adoption date, as well as economic conditions and other factors at that time.

Validus Reinsurance, Ltd.

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4. Recent accounting pronouncements (continued)

Accounting standards not yet adopted (continued)

Codification Improvements

In October 2020, the FASB issued ASU 2020-10, "Codification Improvements". The amendments in this update improve the Codification by ensuring that all guidance that requires or provides an option for an entity to provide information in the notes to financial statements is codified in the Disclosure Section of the Codification.

This standard is effective for non-public entities for fiscal years beginning after December 15, 2021. The Company does not anticipate the adoption of this standard to have a material impact on the Consolidated Financial Statements.

5. Investments

Fixed maturity investments

The amortized cost and fair value of the Company's fixed maturity investments as at December 31, 2021 and 2020 were as follows:

	2021		2020	
	Amortized cost \$	Fair value \$	Amortized cost \$	Fair value \$
U.S. government and government agency	376,913	377,422	200,823	207,674
Non-U.S. government and government agency	282,348	280,408	85,891	88,550
U.S. states, municipalities and political subdivisions	178,747	177,846	90,780	93,537
Agency residential mortgage-backed securities	839,521	838,522	871,138	890,734
Non-agency residential mortgage-backed securities	350,813	346,952	83,854	85,962
Corporate	972,929	977,746	911,181	952,302
Bank loans	-	-	5,143	4,651
Asset-backed securities	503,199	497,445	361,804	365,312
Commercial mortgage-backed securities	594,193	595,045	504,973	515,921
Total fixed maturities	4,098,663	4,091,386	3,115,587	3,204,643

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5. Investments (continued)

Fixed maturity investments (continued)

The following table summarizes the fair value of the Company's fixed maturity investments by credit rating as issued by a recognized rating agency, such as Standard & Poor's, AM Best or another recognized rating agency as at December 31, 2021 and 2020:

	2021		2020	
	Fair value \$	Percentage of total %	Fair value \$	Percentage of total %
AAA	2,479,777	60.61	1,844,436	57.56
AA	594,584	14.53	328,566	10.25
A	521,519	12.75	586,731	18.31
BBB	419,127	10.24	372,743	11.63
Total investment grade fixed maturities	4,015,007	98.13	3,132,476	97.75
BB	29,600	0.72	22,089	0.69
B	12,140	0.30	6,800	0.21
CCC	1,122	0.03	97	0.00
C	8,009	0.20	10,163	0.32
NR	25,508	0.62	33,018	1.03
Total non-investment grade fixed maturities	76,379	1.87	72,167	2.25
Total fixed maturities	4,091,386	100.00	3,204,643	100.00

The amortized cost and fair values for the Company's fixed maturity investments held at December 31, 2021 and 2020 are shown below by contractual maturity. Actual maturity may differ from contractual maturity due to prepayment rights associated with certain investments.

	2021		2020	
	Amortized cost \$	Fair value \$	Amortized cost \$	Fair value \$
Due in one year or less	106,765	107,595	324,504	327,158
Due after one year through five years	1,460,089	1,461,973	857,659	895,164
Due after five years through ten years	179,717	180,460	96,233	108,399
Due after ten years	64,366	63,394	15,422	15,993
	1,810,937	1,813,422	1,293,818	1,346,714
Asset-backed and mortgage-backed securities	2,287,726	2,277,964	1,821,769	1,857,929
Total fixed maturities	4,098,663	4,091,386	3,115,587	3,204,643

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5. Investments (continued)

Other investments

The following table set forth certain information regarding the Company's other investment portfolio as at December 31, 2021 and 2020:

	2021		2020	
	Fair value	Investments with redemption restrictions	Fair value	Investments with redemption restrictions
	\$	\$	\$	\$
Hedge funds	-	-	8,341	8,341
Private equity investments	-	-	217,470	217,470
Fixed income investment funds	-	-	14,819	14,819
Total other investments	-	-	240,630	240,630

During the year ended December 31, 2021, the Company received \$277,456 in cash proceeds in exchange for the fair value of the transferred assets. The fair value of the transferred assets was based on the final net asset valuation of the individual investments held by the Company as of the dates the investments were sold. During the year ended December 31, 2021, net returns of \$86,212 (2020: \$6,082) were earned on Other investments, with realized gains of \$138,855 being crystalized as a result of their sale and are included in "Net realized gains on investments" reported in the Consolidated Statements of Income and Comprehensive Income.

As at December 31, 2020, other investments totalling \$240,630 were unrated given the nature of their underlying assets, and as such did not carry credit ratings.

As at December 31, 2020, the Company's other investments were subject to redemption restrictions. Distributions from those funds were received as the underlying investments of the funds are liquidated by their investment managers, which was not known to the Company at December 31, 2020. At December 31, 2020, it was estimated that the majority of the underlying assets of the investments will liquidate over five to ten-year periods from inception of the funds.

The Company's maximum exposure to any of its other investments was limited to the invested amounts and any remaining capital commitments. Refer to Note 14, "Commitments and contingencies", for further details.

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5. Investments (continued)

Net investment income

Net investment income during the years ended December 31, 2021 and 2020 was derived from the following sources:

	2021	2020
	\$	\$
Fixed maturities and short-term investments	110,346	114,759
Cash and cash equivalents	(681)	1,592
Other investments	5,628	(1,627)
Investment income	115,293	114,724
Investment expenses	(4,579)	(4,135)
Total net investment income	110,714	110,589

Net investment income from other investments includes distributed and undistributed net income (loss) from certain private equity investments and fixed income investment funds.

Net realized and change in net unrealized gains on investments

The following represents an analysis of net realized and change in net unrealized gains (losses) on investments for the years ended December 31, 2021 and 2020:

	2021		
	Fixed maturities	Other investments	Total
	\$	\$	\$
Gross realized gains	20,263	178,548	198,811
Gross realized losses	(12,515)	(39,693)	(52,208)
Net realized gains on investments	7,748	138,855	146,603
Change in net unrealized losses on investments	(96,406)	(58,271)	(154,677)
Total net realized and unrealized (losses) gains on investments	(88,658)	80,584	(8,074)

	2020		
	Fixed maturities	Other investments	Total
	\$	\$	\$
Gross realized gains	2,423	-	2,423
Gross realized losses	(1,724)	-	(1,724)
Net realized gains on investments	699	-	699
Change in net unrealized gains on investments	49,405	9,469	58,874
Total net realized and unrealized gains on investments	50,104	9,469	59,573

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5. Investments (continued)

Pledged investments

As at December 31, 2021, the Company had \$1,882,442 (December 31, 2020: \$1,535,470) of cash and cash equivalents and fixed maturity investments that were pledged and held in trust during the normal course of business. Pledged assets are generally for the benefit of the Company's cedants and policyholders and to facilitate the accreditation of the Company, its Canada branch office, and its operating subsidiary, Validus Reinsurance (Switzerland) Ltd ("Validus Re Swiss"), as alien reinsurers by certain regulators.

6. Fair value investments

Classification within the fair value hierarchy

Fair value is defined as the price to sell an asset or transfer a liability in an orderly transaction between market participants at the measurement date. Under U.S. GAAP, a company must determine the appropriate level in the fair value hierarchy for each fair value measurement. The fair value hierarchy prioritizes the inputs, which refer broadly to assumptions market participants would use in pricing an asset or liability, into three levels. It gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The level in the fair value hierarchy within which a fair value measurement in its entirety falls is determined based on the lowest level input that is significant to the fair value measurement in its entirety.

The three levels of the fair value hierarchy are described below:

Level 1 - Fair values are measured based on unadjusted quoted prices in active markets for identical assets or liabilities that we have the ability to access.

Level 2 - Fair values are measured based on quoted prices in active markets for similar assets or liabilities, quoted prices for identical assets or liabilities in inactive markets, or for which significant inputs are observable (e.g., interest rates, yield curves, prepayment rates, default rates, loss severities, etc.) or can be corroborated by observable market data.

Level 3 - Fair values are measured based on unobservable inputs that reflect the Company's own judgments about assumptions where there is little, if any, market activity for that asset or liability that market participants might use.

The availability of observable inputs can vary from financial instrument to financial instrument and is affected by a wide variety of factors including, for example, the type of financial instrument, whether the financial instrument is new and not yet established in the marketplace, and other characteristics particular to the instrument. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires significantly more judgment.

Accordingly, the degree of judgment exercised by management in determining fair value is greatest for instruments categorized in Level 3. In periods of market dislocation, the observability of prices and inputs may be reduced for many instruments. This may lead the Company to change the selection of the valuation technique (for example, from market to cash flow approach) or to use multiple valuation techniques to estimate the fair value of a financial instrument. These circumstances could cause an instrument to be reclassified between levels within the fair value hierarchy.

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6. Fair value investments (continued)

Classification within the fair value hierarchy (continued)

At December 31, 2021, the Company's investments were allocated between Levels 1, 2 and 3 as follows:

	2021			Total \$
	Level 1 \$	Level 2 \$	Level 3 \$	
U.S. government and government agency	50,066	327,356	-	377,422
Non-U.S. government and government agency	1,956	278,452	-	280,408
U.S. states, municipalities and political subdivisions	-	177,846	-	177,846
Agency residential mortgage-backed securities	-	838,522	-	838,522
Non-agency residential mortgage-backed securities	-	282,351	64,601	346,952
Corporate	-	977,746	-	977,746
Asset-backed securities	-	465,518	31,927	497,445
Commercial mortgage-backed securities	-	595,045	-	595,045
Total fixed maturities	52,022	3,942,836	96,528	4,091,386
Short-term investments	293,669	-	-	293,669
Total investments	345,691	3,942,836	96,528	4,385,055

(a) In accordance with ASC Topic 820 "Fair Value Measurements," investments measured at fair value using the net asset value ("NAV") per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy.

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6. Fair value investments (continued)

Classification within the fair value hierarchy (continued)

At December 31, 2020, the Company's investments were allocated between Levels 1, 2 and 3 as follows:

	2020				Total
	Level 1	Level 2	Level 3	Fair value based on NAV practical expedient ^(a)	
	\$	\$	\$	\$	\$
U.S. government and government agency	-	207,674	-	-	207,674
Non-U.S. government and government agency	-	88,550	-	-	88,550
U.S. states, municipalities and political subdivisions	-	93,537	-	-	93,537
Agency residential mortgage-backed securities	-	890,734	-	-	890,734
Non-agency residential mortgage-backed securities	-	50,886	35,076	-	85,962
Corporate	-	952,302	-	-	952,302
Bank loans	-	4,651	-	-	4,651
Asset-backed securities	-	323,419	41,893	-	365,312
Commercial mortgage-backed securities	-	515,921	-	-	515,921
Total fixed maturities	-	3,127,674	76,969	-	3,204,643
Short-term investments	92,213	-	-	-	92,213
Other investments					
Hedge funds	-	-	-	8,341	8,341
Private equity investments	-	-	-	217,470	217,470
Fixed income investment funds	-	-	-	14,819	14,819
Total other investments	-	-	-	240,630	240,630
Total investments	92,213	3,127,674	76,969	240,630	3,537,486

^(a) In accordance with ASC Topic 820 "Fair Value Measurements," investments measured at fair value using the net asset value ("NAV") per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy.

At December 31, 2021, Level 3 investments totalled \$96,528 (December 31, 2020: \$76,969), representing 2.20% (December 31, 2020: 2.18%) of total investments.

Validus Reinsurance, Ltd.

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6. Fair value investments (continued)

Valuation techniques

There have been no material changes in the Company's valuation techniques during the periods presented in these Consolidated Financial Statements. The following methods and assumptions were used in estimating the fair value of each class of financial instrument recorded in the Consolidated Balance Sheets.

Fixed maturity investments

In general, valuation of the Company's fixed maturity investment portfolio is provided by independent third party valuation service providers, such as index providers and pricing vendors, as well as broker quotations. The pricing vendors provide valuations for a high volume of liquid securities that are actively traded. For securities that do not trade on an exchange, the pricing services generally utilize market data and other observable inputs in matrix pricing models to determine month end prices. Prices are generally verified using third party data. Index providers generally utilize centralized trade reporting networks, available market makers and statistical techniques.

When independent third party valuation service providers are unable to obtain sufficient market observable information upon which to estimate the fair value for a particular security, fair value is determined either through a broker-dealer price quote or by employing market accepted valuation models. In general, broker-dealers value securities through their trading desks based on observable inputs. The methodologies include mapping securities based on trade data, bids or offers, observed spreads, and performance on newly issued securities. Broker-dealers also determine valuations by observing secondary trading of similar securities. Prices obtained from broker quotations are considered non-binding, however, they are based on observable inputs and by observing secondary trading of similar securities obtained from active, non-distressed markets. The techniques generally used to determine the fair value of the Company's fixed maturity investments are detailed below by asset class.

U.S. government and government agency

U.S. government and government agency securities consist primarily of debt securities issued by the U.S. Treasury and certain mortgage pass-through agencies. Fixed maturity investments included in U.S. government and government agency securities are primarily priced by pricing services. When evaluating these securities, the pricing services gather information from market sources and integrate other observations from markets and sector news. Evaluations are updated by obtaining broker dealer quotes and other market information including actual trade volumes, when available. The fair value of each security is individually computed using analytical models which incorporate option adjusted spreads and other daily interest rate data. On-the-Run U.S. Treasury issuances are considered Level 1 given the availability of quoted prices in active markets. Off-the-Run and other U.S. Treasuries are classified as Level 2 as the significant inputs used to price these securities are observable.

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6. Fair value investments (continued)

Valuation techniques (continued)

Non-U.S. government and government agency

Non-U.S. government and government agency securities consist of debt securities issued by non-U.S. governments and their agencies along with supranational organizations (also known as sovereign debt securities). Securities held in these sectors are primarily priced by pricing services who employ proprietary discounted cash flow models to value the securities. Key quantitative inputs for these models are daily observed benchmark curves for treasury, swap and high issuance credits. The pricing services then apply a credit spread for each security which is developed by in-depth and real time market analysis. For securities in which trade volume is low, the pricing services utilize data from more frequently traded securities with similar attributes. These models may also be supplemented by daily market and credit research for international markets. Bills, Bonds and Notes issued from Canada, France, Germany, Italy, Japan, and the United Kingdom within one year of the balance sheet date are considered Level 1 given the availability of quoted prices in active markets. All other instruments are classified as Level 2 as the significant inputs used to price these securities are observable.

U.S. states, municipalities and political subdivisions

The Company's U.S. states, municipalities and political subdivisions portfolio contains debt securities issued by U.S. domiciled state and municipal entities. These securities are generally priced by independent pricing services using available market information such as yields and credit spreads. The availability of observable inputs used to price these securities is contingent on their respective maturity dates. As the significant inputs used to determine price are observable, the fair value of these investments are classified as Level 2.

Agency residential mortgage-backed securities

The Company's agency residential mortgage-backed investments consist primarily of debt securities issued by mortgage-pass through agencies. These securities are primarily priced by pricing services using a mortgage pool specific model which utilizes daily inputs from the active to be announced market which is very liquid, as well as the U.S. Treasury market. The model also utilizes additional information, such as the weighted average maturity, weighted average coupon and other available pool level data which is provided by the sponsoring agency. Valuations are also corroborated with daily active market quotes. As securities with investment grade credit ratings utilize significant observable inputs to determine prices, the fair value of these investments are classified as Level 2. Securities below investment grade credit ratings, or where security holdings are backed by certain collateral types or are residual tranches, utilize an element of significant unobservable inputs, including credit spreads, default rates, prepayment rates, and default projections. Accordingly, the fair value of these investments are classified as Level 3.

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6. Fair value investments (continued)

Valuation techniques (continued)

Non-agency residential mortgage-backed securities

The Company's non-agency residential mortgage-backed investments include non-agency prime and sub-prime residential mortgage-backed fixed maturity investments. Securities held in these sectors are primarily priced by pricing services using an option adjusted spread model or discounted cash flow model, which principally utilize inputs including benchmark yields, available trade information or broker quotes, issuer spreads, prepayment and default projections. The pricing services also review collateral prepayment rates, loss severity and delinquencies among other collateral performance indicators for the securities valuation, when applicable. Where significant inputs used to price the securities are observable, the fair value of these investments are classified as Level 2. Where such information is unavailable, or the security credit rating is below AAA, significant unobservable inputs are used to price these securities, which may include constant prepayment rates, loss severity, default rates and yield, resulting in certain securities being classified as Level 3.

Corporate

Corporate debt securities consist primarily of investment-grade debt of a wide variety of corporate issuers and industries. The Company's corporate fixed maturity investments are primarily priced by pricing services. When evaluating these securities, the pricing services gather information from market sources regarding the issuer of the security and obtain credit data, as well as other observations, from markets and sector news. Evaluations are updated by obtaining broker dealer quotes and other market information including actual trade volumes, when available. The pricing services also consider the specific terms and conditions of the securities, including any specific features which may influence risk. In certain instances, securities are individually evaluated using a spread which is added to the U.S. Treasury curve or a security specific swap curve as appropriate. As the significant inputs used to price these securities are observable, the fair value of these investments are classified as Level 2.

Bank loans

Included in the bank loan portfolio is a collection of loan participations held through an intermediary. A third party pricing service provides monthly valuation reports for each loan and participation using a combination of quotations from loan pricing services, leveraged loan indices or market price quotes obtained directly from the intermediary. Where an independent third party vendor prices securities in the portfolio, they are classified as Level 2. Where such information is unavailable and pricing is sourced by a broker, significant unobservable inputs are used to price these securities, which include credit spreads and default rates. In this instance, these securities would be categorized as Level 3.

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6. Fair value investments (continued)

Valuation techniques (continued)

Asset-backed securities

Asset backed securities include mostly investment-grade debt securities backed by pools of loans with a variety of underlying collateral, including automobile loan receivables, student loans, credit card receivables, and collateralized loan obligations originated by a variety of financial institutions. Securities held in these sectors are primarily priced by pricing services. The pricing services apply dealer quotes and other available trade information such as bids and offers, prepayment rates which may be adjusted for the underlying collateral or current price data, the U.S. Treasury curve and swap curve as well as cash settlement. The pricing services determine the expected cash flows for each security held in this sector using prepayment and default projections for the underlying collateral and current market data. In addition, a spread is applied to the relevant benchmark and used to discount the cash flows noted above to determine the fair value of the securities held in this sector. The fair value classification of asset-backed securities is based on a combination of collateral type, tranche type and rating, in addition to observable pricing inputs. As the significant inputs used to price the majority of these securities are observable, the fair value of these investments are classified as Level 2. Where such information is unavailable and pricing is sourced by a broker, or the security meets specific criteria, significant unobservable inputs are used to price these securities, which includes yield, resulting in certain securities classified as Level 3.

Commercial mortgage-backed securities

The Company's commercial mortgage backed securities consist of primarily investment grade debt securities. The pricing services apply dealer quotes and other available trade information such as bids and offers, prepayment rates which may be adjusted for the underlying collateral or current price data, the U.S. Treasury curve and swap curve as well as cash settlement. The pricing services determine the expected cash flows for each security held in this sector using historical prepayment and default projections for the underlying collateral and current market data. In addition, a spread is applied to the relevant benchmark and used to discount the cash flows noted above to determine the fair value of the securities held in this sector. As securities with investment grade credit ratings utilize significant observable inputs to determine prices, the fair value of these investments are classified as Level 2. Securities below investment grade credit ratings, or where security holdings are backed by certain collateral types or are residual tranches, utilize an element of significant unobservable inputs, including credit spreads, default rates, prepayment rates, and default projections. Accordingly, the fair value of these investments are classified as Level 3.

Short-term investments

Short-term investments consist primarily of highly liquid securities, all with maturities of less than one year from the date of purchase. The fair value of the portfolio is generally determined using amortized cost which approximates fair value. As the highly liquid money market-type funds are actively traded, the fair value of these investments are classified as Level 1.

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6. Fair value investments (continued)

Valuation techniques (continued)

Other investments

Hedge funds

The hedge fund's administrator provides quarterly NAVs with a three-month delay in valuation. The fair value of this investment was measured using the NAV practical expedient and therefore has not been categorized within the fair value hierarchy.

Private equity investments

The private equity funds provide quarterly partnership capital statements with a three to six-month delay which were used as a basis for valuation. These private equity investments vary in investment strategies and are not actively traded in any open markets. The fair value of these investments was measured using the NAV practical expedient and therefore have not been categorized within the fair value hierarchy.

Fixed income investment funds

The fair value of the Company's investment funds was based on the NAV of the funds as reported by the independent fund administrators. The fund's administrators provide a quarterly reported NAV with a three-month delay in their valuation. The fair value of these investments was measured using the NAV practical expedient and therefore have not been categorized within the fair value hierarchy. None of these investments were probable of being sold at amounts different than their NAVs.

Level 3 investments

Details of transfers into / (out of) Level 3 investments and purchases of Level 3 investments are as follows:

	Bank loans	Non-agency residential mortgage- backed securities	Asset- backed securities	Total
	\$	\$	\$	\$
<u>During the year ended December 31, 2021</u>				
Transfers into Level 3 investments	-	-	23,800	23,800
Transfers out of Level 3 investments	-	-	(35,230)	(35,230)
Purchases	-	45,622	24,097	69,719
<u>During the year ended December 31, 2020</u>				
Transfers into Level 3 investments	-	41,327	61,412	102,739
Transfers out of Level 3 investments	(4,652)	(21,933)	(12,172)	(38,757)
Purchases	-	23,694	2,350	26,044

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6. Fair value investments (continued)

Level 3 investments (continued)

During the year ended December 31, 2021, transfers into Level 3 investments included investments in asset-backed securities. These transfers were primarily the result of limited market pricing information and decreases in investment credit rating relating to collateralized debt obligations that required us to determine fair value for these securities based on unobservable inputs.

During the year ended December 31, 2021, transfers out of Level 3 investments included investments in asset-backed securities. These transfers were primarily the result of using pricing information that reflects the fair value of those securities based on observable inputs and increases in investment credit ratings.

During the year ended December 31, 2020, transfers into Level 3 investments primarily included certain investments in non-agency residential mortgage backed securities and asset-backed securities. These transfers were primarily the result of limited market pricing information that required us to determine fair value for these securities based on unobservable inputs.

During the year ended December 31, 2020, transfers out of Level 3 investments primarily included certain investments in bank loans, non-agency residential mortgage backed securities and asset-backed securities. Transfers of bank loans were primarily the result of using observable pricing information that reflects the fair value of those securities. Transfers of non-agency residential mortgage backed securities and asset-backed securities were based on consideration of market liquidity as well as related transparency of pricing and associated observable inputs for these investments.

Quantitative information about Level 3 investments

The following table presents information about the significant unobservable inputs used for fair value measurements for certain Level 3 instruments at December 31, 2021:

Valuation technique	Unobservable inputs	Weighted average
<i>Non-agency residential mortgage-backed securities (fair value of \$47,582)</i>		
Discounted cash flow	Constant prepayment rate	10.84%
Discounted cash flow	Loss severity	19.73%
Discounted cash flow	Constant default rate	1.26%
Discounted cash flow	Yield	2.07%
<i>Asset-backed securities (fair value of \$20,264)</i>		
Discounted cash flow	Yield	1.58%

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6. Fair value investments (continued)

Level 3 investments (continued)

The following table presents information about the significant unobservable inputs used for fair value measurements for certain Level 3 instruments at December 31, 2020:

Valuation technique	Unobservable inputs	Weighted average
<i>Non-agency residential mortgage-backed securities (fair value of \$35,076)</i>		
Discounted cash flow	Constant prepayment rate	8.71%
Discounted cash flow	Loss severity	35.66%
Discounted cash flow	Constant default rate	2.48%
Discounted cash flow	Yield	1.60%
<i>Asset-backed securities (fair value of \$36,763)</i>		
Discounted cash flow	Yield	1.53%

The weighted average for fixed maturity securities is based on the estimated fair value of the Level 3 securities.

The table above includes only those instruments for which information about the inputs is reasonably available to the Company, such as data from independent third party valuation service providers and from internal valuation models. Because input information from third parties with respect to certain Level 3 instruments (primarily, asset-backed securities) may not be completely available, balances shown in the table above may not equal total amounts reported for such Level 3 assets.

7. Investments in operating affiliates and structured notes receivable from AlphaCat ILS fund

Investments in operating affiliates

AlphaCat sidecars

Beginning on May 25, 2011, the Company joined with other investors in capitalizing a series of reinsurance and investment entities, referred to as “sidecars”, for the purpose of investing in collateralized reinsurance and retrocessional contracts. Certain of these sidecars deployed their capital through transactions entered into by AlphaCat Reinsurance Ltd. (“AlphaCat Re”). Each of these entities returns capital once the risk period expires and all losses have been paid out. The AlphaCat sidecars are VIEs and the Company is not the primary beneficiary. Therefore, the Company’s investments in the sidecars have been treated as equity method investments. The Company’s maximum exposure to any of the sidecars is the amount of capital invested at any given time and any remaining capital commitments.

Validus Reinsurance, Ltd.

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7. Investments in operating affiliates and structured notes receivable from AlphaCat ILS fund (continued)

Investments in operating affiliates (continued)

AlphaCat ILS funds

Beginning on December 17, 2012, the Company joined with other investors in capitalizing the AlphaCat ILS funds for the purpose of investing in instruments with returns linked to property catastrophe reinsurance, retrocession and insurance linked securities (“ILS”) contracts. The AlphaCat ILS funds have varying risk profiles and are categorized by the maximum permitted portfolio expected loss of the fund. The maximum permitted portfolio expected loss represents the average annual loss over the set of simulation scenarios divided by the total limit. Lower risk ILS funds are defined as having a maximum permitted portfolio expected loss of less than 7%, whereas higher risk ILS funds have a maximum permitted portfolio expected loss of 7% or greater. The AlphaCat ILS funds primarily deploy their capital through transactions entered into by AlphaCat Re or OmegaCat Reinsurance, Ltd. and AlphaCat Master Fund Ltd. The AlphaCat ILS funds are VIEs and the Company is not the primary beneficiary. Therefore, the Company’s investments in the funds have been treated as equity method investments.

During the year ended December 31, 2021, the Company sold its ownership interest in and structured notes receivable from certain AlphaCat ILS Funds to other subsidiaries of AIG that are not consolidated by Validus Re and are not subsidiaries of Validus Re. The Company surrendered control over the financial assets during the year and has no continuing involvement with the transferred investments.

During 2021, the Company received \$98,945 and \$10,000 in cash proceeds in exchange for the carrying value of its ownership interest in and structured notes receivable from certain AlphaCat ILS funds, respectively. The value of the transferred assets was based on the final investment valuation statements established by the fund administrators. Ownership interest in AlphaCat ILS funds was transferred at the carrying value of the assets at the effective date and did not result in the recognition of net gains or losses on sale. The Company recognized net losses from the sale of structured notes of \$337, which are included in “(Loss) income from structured notes receivable from AlphaCat ILS fund” reported in the Consolidated Statements of Income and Comprehensive Income.

The Company’s maximum exposure to any of the AlphaCat ILS funds is the amount of capital invested at any given time and any remaining capital commitments. Refer to Note 14, “Commitments and contingencies”, for further details.

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7. Investments in operating affiliates and structured notes receivable from AlphaCat ILS fund (continued)

Investments in operating affiliates (continued)

The following tables present a reconciliation of the beginning and ending investments in operating affiliates for the years ended December 31, 2021 and 2020:

2021				
	AlphaCat sidecars	AlphaCat ILS Funds - Lower Risk	AlphaCat ILS Funds - Higher Risk	Total
	\$	\$	\$	\$
Balance, beginning of year	1,584	61,701	55,071	118,356
Risk profile change, net	-	(40,597)	40,597	-
Purchase of shares	-	-	15,000	15,000
Redemption of shares / distributions	-	(6,865)	(6,018)	(12,883)
Sale of shares	-	(13,859)	(85,086)	(98,945)
Loss from operating affiliates	(27)	(380)	(14,459)	(14,866)
Balance, end of year	1,557	-	5,105	6,662

During the year ended December 31, 2021, the Company saw a change to the maximum permitted portfolio expected loss to one of the AlphaCat ILS Funds. As a result of this risk profile change, the AlphaCat ILS Fund has transferred from lower risk to higher risk.

2020				
	AlphaCat sidecars	AlphaCat ILS Funds - Lower Risk	AlphaCat ILS Funds - Higher Risk	Total
	\$	\$	\$	\$
Balance, beginning of year	2,236	55,952	65,784	123,972
Risk profile change, net	-	13,369	(13,369)	-
Purchase of shares	-	-	15,000	15,000
Redemption of shares / distributions	(737)	(9,500)	(18,624)	(28,861)
Income from operating affiliates	85	1,880	6,280	8,245
Balance, end of year	1,584	61,701	55,071	118,356

During the year ended December 31, 2020, the Company saw changes to the maximum permitted portfolio expected loss of a number of AlphaCat ILS Funds. As a result of these risk profile changes, certain AlphaCat ILS Funds have transferred from higher risk to lower risk.

The following table presents the Company's investments in operating affiliates as at December 31, 2021:

2021			
	Voting ownership	Equity ownership	Carrying value
	%	%	\$
AlphaCat sidecars	40.00	20.00	1,557
AlphaCat ILS Funds - Higher Risk	n/a	3.67	5,105
Total			6,662

Validus Reinsurance, Ltd.

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7. Investments in operating affiliates and structured notes receivable from AlphaCat ILS fund (continued)

Investments in operating affiliates (continued)

The following table presents the Company's investments in operating affiliates as at December 31, 2020:

	2020		
	Voting ownership %	Equity ownership %	Carrying value \$
AlphaCat sidecars	40.00	20.00	1,584
AlphaCat ILS Funds - Lower Risk	n/a	(a)	61,701
AlphaCat ILS Funds - Higher Risk	n/a	(b)	55,071
Total			118,356

(a) Equity ownerships in the lower risk AlphaCat ILS funds were between 7.04% and 9.79%.

(b) Equity ownerships in the higher risk AlphaCat ILS funds were between 1.84% and 4.43%.

Structured notes receivable from AlphaCat ILS fund

During 2021 and 2020, one of the AlphaCat ILS funds (the "Fund") issued both common shares and structured notes to the Company in order to capitalize the Fund. The structured notes do not have a stated maturity date since repayment is dependent on the settlement and income or loss of the underlying transactions. These structured notes rank senior to the common shares of the Fund and earn an interest rate of 5.00% (2020: 4.75%) plus the 3-month London Inter-Bank Offer Rate per annum, payable on a cumulative basis in arrears.

The following table presents a reconciliation of the beginning and ending structured notes receivable from the Fund as at December 31, 2021 and 2020:

	2021 \$	2020 \$
Structured notes receivable from the Fund, beginning of year	10,365	10,909
Purchases of structured notes receivable	10,000	10,000
Redemptions of structured notes receivable	(10,000)	(10,544)
Sale of structured notes receivable	(10,000)	-
Decrease in net asset value of structured notes receivable	(353)	-
Structured notes receivable from the Fund, end of year	12	10,365

Validus Reinsurance, Ltd.

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8. Derivative instruments

Derivatives not designated as hedging instruments

The following tables summarize information on the classification and amount of the fair value of derivatives not designated as hedging instruments within the Company's Consolidated Balance Sheets as at December 31, 2021 and 2020:

	2021			
	Asset notional exposure ^(a)	Asset derivative at fair value ^(b)	Liability notional exposure ^(a)	Liability derivative at fair value ^(b)
	\$	\$	\$	\$
Foreign exchange contracts	38,935	611	224,046	2,278
Commodity derivative contracts	302,687	3,961	218,858	287
Total	341,622	4,572	442,904	2,565

	2020			
	Asset Notional exposure ^(a)	Asset derivative at fair value ^(b)	Liability Notional exposure ^(a)	Liability derivative at fair value ^(b)
	\$	\$	\$	\$
Foreign exchange contracts	99,452	4,923	192,607	7,848

(a) Notional exposure represents the total aggregate notional exposure. For commodity derivative contracts derivative transactions management enters into option collar arrangements, wherein our net notional exposure is \$83,829 as at December 31, 2021. There were no commodity derivative contracts at December 31, 2020.

(b) Asset and liability derivatives are classified within Other assets and Accounts payable and accrued expenses, respectively, on the Consolidated Balance Sheets. Fair value amounts are shown before the effects of counterparty netting adjustments and offsetting cash collateral. Collateral posted for foreign exchange contract derivative transactions was \$2,940 and \$2,810 at December 31, 2021 and 2020, respectively.

The foreign exchange contracts are valued on the basis of standard industry valuation models. The inputs to these models are based on observable market inputs, and as such the fair values of these contracts are classified as Level 2.

The commodity derivative contracts are exchange traded instruments and are valued on the basis of standard industry valuation models and market prices. The inputs to these models are based on observable market inputs, and as such the fair values of these contracts are classified as level 2.

The following table summarizes information on the classification and net impact on earnings, recognized in the Company's Consolidated Statements of Income and Comprehensive Income relating to derivatives that were not designated as hedging instruments during the years ended December 31, 2021 and 2020:

Derivatives not designated as hedging instruments	Classification of gains recognized in earnings	2021	2020
		\$	\$
Foreign exchange contracts	Foreign exchange gains (losses)	2,787	(9,721)
Commodity derivative contracts	Losses and loss expenses	9,694	-

Validus Reinsurance, Ltd.

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8. Derivative instruments (continued)

Balance sheet offsetting

There was no balance sheet offsetting activity as at December 31, 2021 and 2020.

Commencing in 2019, the Company engaged in the above noted foreign exchange contracts with an affiliated AIG entity under International Swaps and Derivatives Association, Inc. Master Agreements, which establish terms that apply to all transactions. As part of the agreements, collateral is provided as security for the foreign exchange contracts. As at December 31, 2021, collateral held as security for foreign exchange contracts amounted to \$2,940 (December 31, 2020: \$2,810). On a periodic basis, the amounts receivable from or payable to the counterparties are settled in cash on a net basis.

9. Premiums receivable and funds withheld

Premiums receivable

Premiums receivable is composed of premiums in the course of collection and premiums accrued but unbilled, both of which are presented net of commissions and brokerage. It is common practice in the reinsurance industry for premiums to be paid on an instalment basis, therefore significant amounts will be considered unbilled and will not become due until a future date, which is typically no later than expiration of the underlying coverage period. The following is a breakdown of the components of premiums receivable as at December 31, 2021 and 2020:

	2021		
	Premiums in course of collection	Premiums accrued but unbilled	Total
	\$	\$	\$
Premiums receivable, beginning of year	25,499	861,148	886,647
Change during the year	51,038	289,604	340,642
Premiums receivable, end of year	76,537	1,150,752	1,227,289

	2020		
	Premiums in course of collection	Premiums accrued but unbilled	Total
	\$	\$	\$
Premiums receivable, beginning of year	20,118	697,408	717,526
Change during the year	5,381	163,740	169,121
Premiums receivable, end of year	25,499	861,148	886,647

Funds withheld

The Company writes and cedes certain business on a funds withheld basis. Under these contractual arrangements, the cedants withhold premiums for the purpose of paying claims. The remaining net funds will be remitted after all policies have expired and all claims have been settled.

Funds withheld assumed and ceded as at December 31, 2021 were \$148,104 and \$2,807, respectively (December 31, 2020: \$134,678 and \$2,019, respectively).

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

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10. Reserves for losses and loss expenses

The following table summarizes the Company's reserve for losses and loss expenses as at December 31, 2021 and 2020:

	2021	2020
	\$	\$
Case reserves	1,072,070	942,757
IBNR	3,661,691	2,268,639
Reserve for losses and loss expenses	4,733,761	3,211,396

The following table represents an analysis of paid and unpaid losses and loss expenses incurred and a reconciliation of the beginning and ending unpaid losses and loss expenses for the years ended December 31, 2021 and 2020:

	2021	2020
	\$	\$
Reserve for losses and loss expenses, beginning of year	3,211,396	2,724,823
Loss reserves recoverable, beginning of year	(1,074,617)	(1,119,707)
Net reserves for losses and loss expenses, beginning of year	2,136,779	1,605,116
Increase (decrease) in net reserves for losses and loss expenses in respect of losses occurring in:		
Current year	1,563,703	1,316,354
Prior years	(32,866)	(44,642)
Total incurred losses and loss expenses	1,530,837	1,271,712
Foreign exchange (gains) losses	(50,941)	34,128
Net impact of commodity derivatives recognized in losses and loss expense	(9,694)	-
Less net losses and loss expenses paid in respect of losses occurring in:		
Current year	(413,001)	(374,837)
Prior years	(600,965)	(399,340)
Total net paid losses	(1,013,966)	(774,177)
Net reserve for losses and loss expenses, end of year	2,593,015	2,136,779
Loss reserves recoverable, end of year	2,140,746	1,074,617
Reserve for losses and loss expenses, end of year	4,733,761	3,211,396

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2021 and 2020

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10. Reserves for losses and loss expenses (continued)

Total incurred losses and loss expenses for the years ended December 31, 2021 and 2020 is comprised of:

	2021	2020
	\$	\$
Gross losses and loss expenses	2,782,914	1,477,480
Reinsurance recoveries	(1,252,077)	(205,768)
Net incurred losses and loss expenses	1,530,837	1,271,712

The net favourable development on prior accident years by line of business is as follows:

	Line of business			Total
	Property	Specialty - Short-tail	Specialty - Other	
	\$	\$	\$	\$
Year ended December 31, 2021	37,162	(50,118)	(19,910)	(32,866)
Year ended December 31, 2020	11,086	(57,894)	2,166	(44,642)

The net favourable development on prior accident years for the years ended December 31, 2021 and 2020 were primarily driven by favourable development on attritional losses.

Short Duration Contract Disclosures

The Company has disaggregated its information presented in the tables below by lines of business. The Company has presented the below development tables for all accident years shown using exchange rates as at December 31, 2021. All accident years prior to the current year have been presented using the current year exchange rate.

Loss development tables

The loss development tables have been produced by lines of business for accident years 2012 through to 2021. The Company provides treaty reinsurance products on a global basis for all of its lines of business and does not receive or maintain claims count information associated with its reserve claims. As such, the Company has determined that it is impracticable to provide this information.

Validus Reinsurance, Ltd.

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10. Reserves for losses and loss expenses (continued)

Short Duration Contract Disclosures (continued)

Loss development tables - Property

Incurred losses and loss expenses, net of reinsurance											December 31, 2021 Total of IBNR reserves plus expected development on reported losses \$
Years ended December 31,											
Accident Year	2012 \$	2013 \$	2014 \$	2015 \$	2016 \$	2017 \$	2018 \$	2019 \$	2020 \$	2021 \$	
<i>I----- Unaudited -----I</i>											
2012	398,473	320,625	310,150	283,293	281,156	279,435	273,248	267,669	267,040	266,023	11,525
2013	-	177,888	161,893	146,951	138,284	133,442	131,868	129,488	129,412	129,331	1,102
2014	-	-	110,131	105,400	96,733	97,601	103,178	101,596	99,189	95,297	1,868
2015	-	-	-	154,976	122,192	101,412	94,525	87,729	86,284	85,697	1,275
2016	-	-	-	-	153,786	161,108	144,524	132,080	124,759	120,877	1,519
2017	-	-	-	-	-	394,740	388,512	363,640	366,860	351,402	37,317
2018	-	-	-	-	-	-	436,589	482,657	466,398	460,482	49,873
2019	-	-	-	-	-	-	-	306,335	348,523	326,737	57,744
2020	-	-	-	-	-	-	-	-	339,860	444,551	202,407
2021	-	-	-	-	-	-	-	-	-	413,038	164,185
										Total	2,693,435
Cumulative paid losses and loss expenses, net of reinsurance											
Years ended December 31,											
Accident Year	2012 \$	2013 \$	2014 \$	2015 \$	2016 \$	2017 \$	2018 \$	2019 \$	2020 \$	2021 \$	
<i>I----- Unaudited -----I</i>											
2012	67,712	150,520	202,851	226,210	235,008	239,865	241,911	248,244	249,448	250,472	
2013	-	19,723	67,255	105,818	119,294	124,258	125,551	126,265	126,628	126,577	
2014	-	-	25,697	64,590	80,202	86,705	89,124	90,950	91,616	92,278	
2015	-	-	-	16,134	59,622	74,635	79,777	81,224	82,626	83,395	
2016	-	-	-	-	27,183	81,524	99,712	110,574	113,366	115,924	
2017	-	-	-	-	-	128,128	286,802	319,416	307,006	299,069	
2018	-	-	-	-	-	-	24,021	334,224	359,185	387,588	
2019	-	-	-	-	-	-	-	11,164	156,429	192,730	
2020	-	-	-	-	-	-	-	-	23,784	164,212	
2021	-	-	-	-	-	-	-	-	-	75,617	
										Total	1,787,862
Reserves for losses and loss expenses, net of reinsurance ^(a)											64,074
Reserves for losses and loss expenses, net of reinsurance											969,647

(a) Includes reserves for losses and loss expense, net of reinsurance, of \$42,260 and \$7,501 related to Flagstone Reinsurance Holdings, S.A. ("Flagstone") and IPC Holdings Ltd. ("IPC"), respectively.

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10. Reserves for losses and loss expenses (continued)

Short Duration Contract Disclosures (continued)

Loss development tables - Specialty - Short-tail

Incurred losses and loss expenses, net of reinsurance											December 31, 2021 Total of IBNR reserves plus expected development on reported losses \$
Years ended December 31,											
Accident Year	2012 \$	2013 \$	2014 \$	2015 \$	2016 \$	2017 \$	2018 \$	2019 \$	2020 \$	2021 \$	
<i>Unaudited</i>											
2012	250,846	277,675	278,075	269,682	267,036	265,627	266,825	266,733	266,573	265,814	7,425
2013	-	259,236	266,289	244,023	237,011	236,880	235,061	232,978	232,747	231,384	22
2014	-	-	275,192	250,867	235,569	229,167	226,537	224,539	224,912	223,576	1,977
2015	-	-	-	419,799	391,825	357,273	347,221	336,475	327,833	326,982	1,094
2016	-	-	-	-	329,999	281,331	268,007	261,645	256,279	254,920	10,492
2017	-	-	-	-	-	314,439	284,546	254,510	229,956	235,365	8,682
2018	-	-	-	-	-	-	285,491	285,309	250,769	242,023	13,780
2019	-	-	-	-	-	-	-	314,465	340,551	337,884	31,351
2020	-	-	-	-	-	-	-	-	740,733	722,698	81,085
2021	-	-	-	-	-	-	-	-	-	730,870	337,442
										Total	3,571,516
Cumulative paid losses and loss expenses, net of reinsurance											
Years ended December 31,											
Accident Year	2012 \$	2013 \$	2014 \$	2015 \$	2016 \$	2017 \$	2018 \$	2019 \$	2020 \$	2021 \$	
<i>Unaudited</i>											
2012	30,573	138,028	196,084	217,790	227,017	235,258	243,289	244,953	245,434	246,204	
2013	-	111,294	188,060	205,244	212,824	224,624	227,556	228,300	229,744	229,279	
2014	-	-	101,768	172,816	191,981	197,931	202,378	206,852	208,909	217,362	
2015	-	-	-	181,007	248,152	301,904	311,388	317,859	319,200	320,771	
2016	-	-	-	-	155,504	206,911	197,165	218,746	232,453	238,626	
2017	-	-	-	-	-	96,519	166,000	200,772	210,586	215,185	
2018	-	-	-	-	-	-	58,655	158,500	184,699	198,221	
2019	-	-	-	-	-	-	-	89,502	204,705	245,974	
2020	-	-	-	-	-	-	-	-	317,494	586,043	
2021	-	-	-	-	-	-	-	-	-	296,575	
										Total	2,794,240
Reserves for losses and loss expenses, net of reinsurance ^(a)											56,934
Reserves for losses and loss expenses, net of reinsurance											834,210

^(a) Includes reserves for losses and loss expense, net of reinsurance, of \$25,281 and \$5,159 related to Flagstone and IPC, respectively.

Validus Reinsurance, Ltd.

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10. Reserves for losses and loss expenses (continued)

Short Duration Contract Disclosures (continued)

Loss development tables - Specialty - Other

Incurred losses and loss expenses, net of reinsurance											December 31, 2021 Total of IBNR reserves plus expected development on reported losses \$
Years ended December 31,											
Accident Year	2012 \$	2013 \$	2014 \$	2015 \$	2016 \$	2017 \$	2018 \$	2019 \$	2020 \$	2021 \$	
<i>I----- Unaudited -----I</i>											
2012	46	24	831	269	29	231	232	-	-	-	-
2013	-	152	94	48	53	36	24	22	22	22	-
2014	-	-	2,097	1,350	485	780	331	180	430	443	48
2015	-	-	-	5,589	7,069	4,232	4,403	4,536	3,751	3,045	455
2016	-	-	-	-	30,088	36,310	41,204	44,703	29,105	32,667	4,455
2017	-	-	-	-	-	73,249	70,810	76,290	77,883	85,185	20,786
2018	-	-	-	-	-	-	129,623	119,306	123,920	116,364	56,730
2019	-	-	-	-	-	-	-	147,455	159,024	154,909	93,446
2020	-	-	-	-	-	-	-	-	222,285	203,585	158,131
2021	-	-	-	-	-	-	-	-	-	371,922	348,609
									Total	968,142	
Cumulative paid losses and loss expenses, net of reinsurance											
Years ended December 31,											
Accident Year	2012 \$	2013 \$	2014 \$	2015 \$	2016 \$	2017 \$	2018 \$	2019 \$	2020 \$	2021 \$	
<i>I----- Unaudited -----I</i>											
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	18	18	22	22	22	22	22
2014	-	-	-	1	4	45	66	67	386	392	
2015	-	-	-	18	1,688	2,058	2,441	2,668	2,849	2,430	
2016	-	-	-	-	2,583	2,396	6,380	12,489	17,512	20,176	
2017	-	-	-	-	-	978	5,303	13,868	30,317	49,579	
2018	-	-	-	-	-	-	2,934	14,570	30,336	39,876	
2019	-	-	-	-	-	-	-	5,110	21,939	37,718	
2020	-	-	-	-	-	-	-	-	8,842	27,495	
2021	-	-	-	-	-	-	-	-	-	10,577	
									Total	188,265	
Reserves for losses and loss expenses, net of reinsurance ^(a)											1,781
Reserves for losses and loss expenses, net of reinsurance											781,658

^(a) Includes reserves for losses and loss expense, net of reinsurance, of \$3,700 related to Flagstone.

Validus Reinsurance, Ltd.

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10. Reserves for losses and loss expenses (continued)

Reconciliation of loss development information to the reserve for losses and loss expenses

The following table reconciles the loss development information to the Company's reserves for losses and loss expenses as at December 31, 2021:

	2021
	\$
Reserves for losses and loss expenses, net of reinsurance	
Property	969,647
Specialty - Short-tail	834,210
Specialty - Other	781,658
Total reserves for losses and loss expenses, net of reinsurance	2,585,515
Loss reserves recoverable	
Property	2,028,170
Specialty - Short-tail	84,738
Specialty - Other	27,838
Total loss reserves recoverable	2,140,746
Unallocated loss expenses	7,500
Total reserves for losses and loss expenses	4,733,761

Historical loss duration

The following table summarizes the historic average annual percentage pay-out of incurred losses by age, net of reinsurance, as of December 31, 2021:

Average annual percentage pay-out of incurred losses by age, net of reinsurance (unaudited)

	December 31, 2021									
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	%	%	%	%	%	%	%	%	%	%
Property	17.77	43.66	15.53	6.24	1.90	1.70	0.73	1.12	0.21	0.38
Specialty - Short-tail	39.77	32.01	11.03	5.03	3.31	1.84	1.19	1.68	0.00	0.29
Specialty - Other	2.26	9.97	7.35	21.40	8.36	6.49	14.61	0.39	0.00	0.00

Coronavirus (COVID-19) pandemic

Given the uncertainties around the impact from the COVID-19 pandemic, including the significant global economic slowdown, the full impact of COVID-19 and how it may ultimately impact the results of the Company's reinsurance operations remains uncertain. In addition, in response to the pandemic, new governmental, legislative and regulatory initiatives have been put in place and continue to be developed that could result in additional restrictions and requirements relating to management's policies that may have a negative impact on the Company's business operations. The Company has recorded the estimate of the ultimate liability for losses that have occurred as of the balance sheet date associated with COVID-19 which reflects the Company's expectations given the current facts and circumstances. Management will continue to monitor and review the impact. Reserve changes that increase previous estimates of ultimate cost are referred to as unfavorable or adverse development or reserve strengthening. Reserve changes that decrease previous estimates of ultimate cost are referred to as favorable development.

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2021 and 2020

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11. Reinsurance

The Company's reinsurance balances recoverable as at December 31, 2021 and 2020 were as follows:

	2021	2020
	\$	\$
Loss reserves recoverable on unpaid		
Case reserves	258,811	295,263
IBNR	1,881,935	779,354
Total loss reserves recoverable	2,140,746	1,074,617
Paid losses recoverable	36,151	23,282
Total reinsurance recoverable	2,176,897	1,097,899

Effects of reinsurance on premiums written and earned

The effects of reinsurance on net premiums written and earned, and on losses and loss expenses for the years ended December 31, 2021 and 2020 were as follows:

	2021	2020
	\$	\$
<i>Premiums written</i>		
Assumed	3,171,374	2,409,467
Ceded	(719,266)	(586,263)
Net premiums written	2,452,108	1,823,204
<i>Premiums earned</i>		
Assumed	2,784,770	2,234,338
Ceded	(671,065)	(591,489)
Net premiums earned	2,113,705	1,642,849
<i>Losses and loss expenses</i>		
Assumed	2,782,914	1,477,480
Ceded	(1,252,077)	(205,768)
Net losses and loss expenses	1,530,837	1,271,712

Credit risk

The cession of reinsurance does not legally discharge the Company from its primary liability for the full amount of the reinsurance policies it writes, and the Company is required to pay the loss and bear collection risk regarding reinsurers' obligations under reinsurance and retrocession agreements. The Company records provisions for uncollectible reinsurance recoverable when collection becomes unlikely due to the reinsurer's inability to pay.

To the extent the creditworthiness of the Company's reinsurers were to deteriorate due to adverse events affecting the reinsurance industry, such as a large number of major catastrophes, actual uncollectible amounts could be significantly greater than the Company's provision. Amounts recoverable from reinsurers are estimated in a manner consistent with the underlying loss reserves.

Validus Reinsurance, Ltd.

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11. Reinsurance (continued)

Credit risk (continued)

The Company evaluates the financial condition of its reinsurers and monitors concentration of credit risk arising from its exposure to individual reinsurers. The reinsurance program is generally placed on a fully collateralized basis or with reinsurers whose rating, at the time of placement, was A- or better as rated by Standard & Poor's or the equivalent with other rating agencies. Exposure to a single reinsurer is also controlled with restrictions dependent on rating. As at December 31, 2021, \$2,176,240 or 99.97% (December 31, 2020: \$1,097,739 or 99.99%) of the Company's reinsurance balances recoverable were either fully collateralized or recoverable from reinsurers rated A- or better.

Information regarding the Company's concentration of credit risk arising from its exposure to individual reinsurers as at December 31, 2021 and 2020 were as follows:

	2021		2020	
	Reinsurance recoverable \$	Percentage of total %	Reinsurance recoverable \$	Percentage of total %
Top 10 reinsurers	2,134,242	98.04	1,081,718	98.52
Other reinsurers' balances > \$1,000	38,170	1.75	13,353	1.22
Other reinsurers' balances < \$1,000	4,485	0.21	2,828	0.26
Total	2,176,897	100.00	1,097,899	100.00

		2021	
		Reinsurance recoverable \$	Percentage of total %
Top 10 reinsurers	Rating		
Fully collateralized reinsurers	NR	1,937,286	88.99
Everest Re	A+	40,586	1.86
Third Point Reinsurance Company Ltd	A-	28,137	1.29
Fidelis	A-	24,674	1.13
Markel	A	24,581	1.13
Manufacturers P&C Limited	A-	18,900	0.87
Lloyd's Syndicates	A+	18,505	0.85
PartnerRe	A+	17,005	0.78
Chubb	AA	12,289	0.57
Axis Capital Holdings	A+	12,279	0.57
Total		2,134,242	98.04

NR: Not rated

Validus Reinsurance, Ltd.

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11. Reinsurance (continued)

Credit risk (continued)

Top 10 reinsurers	Rating	2020	
		Reinsurance recoverable \$	Percentage of total %
Fully collateralized reinsurers	NR	908,426	82.74
Everest Re	A+	42,901	3.91
Third Point Reinsurance Company Ltd	A-	31,711	2.89
Markel	A	27,483	2.50
Fidelis	A-	16,866	1.54
Chubb	AA	13,740	1.25
Axis Capital Holdings	A+	13,740	1.25
Manufacturers P&C Limited	A-	11,803	1.07
Lloyd's Syndicates	A+	9,054	0.82
BMO Reinsurance Limited	A+	5,994	0.55
Total		1,081,718	98.52

NR: Not rated

12. Share capital

Authorized and issued

The Company's authorized share capital is 1,000,000 common shares with a par value of \$1.00 each.

On October 19, 2005, the Company issued 1,000,000 common shares at a price of \$1,000.00 each. Proceeds from this issuance were \$1,000,000.

Capital contributions and distributions

The Company received capital contributions from AIG via Validus Holdings during the year ended December 31, 2021 amounting to \$495 (2020: \$nil) relating to settlement of share-based compensation arrangements. There were no capital distributions made to Validus Holdings during the years ended December 31, 2021 and 2020.

Dividends

The Company did not declare any dividends to Validus Holdings of during the year ended December 31, 2021 (2020: \$100,000).

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

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13. Debt and financing arrangements

Letters of credit

The Company's financing structure is comprised of letters of credit held with Citibank which are ultimately supported by AIG. As at December 31, 2021, total outstanding letters of credit amounted to \$456,552 (2020: \$342,109). There were no cash or investments pledged as collateral relating to these letters of credit as at December 31, 2021 and 2020.

Finance expenses

The following table summarizes the Company's finance expenses for the years ended December 31, 2021 and 2020.

	2021	2020
	\$	\$
Fees on letters of credit	5,556	2,936
Bank and other charges	244	354
Total finance expenses	5,800	3,290

14. Commitments and contingencies

Concentrations of credit risk

The Company underwrites a significant amount of its reinsurance business through the following brokers as set out below. There is credit risk associated with payments of reinsurance balances to the Company in regards to these brokers' ability to fulfil their contractual obligations. These brokerage companies are large and well established, and there are no indications they are financially distressed. There was no other broker or reinsured party that accounted for more than 10% of gross premiums written for the periods mentioned.

The following table shows the percentage of gross premiums written through each of these three brokers for the years ended December 31, 2021 and 2020:

Broker	2021	2020
	%	%
Marsh & McLennan Companies, Inc.	49.75	51.29
Aon Benfield Group Ltd.	25.89	24.04
Willis Towers Watson Plc / Arthur J. Gallagher & Co.	14.68	14.48

Employment agreements

The Company has entered into employment agreements with certain individuals that provide for executive benefits and severance payments under certain circumstances.

Validus Reinsurance, Ltd.

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14. Commitments and contingencies (continued)

Investments in operating affiliates

The Company entered into an agreement with an AlphaCat ILS fund whereby it assumed a capital commitment of \$25,000 during the period ended December 31, 2021 (2020: \$25,000). For each of the years ended December 31, 2021 and 2020, the total \$25,000 capital commitment was called and funded and therefore there is no remaining commitment. As of December 31, 2021, the Company sold its ownership interest in this AlphaCat ILS fund to another subsidiary of AIG. The Company surrendered control over the financial assets during the year and has no continuing involvement with the transferred investments or capital commitments for future periods. Following the sale, the Company does not have any remaining capital commitment as at December 31, 2021.

Fixed maturity commitments

During the year ended December 31, 2021, the Company sold its investment in bank loans and does not have any remaining obligations to participate in certain secured loan facilities as at December 31, 2021.

At December 31, 2020, the Company had an outstanding commitment to participate in certain secured loan facilities through participation agreements with an established loan originator. The undrawn amount under the revolver facility participations as at December 31, 2020 was \$1,203.

Other investment commitments

During the year ended December 31, 2021, the Company sold its ownership interest in other investments. As at December 31, 2021, the Company does not have any remaining unfunded capital commitment to these investments.

At December 31, 2020, the Company had capital commitments in certain other investments of \$318,641. The Company's remaining unfunded capital commitment to these investments as at December 31, 2020 was \$49,416.

15. Related party transactions

The following significant transactions are classified as related party transactions as principals and/or directors of each counterparty are members of the Company's or AIG's board of directors.

Reinsurance agreements

The Company has various reinsurance agreements with its affiliates. The following tables summarize the significant balances resulting from these reinsurance agreements:

Reinsurance agreements with AlphaCat Re (a non-consolidated affiliate)	2021	2020
	\$	\$
<i>Balances during the years ended December 31</i>		
Ceded net premiums earned	-	25,933
Ceded losses and loss expenses	-	111,719
Ceded earned commissions	-	2,672
<i>Balances outstanding as at December 31</i>		
Deferred acquisition costs	-	87
Paid losses recoverable	-	20,873
Prepaid reinsurance	-	416
Loss reserves recoverable	-	482,270
Reinsurance balances payable	-	3,718

Validus Reinsurance, Ltd.

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15. Related party transactions (continued)

Reinsurance agreements (continued)

AlphaCat Re entered into a novation agreement with the Company and a third party reinsurer effective January 1, 2021. Upon execution of the novation agreement, all business that the Company ceded to AlphaCat Re was fully novated to a third party reinsurer.

	2021	2020
	\$	\$
Reinsurance agreements with Talbot Syndicate		
<i>Balances during the years ended December 31</i>		
Net premiums earned	1,061	8,129
Incurring losses and loss expenses	2,628	8,074
Policy acquisition costs	255	1,518
<i>Balances outstanding as at December 31</i>		
Premiums receivable	33,174	33,703
Deferred acquisition costs	39	191
Reserves for losses and loss expenses	25,492	33,738
Unearned premiums	2,313	2,584
Reinsurance balances payable	22,203	18,017

	2021	2020
	\$	\$
Reinsurance agreements with affiliated subsidiaries of AIG		
<i>Balances during the years ended December 31</i>		
Assumed net premiums earned	1,906	29
Recoveries of losses and loss expenses	61,695	91,152
Policy acquisition costs	137	227
<i>Balances outstanding as at December 31</i>		
Premiums receivable	1,183	2,026
Deferred acquisition costs	50	330
Funds withheld	13	49
Reserves for losses and loss expenses	27,346	94,131
Unearned premiums	420	1,986
Reinsurance balances payable	48	(2,170)

Derivatives, investments and loans

Derivative agreement

The Company has a derivative agreement in place with an affiliated AIG entity. Refer to Note 8, "Derivative instruments" for further details.

Investments

On January 1, 2019, the Company entered into an investment management agreement with AIG, whereby AIG would assume overall management of the Company's investment portfolio. As part of this agreement, the Company paid \$3,711 of investment management expenses to AIG during the year ended December 31, 2021 (2020: \$2,644).

During the year ended December 31, 2021, the Company sold its ownership interest in other investments to other subsidiaries of AIG. These subsidiaries are not consolidated by Validus Re and are not subsidiaries of Validus Re. The Company surrendered control over the financial assets during the year and has no continuing involvement with the transferred investments. Refer to Note 5, "Investments" for further details.

Validus Reinsurance, Ltd.

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15. Related party transactions (continued)

Derivatives, investments and loans (continued)

Loan receivables

On September 26, 2014, Validus Specialty, Inc., an affiliate, obtained a loan from Flagstone Reinsurance (Luxembourg), SARL, a subsidiary of the Company, with a principal amount of \$400,000 bearing an annual interest rate of 5.80% and maturing on September 23, 2024. On April 1, 2019, the Company settled this loan with Validus Specialty, Inc. and entered into a new loan agreement with AIG. The new loan receivable has a principal amount of \$400,000 bearing an annual interest rate of 5.09% and maturing on April 1, 2033. The outstanding balance as at December 31, 2021 was \$401,664 (December 31, 2020: \$401,664). The related interest income earned during the year ended December 31, 2021 amounted to \$20,360 (2020: \$20,360).

On September 1, 2018, the Company acquired a note receivable from AIG International Holdings GmbH with a principal amount of \$327,729 bearing an annual interest rate of 3.60% and maturing on August 31, 2022. The outstanding balance as at December 31, 2021 was \$331,760 (December 31, 2020: \$331,760). The related interest income earned during the year ended December 31, 2021 amounted to \$11,962 (2020: \$11,995).

On April 1, 2019, the Company acquired an additional AIG loan receivable from Validus Holdings with a principal amount of \$250,000 in exchange for a capital contribution of \$73,441 and the settlement of intercompany receivables from Validus Holdings of \$176,559. This loan bears an annual interest rate of 3.90% and matures on August 31, 2022. The outstanding balance as at December 31, 2021 was \$253,331 (December 31, 2020: \$253,331). The related interest income earned during the year ended December 31, 2021 amounted to \$9,885 (2020: \$9,913).

Service level agreements

In accordance with service level agreements, the Company participates in centralized services wherein expenses are incurred by service and other affiliated entities and allocated to, or recharged from, the Validus Holdings group of companies. Services provided across the group include managerial services, underwriting services, actuarial services, claims services, accounting services, information technology services and others. The following table summarizes the revenue and expenses incurred by the Company for services provided to or received from the Validus Holdings group of companies during the years ended December 31, 2021 and 2020:

	2021	2020
	\$	\$
Other insurance-related income and other income	10,377	12,630
General and administrative expenses	79,848	67,815

Other

Certain shareholders of AIG and their affiliates, as well as employees of entities associated with directors and officers may have purchased insurance and/or reinsurance from the Company in the ordinary course of business. The Company does not believe these transactions to be material.

Validus Reinsurance, Ltd.

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16. Statutory and regulatory requirements

The Company has operations that are subject to laws and regulations in the jurisdictions in which they operate, the most significant of which are Bermuda and Switzerland.

The Company's reinsurance subsidiaries prepare their statutory financial statements in conformity with statutory accounting practices prescribed or permitted by the applicable local laws and relevant regulatory authority. The statutory financial statements may vary materially from statements prepared in accordance with U.S. GAAP.

The Company and its subsidiaries are required to maintain certain measures of solvency and liquidity that provide restrictions on declaring dividends and distributions. Statutory capital and surplus as at December 31, 2021 and 2020 and statutory net income for the years ended December 31, 2021 and 2020 for our reinsurance subsidiaries based in our most significant regulatory jurisdictions were as follows:

	Statutory capital and surplus				Statutory net income (loss)	
	Required		Actual		2021	2020
	2021	2020	2021	2020		
	\$	\$	\$	\$	\$	\$
Bermuda	1,211,090	1,036,557	3,893,878	3,784,457	108,408	91,797
Switzerland	557,000	454,000	1,236,051	1,269,694	91,491	(43,543)

During the year ended December 31, 2021, the Company did not declare any dividends to Validus Holdings (2020: \$100,000).

Bermuda

The Company is a Class 4 insurer and has the following Bermuda-based insurance subsidiaries at December 31, 2021 and 2020:

- Validus Reinsurance (Switzerland) Ltd. (Bermuda Branch) - Class 4 insurer
- Mont Fort Re Ltd. - Class 3 insurer

On December 27, 2018, the Company secured a non-assignable, non-transferrable unsecured standby letter of credit from Standard Chartered Bank for a sum not exceeding the aggregate amount of \$200,000 effective December 31, 2018, with an original expiration date of December 31, 2021. This letter of credit provides for an automatic renewal for one year at each anniversary date, unless at least 60 days prior to each such commencement date anniversary, the bank sends written notice to the Company that they elect not to consider this LOC so extended. The Company did not receive any such notice, and hence, this letter of credit is considered to be renewed until December 31, 2022. This standby letter of credit is recorded as Other Fixed Capital on the Statutory Statement of Capital and Surplus and as a Tier 3 Ancillary Capital as at December 31, 2021 and 2020, subject to certain conditions.

On May 27, 2020, the Company secured a non-assignable, non-transferrable unsecured standby letter of credit from Société Générale for a sum not exceeding the aggregate amount of \$150,000 effective May 27, 2020, expiring on May 27, 2025. This standby letter of credit is recorded as Other Fixed Capital on the Statutory Statement of Capital and Surplus and as a Tier 2 Ancillary Capital as at December 31, 2021 and 2020, subject to certain conditions.

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

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16. Statutory and regulatory requirements (continued)

Bermuda (continued)

Bermuda-based insurers are required to maintain minimum statutory capital and surplus equal to the greater of a minimum solvency margin (“MSM”) and the Enhanced Capital Requirement (“ECR”) where applicable. The ECR is equal to the higher of the MSM or the Bermuda Solvency Capital Requirement (“BSCR”) model or approved internal capital model. The BSCR for the relevant insurers for the year ended December 31, 2021 will not be filed with the Bermuda Monetary Authority (“BMA”) until end of April 2022. As a result, the required statutory capital and surplus as at December 31, 2021 of \$1,211,090, which exceeds the December 31, 2021 MSM of \$591,332, is primarily based on the latest draft BSCR. The required statutory capital and surplus as at December 31, 2020 of \$1,036,557 is based primarily on the actual December 31, 2020 ECR, which exceeded the December 31, 2020 MSM of \$449,612.

At December 31, 2021 and 2020, the actual statutory capital and surplus of the Company and the Bermuda-based insurance subsidiaries exceeded the relevant regulatory requirements.

The ability of the Company’s Bermuda-based subsidiaries to pay dividends to the Company is limited under Bermuda law and regulations. The Insurance Act provides that Class 4 insurers may not declare or pay, in any financial year, dividends of more than 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 at least seven days prior to the payment, an affidavit signed by at least two directors and such insurance subsidiary’s principal representative, stating that in their opinion, such subsidiary will continue to satisfy the required margins following declaration of those dividends, however, there is no additional requirement for BMA approval.

In addition, before reducing its total statutory capital by 15% or more (as set out in its previous year’s statutory financial statements) Class 4 Bermuda insurers must make application to the BMA for permission to do so. Such application shall consist of an affidavit signed by at least two directors and such insurance subsidiary’s principal representative stating that in their opinion, the proposed reduction in capital will not cause such subsidiaries to fail to meet its relevant margins, and such other information as the BMA may require. A Class 3 insurer, before reducing by 15% or more of its total statutory capital, as set out in its previous year’s financial statements, is required to apply to the BMA for its approval and provide such information as the BMA may require.

As at December 31, 2021, the Company has the ability to distribute up to \$1,078,309 (December 31, 2020: \$969,309) of unrestricted net assets as dividend payments and/or return of capital to Validus Holdings without prior regulatory approval.

The Company’s primary restrictions on net assets of insurance subsidiaries consist of regulatory requirements placed upon the regulated insurance subsidiaries to hold minimum amounts of total statutory capital and surplus. There were no other material restrictions on net assets in place as at December 31, 2021 and 2020.

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

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16. Statutory and regulatory requirements (continued)

Bermuda (continued)

The Company maintains branch office in Singapore and Canada. As the branch offices are not considered separate entities for regulatory purposes, the required and actual statutory capital and surplus amount includes amounts, as set out above, related to the applicable branch offices.

The Company's Singapore branch office is subject to capital a minimum adequacy requirement of SGD 5,000 as at December 31, 2021 and 2020.

The Canada branch office is subject to regulation by the Office of the Superintendent of Financial Institutions Canada ("OSFI"). Under regulations and guidelines prescribed by OSFI, the Canada branch office is required to maintain prescribed levels of capital, which are dependent on the type and amount of insurance policies in force and the nature of the Canada branch office's assets. At December 31, 2021, the margin of net assets required is CAD 427. The revised margin of net assets required as at December 31, 2020 of CAD 217 is based on the actual December 31, 2020 Branch Adequacy of Assets Test.

At December 31, 2021 and 2020, the actual capital and assets for the branch offices exceeded the relevant local regulatory requirements.

Switzerland

Validus Re Swiss is a société anonyme headquartered in Zurich, Switzerland. The conduct of reinsurance business by a company headquartered in Switzerland requires a license granted by the Swiss Financial Market Supervisory Authority ("FINMA"). Validus Re Swiss maintains a branch office in Bermuda, Validus Reinsurance (Switzerland) Ltd. (Bermuda Branch), a Class 4 insurer.

Required statutory capital and surplus is based on the Target Capital requirements calculated under the Swiss Solvency Test ("SST") and includes both Validus Re Swiss and its Bermuda branch. At December 31, 2021 and 2020, the actual capital and assets exceeded the relevant local regulatory requirements.

Validus Re Swiss is funded by equity in the form of paid in capital by shares and in share premium. Under Swiss corporate law as modified by insurance supervisory law, a non-life insurance company is obliged to contribute to statutory legal reserves a minimum of 20% of any annual profit up to 50% of statutory capital, being paid in share capital. Validus Re Swiss has been substantially funded by share premium. Share premium can be distributed to shareholders without being subject to withholding tax. However, the distribution of any special dividend to shareholders remains subject to the approval of FINMA which considers the maintenance of solvency and the interests of reinsureds and creditors.

Validus Reinsurance (Switzerland) Ltd. (Bermuda Branch) is exempt from filing an Annual Statutory Financial Return and Annual Capital and Solvency Return but is subject to the minimum required statutory capital and surplus requirements for Class 4 insurers and the SST. At December 31, 2021 and 2020, the branch was in compliance with all relevant regulatory requirements.

Validus Reinsurance, Ltd.

Notes to the Consolidated Financial Statements

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17. Subsequent events

Material subsequent events are evaluated through the date the financial statements were issued. The following events occurred subsequent to December 31, 2021 and may impact future financial statements.

Adverse development treaty

Effective January 1, 2022, the Company, via Validus Re Swiss, entered into an adverse development excess of loss reinsurance agreement with a wholly owned subsidiary of AIG. The treaty provides for \$300,000 in coverage as at December 31, 2021 and prior aggregate ultimate net losses paid over a retention of \$100,000 in exchange for a premium of \$27,450.

Russia/Ukraine conflict

The Russia/Ukraine conflict began in February 2022. The conflict has and may continue to have a significant impact on the global macroeconomic and geopolitical environments, including increased volatility in capital and commodity markets, rapid changes to regulatory conditions around the globe including the use of sanctions, operational challenges for multinational corporations, inflationary pressures and an increased risk of cybersecurity incidents.

The conflict is evolving and has the potential to adversely affect the Company's business and results of operations from an investment, underwriting and operational perspective. While management believe they have taken appropriate actions to minimize related risk, management continues to monitor potential exposure and operational impacts, as well as any actual and potential claims activity. The ultimate impact will depend on future developments that are uncertain and cannot be predicted, including scope, severity and duration, the governmental, legislative and regulatory actions taken (including the application of sanctions), and court decisions, if any, rendered in response to those actions.