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Premia Reinsurance Ltd.

Consolidated Financial Statements and Report of Independent Auditors

For the Years Ended December 31, 2020 and 2019

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Premia Reinsurance Ltd.

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Financial Statements

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Shareholder of Premia Reinsurance Ltd.

We have audited the accompanying consolidated financial statements of Premia Reinsurance Ltd. and its subsidiaries (the "Company"), which comprise the consolidated balance sheets as of December 31, 2020 and 2019, and the related consolidated statements of operations and comprehensive income, changes in shareholders' equity, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes 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.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the consolidated financial statements 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, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

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

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Premia Reinsurance Ltd. and its subsidiary as of December 31, 2020 and 2019, and the results of their operations and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

Accounting principles generally accepted in the United States of America require that the disclosure of short-duration contracts included in Note 5 be presented to supplement the basic financial statements. Such information, although not part of the basic 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 financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary 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 financial statements, and other knowledge we obtained during our audit of the basic 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.

Deloitte Ltd.

March 31, 2021

Premia Reinsurance Ltd.

Consolidated Balance Sheets

As at December 31, 2020 and December 31, 2019

(Expressed in thousands of U.S. dollars, except share data)

		2020	2019
Assets			
Investments at fair value	Note 3	$ 1,373,075	$ 1,199,273
Cash and cash equivalents		4,637	22,056
Restricted cash and cash equivalents		73,512	160,632
Premiums receivable	Note 5	77,077	157,111
Accrued investment income		3,715	4,194
Funds held by ceding companies	Note 5	507,020	610,062
Reinsurance recoverable on paid and unpaid losses	Note 5	22,587	35,005
Receivable for securities sold		7,348	4,495
Deferred charge asset	Note 5	16,311	12,947
Other assets		18,764	17,172
Receivable from related party		119,893	103,298
Total Assets		**$ 2,223,939**	**$ 2,326,245**
Liabilities			
Reserve for losses and loss adjustment expenses	Note 5	$ 703,689	$ 829,446
Deposit liability	Note 5	739,099	711,715
Unearned premiums		44,599	86,402
Ceded funds held		32,650	39,709
Payable for securities purchased		11,966	4,498
Deferred charge liability	Note 5	10,562	8,435
Intercompany payable		1,318	—
Other liabilities		32,577	20,951
Total Liabilities		**1,576,460**	**1,701,156**
Shareholder's Equity			
Common shares ($1 par; shares authorized, issued and outstanding: 1,000,000)	Note 6	1,000	1,000
Additional paid-in capital		503,000	503,000
Retained earnings		108,185	95,600
Accumulated other comprehensive income		35,294	25,489
Total Shareholder's Equity		**647,479**	**625,089**
Total Liabilities and Shareholder's Equity		**$ 2,223,939**	**$ 2,326,245**

Premia Reinsurance Ltd.

Consolidated Statements of Operations and Comprehensive Income

For the Years Ended December 31, 2020 and 2019

(Expressed in thousands of U.S. dollars)

		2020	2019
Revenues			
Gross premiums written		$ 91,459	$ 1,015,010
Ceded premiums		—	(13,678)
Net premiums written		91,459	1,001,332
Change in unearned premiums		41,316	(85,915)
Net premiums earned		132,775	915,417
Net investment income	Note 3	42,982	62,822
Realized (losses) gains on all investments	Note 3	(7,404)	844
Unrealized gains on fair value equity securities	Note 3	4,392	4,673
Claims administration monitoring fee		1,000	1,000
Other income		3,519	3,476
Total revenues		**177,264**	**988,232**
Expenses			
Net loss and loss adjustment expenses	Note 5	(133,506)	(920,406)
Acquisition expenses		—	(1,410)
Operating expenses		(5,690)	(4,348)
Interest expense and other debt facility fees	Note 5	(27,384)	—
Net foreign exchange gain (loss)		1,901	(321)
Total expenses		**(164,679)**	**(926,485)**
Net income		$ **12,585**	**$** **61,747**
Other Comprehensive Income			
Available for sale investments:			
Unrealized gains arising during the year		$ 1,724	$ 47,307
Adjustment for net realized losses (gains) and OTTI recognized in net income		8,081	(1,931)
Unrealized gains arising during the year, net of reclassification adjustment		9,805	45,376
Total other comprehensive income		**9,805**	**45,376**
Comprehensive income		**$** **22,390**	**$** **107,123**

Premia Reinsurance Ltd.
Consolidated Statements of Changes in Shareholder's Equity
For the Years Ended December 31, 2020 and 2019
(Expressed in thousands of U.S. dollars)

	2020	2019
Common Shares		
Balance at beginning of year	$ 1,000	$ 1,000
Common shares issued	—	—
Balance at end of year	1,000	1,000
Additional Paid-in Capital		
Balance at beginning of year	503,000	503,000
Contribution during the year	—	—
Balance at end of year	503,000	503,000
Accumulated Other Comprehensive Income		
Balance at beginning of year	25,489	(19,887)
Unrealized gains on available-for-sale securities arising during the year	9,805	45,376
Balance at end of year	35,294	25,489
Retained Earnings		
Balance at beginning of year	95,600	33,853
Net income	12,585	61,747
Balance at end of year	108,185	95,600
Total Shareholder's Equity	**$ 647,479**	**$ 625,089**

Premia Reinsurance Ltd.
Consolidated Statements of Cash Flows
For the Years Ended December 31, 2020 and 2019
(Expressed in thousands of U.S. dollars)

		2020		2019
Operating Activities				
Net income	$	12,585	$	61,747
Adjustments to reconcile net income to net cash used by operating activities:				
Realized losses (gains) on all securities		2,632		(2,377)
Unrealized gains on fair value equity securities		(4,392)		(4,673)
Net impairment losses included in income		4,772		1,533
Depreciation and amortization		39		(1)
Net foreign exchange gain		(1,901)		—
Changes in assets and liabilities:				
Premiums receivable		80,033		(157,111)
Accrued investment income		479		1,852
Funds held by ceding companies		103,042		(610,062)
Reinsurance recoverable on paid and unpaid losses		12,418		(1,797)
Deferred charge asset		(3,363)		318,798
Other assets		(1,612)		(15,107)
Reserve for losses and loss adjustment expenses		(125,758)		(328,389)
Deposit liability		27,384		711,715
Unearned premiums		(41,804)		86,402
Ceded funds held		(7,060)		4,501
Deferred charge liability		2,127		8,435
Other liabilities		11,627		13,864
Receivable from related party		(16,401)		(66,532)
Intercompany payable		1,122		—
Net cash provided by Operating Activities		55,969		22,798
Investing Activities				
Purchase of available-for-sale investments		(574,391)		(517,307)
Proceeds from sale or redemption of available-for-sale investments		413,901		480,751
Purchase of property and equipment		(18)		(129)
Net cash used in Investing Activities		(160,508)		(36,685)
Net decrease in cash, cash equivalents and restricted cash		(104,539)		(13,887)
Cash, cash equivalents and restricted cash at beginning of period		182,688		196,575
Cash, cash equivalents and restricted cash at end of period	**$**	**78,149**	**$**	**182,688**
Reconciliation to Consolidated Balance Sheet				
Cash and cash equivalents		4,637		22,056
Restricted cash and cash equivalents		73,512		160,632
Cash, cash equivalents and restricted cash	**$**	**78,149**	**$**	**182,688**

1. Organization

Premia Reinsurance Ltd. (“Premia Re” or the “Company”) was incorporated in Bermuda on October 31, 2016 as a Bermuda exempted company, and obtained a license from the Bermuda Monetary Authority (“BMA”) to operate as a Class 4 insurer and reinsurer under the Insurance Act 1978 (the “Act”) on January 1, 2017. The ultimate parent company of Premia Re is Premia Holdings Ltd. (“Premia Holdings”), which was incorporated in Bermuda on October 6, 2016, and was capitalized on January 6, 2017.

Premia Re was capitalized with $500.0 million and $4.0 million on January 9, 2017 and February 3, 2017, respectively, by Premia Holdings.

2. Summary of significant accounting policies

(a) Basis of presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). The term “ASC” used in these notes refers to Accounting Standards Codification issued by the United States Financial Accounting Standards Board (the “FASB”).

The Company’s consolidated financial statements include the financial statements of the Company and its subsidiaries. All intercompany balances and transactions have been eliminated on consolidation.

Certain prior year amounts have been reclassified for consistency with the current year presentation. These reclassifications had no effect on the reported results of operations.

(b) Use of estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported and disclosed 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 year. While management believes the amounts included in the consolidated financial statements reflect management’s best estimates and assumptions, actual results could differ from those estimates.

The principal estimates recorded in the Company’s consolidated financial statements relate to the development and determination of the following:

- valuation of loss and loss adjustment expense reserves;
- determination of whether reinsurance contracts transfer insurance risk;
- recoverability of reinsurance balances receivable;
- valuation of investments and assessment of other than temporary impairment;
- determination of hierarchical inputs used to measure the fair value of investments; and
- valuation of deferred charge assets and liabilities.

2. Summary of significant accounting policies, continued

(c) Premiums

To the extent that the amount of written premium is estimable, the Company estimates the ultimate premiums for the entire contract period and records this estimate at the inception of the contract. For contracts where the full written premium is not estimable at inception, the Company records written premium for the portion of the contract period for which the amount is estimable. These estimates are based primarily on information in the underlying contracts as well as information provided by clients and/or brokers.

Changes in premium estimates are expected and may result in adjustments in any reporting period. These estimates change over time as additional information regarding the underlying business volume is obtained. Any subsequent adjustments arising on such estimates are recorded in the period in which they are determined.

Premiums for retroactive reinsurance contracts are earned at the inception of the contract, as all of the underlying loss events covered by these contracts occurred in the past. If the estimated loss and loss adjustment expense reserve differs from the premium received at inception of a retroactive reinsurance contract, the resulting difference is deferred and recognized over the estimated claim payment period of the related contract with the periodic amortization reflected in earnings as a component of loss and loss adjustment expenses incurred.

Premiums for prospective reinsurance are earned over the life of the reinsurance contract. At inception of the contract, the Company records premiums written and ceded on prospective business in full with an unearned premium reserve and ceded unearned premiums respectively, equal to an actuarial analysis of the reserve balance, as of the same date. The unearned premium reserve and ceded unearned premium is amortized over the remaining contract period in proportion to the amount of insurance protection provided.

(d) Reinsurance premiums ceded

Retrocessional coverage is used to limit the Company's exposures to risks of losses arising from certain reinsurance contracts. The Company remains obligated to the extent that any retrocessionaire fails to meet its obligations to it. Reinsurance premiums ceded which relate to retroactive reinsurance contracts, are written during the period in which the risks incept and are earned at the inception of the contract. Ceded unearned premiums relating to prospective reinsurance contracts, if any, consist of the unexpired portion of reinsurance ceded.

(e) Retroactive reinsurance

Retroactive reinsurance reimburses a ceding company for liabilities incurred as a result of past insurable events covered by the underlying policies reinsured. Underwriting income (or loss) generated in connection with retroactive reinsurance contracts is deferred and amortized using the interest rate method over the expected claims settlement period.

2. Summary of significant accounting policies, continued

Changes to the estimated timing or amount of loss payments produce changes in periodic amortization. Changes in such estimates are applied retrospectively and are included within net income in the period in which changes are made.

A deferred charge asset or liability ("DCA" or "DCL") is reported separately in the consolidated balance sheets when the premium received is less than, or greater than, the best estimate of the reserves assumed. The DCA/DCL amortization is recognized within net losses and loss adjustment expenses in the consolidated statements of operations.

(f) Deposit accounting

An assumed reinsurance contract that is deemed not to have transferred insurance risk is accounted for using the deposit method of accounting. Insurance risk is made up of both significant insurance risk and significant loss. Significant insurance risk exists when both the amount and timing of the reinsurance payments depend on and directly vary with the amount and timing of claims settled under the reinsured contracts, and significant loss exists wherein it remains reasonably possible that the reinsurer may realize a significant loss from the transaction.

The contract accounted for under deposit accounting transfers only significant timing risk, therefore an accretion rate, based on actuarial estimates, has been established and applied at inception of the contract to increase the liability to the estimated amount payable over the contract term. The amount of the deposit liability shall be adjusted at subsequent reporting dates by calculating the effective yield of the deposit to reflect actual payments to date and expected future payments, with a corresponding credit or charge to interest income or expense.

Where a ceding company on a quota share reinsurance contract retains the related assets on a funds held basis, this is presented separately on the consolidated balance sheet. Interest and investment income produced by those assets are presented as part of net investment income on the Company's consolidated statements of operations.

(g) Acquisition costs

Acquisition costs, consisting principally of brokerage and federal excise tax, incurred at the time a retroactive reinsurance contract is issued and which directly relate to the successful effort of acquiring such new reinsurance contract, are typically expensed at inception consistent with how the premium is earned.

(h) Loss and loss adjustment expenses

The Company establishes reserves for outstanding losses and loss expenses for what it estimates will be the future amount to be paid in settlement of its ultimate liabilities for claims arising under reinsurance contracts that have occurred at or before the consolidated balance sheet date. The estimation of ultimate loss and loss expense liabilities is a significant judgment made by management and is inherently subject to uncertainties.

2. Summary of significant accounting policies, continued

The Company's loss and loss adjustment expense reserves include case reserves and reserves for losses incurred but not reported ("IBNR reserves"). Case reserves are established for losses that have been reported, but not yet paid. Reserves are established by management in large part based on actuarially determined estimates of ultimate loss and loss adjustment expenses.

Inherent in the estimate of ultimate loss and loss adjustment expenses are expected trends in claim severity and frequency and other factors that may vary significantly as claims are settled. The Company does not anticipate future changes in laws on regulations in setting its reserves. Accordingly, ultimate loss and loss adjustment expenses paid may differ materially from the reserves recorded in the consolidated financial statements. These estimates are reviewed regularly and, as experience develops and new information becomes available, the reserves may be adjusted as necessary.

Such adjustments, if any, are recorded in the consolidated statements of operations in the period in which they become known unless it relates to a contract in which DCA/DCL has been established, in which case such change will require the DCA/DCL to be updated, which will impact the amortization of DCA/DCL over time. To the extent it becomes apparent that insufficient or excess DCA/DCL has been amortized to date, an adjustment will be made within the year in question.

(i) Commutations

As the Company actively runs off its insurance and reinsurance subsidiaries, it seeks to mitigate its exposures through early settlement of all its obligations to policyholders or ceding companies by entering into commutations. These negotiated commutation agreements eliminate the risk of adverse claim experience as they provide for full and final settlement of all current and future policy obligations with respect to the transaction to which they relate. Gains and losses on commutations are recorded as either a decrease or increase in incurred claims in the consolidated statements of operations.

(j) Cash and cash equivalents

Cash equivalents include highly liquid instruments, such as money market funds and other time deposits with commercial banks and financial institutions which have maturities of less than three months from the date of purchase.

Restricted cash and cash equivalents are separately reported on the consolidated balance sheets and consist of cash and cash equivalents held in trust accounts securing obligations to the Company's cedants under certain reinsurance contracts as well as funds in transit within certain investment accounts.

(k) Investments and net investment income

The Company currently classifies its investments as "available-for-sale" and "fair value equity securities". Available-for-sale investments are carried at estimated fair value with the changes in fair value recorded as an unrealized gain or loss component of accumulated other comprehensive income in shareholder's equity, while the fair value equity securities, including investments in funds, are carried at estimated fair value with the changes in fair value recognized as an unrealized gain or loss in net income.

2. Summary of significant accounting policies, continued

The fair value of the Company's fixed maturity investments is based on quoted market prices, or when such prices are not available, by reference to broker bid indications or industry recognized pricing vendors. Investment transactions are recorded on a trade date basis with balances pending settlement included in receivable / payable for securities sold / purchased in the consolidated balance sheet.

Realized gains and losses on sales of investments are determined on a first-in, first-out basis and are shown within net gains (losses) on investments in the consolidated statements of operations.

Net investment income is recognized when earned and includes interest and dividend income, together with amortization of market premiums and discounts using the effective yield method, and is net of investment management and custody fees, third party investment accounting fees and sponsor oversight fees.

The Company performs a quarterly review of its investments to determine whether declines in fair value below the cost basis are considered other-than-temporary in accordance with applicable accounting guidance regarding the recognition and the presentation of other-than-temporary impairments ("OTTI").

The Company considers whether it intends to sell the security or if it is more likely than not required to sell the security before recovery. The process of determining whether a security is other-than-temporarily impaired requires judgement and involves analyzing many factors. These factors include an analysis on the liquidity, business prospects and overall financial condition of the issuer, the time period in which there was a significant decline in value, the significance of the decline, and the analysis of specific credit events.

The Company evaluates the unrealized losses of its securities by issuer and forecasts a reasonable period of time by which the fair value of the securities would increase and the Company would recover its costs. If the Company is unable to forecast a reasonable period of time in which to recover the cost of its securities, a net impairment loss in earnings equivalent to the entire unrealized loss is recognized.

The Company compares the estimated present value of the cash flows expected to be collected to the amortized cost of the security. The extent to which the estimated present value of the cash flows expected to be collected is less than the amortized cost of the security represents the credit-related portion of the other-than-temporary impairment, which is recognized in net income, resulting in a new cost basis for the security. Any remaining decline in fair value represents the non-credit portion of the other-than-temporary impairment, which is recognized in other comprehensive income (loss). The discount rate used to calculate the estimated present value of the cash flows expected to be collected is the effective interest rate implicit for the security at the date of purchase.

When assessing whether it intends to sell a fixed maturity or if it is likely to be required to sell a fixed maturity before recovery of its amortized cost, the Company evaluates facts and circumstances including decisions to reposition the investment portfolio, potential sales of investments to meet cash flow needs and, ultimately, current market prices.

2. Summary of significant accounting policies, continued

(l) Fair value measurement

The Company uses pricing services to obtain the fair value measurements for the majority of its investment securities. Based on management's understanding of the methodologies used, these pricing services only produce an estimate of fair value if there is observable market information that would allow them to make a fair market value estimate. The Company does not adjust prices from pricing services. The following is a description of the valuation techniques and inputs used to determine fair values for financial instruments carried at fair value, as well as the general classification of such instruments pursuant to the valuation hierarchy.

The Company's pricing services determine fair value in accordance with current accounting guidance, which defines fair value and establishes a three level fair value hierarchy based upon the transparency of inputs used in the valuation of an asset or liability. Fair value is defined as the price that the Company would receive to sell an asset or would pay to transfer a liability in an orderly transaction between market participants at the measurement date. Assets and liabilities recorded at fair value in the consolidated balance sheets are categorized based upon the level of judgement associated with the inputs used to measure their fair value. An asset or liability's categorization within the fair value hierarchy is based on the lowest level of significant input to its valuation.

The hierarchy is broken down into three levels as follows:

- Level 1 – Valuations based on quoted prices in active markets for identical assets or liabilities that the Company has the ability to access. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these products does not entail a significant degree of judgement.
- Level 2 – Valuations based on quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active or for which all significant inputs are observable, directly or indirectly.
- Level 3 – Valuations based on inputs that are unobservable and significant to the overall fair value measurement. These are generally Company generated inputs and are not market based inputs.

Fair values for alternative investments, including investments in investment funds and limited partnerships are based on their respective net asset value ("NAV") and are excluded from the fair value hierarchy.

Other assets and liabilities

The fair value of investment purchases and sales pending settlement, funds held by ceding companies, other assets and other liabilities approximate their carrying value due to the immediate or short-term maturity of these financial instruments.

2. Summary of significant accounting policies, continued

(m) Property and equipment

Property and equipment, which consist of office furniture, computer software and computer equipment, are stated at cost less accumulated depreciation. Depreciation is computed using a straight-line method over the estimated useful lives of the assets, ranging from three to fifteen years. Net property and equipment are included in other assets on the consolidated balance sheet.

(n) Intangible assets

Intangible assets with finite lives are amortized over the estimated useful lives of the assets, whereas intangible assets with indefinite useful lives are not amortized. Intangible assets with indefinite useful lives are assessed annually, during the fourth quarter, for impairment, or more frequently if events or changes in circumstances indicate that it is more likely than not that an impairment exists.

If the carrying amounts of intangible assets, including goodwill, are greater than their fair values established during impairment testing, the carrying value is written down to the fair value with a corresponding impairment loss recognized in the consolidated statements of operations. Intangible assets with finite useful lives do not require annual impairment testing but the Company is responsible for routinely assessing whether indicators of impairment exists that would lead to a need for recoverability testing.

(o) Foreign currency translation

The functional currency of the Company and its subsidiaries is the U.S. dollar. For these companies, all foreign currency asset and liability amounts are translated into U.S. dollar at the year-end exchange rates with the resulting foreign exchange gains and losses recognized in the consolidated statements of operations. Foreign currency income and expenses are translated at average rates in effect during the year.

(p) Recent accounting pronouncements

Recently adopted

Changes to disclosures on fair value measurement
In August 2018, the FASB issued ASU 2018-13 to modify the disclosure requirements in Topic 820 Fair Value Measurement. The update modifies the disclosure requirements of fair value measurement as part of the disclosure framework project with the objective to improve the effectiveness of disclosures in the notes to the consolidated financial statements.

ASU 2018-13 allows for removal of the amount and reasons for transfer between Level 1 and Level 2 of the fair value hierarchy; the policy for transfers between levels; and the valuation processes for Level 3 fair value measurements. ASU 2018-03 became effective for all entities for fiscal years beginning after December 15, 2019. Accordingly, the Company adopted ASU 2018-13 effective January 1, 2020. Since ASU 2018-03 is disclosure-related only, it did not have an impact on the Company's consolidated financial statements.

2. Summary of significant accounting policies, continued

Recently issued but not yet adopted

Leases
In February 2016, FASB issued ASU 2016-02 in which lessees will recognize most leases on the balance sheet. The update is effective for annual periods beginning after December 15, 2021. The Company does not anticipate the adoption of this update to have a material impact on its financial position, results of operations, or cash flows.

Measurement of credit losses on financial instruments
In June 2016, the FASB issued ASU 2016-13 to provide financial statement users with more decision-useful information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. The amendments in this update are effective for fiscal years beginning after December 15, 2022 and the Company is currently evaluating the impact of this guidance on the Company's financial position, results of operations, or cash flows.

3. Investments

a) The following tables summarize the Company's investments as at December 31, 2020 and 2019. Commercial and residential mortgage-backed securities include securities issued by U.S. government-sponsored enterprises and U.S. government agencies.

	2020			
(in thousands of U.S. dollars)	Amortized cost	Gross unrealized holding gains	Gross unrealized holding losses	Fair value
Fixed maturities, available-for-sale				
Corporate bonds	$ 378,287	36,982	(92)	$ 415,177
Non-agency mortgage-backed securities	272,769	10,486	(10,763)	272,492
U.S. government and govt agency bonds	51,912	577	(192)	52,297
Non-U.S. governments	4,812	426	(128)	5,110
Municipals	23,039	2,470	(1)	25,508
Agency mortgage-backed securities	92,987	1,557	(591)	93,953
Asset backed securities	182,654	1,461	(5,083)	179,032
Term loans	153,943	3,623	(5,438)	152,128
Total fixed maturities, available-for-sale	1,160,403	57,582	(22,288)	1,195,697
Total fair value equity securities	166,940	13,280	(2,842)	177,378
Total investments	$ 1,327,343	70,862	(25,130)	$ 1,373,075

	2019			
(in thousands of U.S. dollars)	Amortized cost	Gross unrealized holding gains	Gross unrealized holding losses	Fair value
Fixed maturities, available-for-sale				
Corporate bonds	$ 332,076	18,127	(562)	$ 349,641
Non-agency mortgage-backed securities	260,114	10,314	(3,702)	266,726
U.S. government and govt agency bonds	29,363	339	(11)	29,691
Non-U.S. governments	3,119	252	(49)	3,322
Municipals	27,217	2,329	(11)	29,535
Agency mortgage-backed securities	32,422	1,076	(962)	32,536
Asset backed securities	170,472	1,253	(2,665)	169,060
Term loans	180,512	1,759	(1,998)	180,273
Total fixed maturities, available-for-sale	1,035,295	35,449	(9,960)	1,060,784
Total fair value equity securities	132,442	6,880	(833)	138,489
Total investments	$ 1,167,737	42,329	(10,793)	$ 1,199,273

3. Investments, continued

b) The following tables summarize gross unrealized investment losses on fixed maturity securities classified as available-for-sale by the length of time that securities have continuously been in an unrealized loss position. Unrealized holding gains have specifically been omitted from the below tables.

(in thousands of US dollars)	2020					
	Less than 12 months		12 months or longer		Total	
	Fair value	Gross unrealized holding losses	Fair value	Gross unrealized holding losses	Fair value	Gross unrealized holding losses
Fixed maturities, available-for-sale						
Corporate bonds	$ 12,152	$ (86)	$ 510	$ (6)	$ 12,662	$ (92)
Non-agency mortgage-backed securities	85,226	(7,480)	23,298	(3,282)	108,524	(10,762)
U.S. government and govt agency bonds	21,341	(192)	—	—	21,341	(192)
Non-U.S. governments	1,286	(17)	939	(111)	2,225	(128)
Municipals	99	(1)	—	—	99	(1)
Agency mortgage-backed securities	19,168	(351)	296	(241)	19,464	(592)
Asset backed securities	66,818	(2,491)	38,779	(2,592)	105,597	(5,083)
Term loans	26,438	(2,982)	20,373	(2,456)	46,811	(5,438)
Total fixed maturities, available-for-sale	$ 232,528	$ (13,600)	$ 84,195	$ (8,688)	$ 316,723	$ (22,288)

(in thousands of US dollars)	2019					
	Less than 12 months		12 months or longer		Total	
	Fair value	Gross unrealized holding losses	Fair value	Gross unrealized holding losses	Fair value	Gross unrealized holding losses
Fixed maturities, available-for-sale						
Corporate bonds	$ 11,124	$ (250)	$ 3,873	$ (312)	$ 14,997	$ (562)
Non-agency mortgage-backed securities	54,315	(1,379)	26,292	(2,323)	80,607	(3,702)
U.S. government and govt agency bonds	2,473	(11)	2,699	—	5,172	(11)
Non-U.S. governments	—	—	1,002	(49)	1,002	(49)
Municipals	1,213	(11)	—	—	1,213	(11)
Agency mortgage-backed securities	7,362	(741)	934	(221)	8,296	(962)
Asset backed securities	48,099	(692)	51,385	(1,973)	99,484	(2,665)
Term loans	40,822	(1,633)	16,796	(365)	57,618	(1,998)
Total fixed maturities, available-for-sale	$ 165,408	$ (4,717)	$ 102,981	$ (5,243)	$ 268,389	$ (9,960)

3. Investments, continued

At December 31, 2020 the Company was in an overall net unrealized holding gain position of $35.294 million on fixed maturities classified as available-for-sale. Gross unrealized holding gains were $57.582 million which were offset by gross unrealized holding losses of $22.288 million on fixed maturities. Fixed maturities in an unrealized loss position at December 31, 2020 where fair value has declined less than amortized cost are primarily attributed to widening credit spreads subsequent to purchase. The Company has the ability and intent to hold securities for a period of time sufficient to allow the anticipated recovery of their fair value.

At December 31, 2020 the Company completed a detailed analysis to assess whether the decline in the fair value of any investment below its cost basis is deemed other-than-temporary. 16 securities were deemed impaired resulting in a total impairment of $4.566 million (2019: 1.533 million). An impairment was recorded where the analysis performed deemed expected future cash flows to be less than the security's existing cost basis. All securities with unrealized losses are reviewed quarterly. The company considers many factors in completing its review of securities with unrealized losses for other-than-temporary impairment, including the length of time and the extent to which fair value has been below cost and the financial condition and near-term prospects of the issuer.

c) The following table sets forth certain information regarding the investment ratings of the Company's fixed maturity securities classified as available-for-sale as of December 31, 2020 and 2019.

(in thousands of US dollars)	2020		2019	
	Fair value	%	Fair value	%
AAA	$ 200,742	16.8 %	$ 89,664	8.4 %
AA	59,821	5.0 %	54,696	5.2 %
A	315,390	26.4 %	301,775	28.4 %
BBB	223,102	18.7 %	217,424	20.5 %
BB	53,872	4.5 %	57,265	5.4 %
B	41,631	3.5 %	78,009	7.4 %
CCC or lower	173,842	14.5 %	154,095	14.5 %
Not rated	127,297	10.6 %	107,856	10.2 %
Total fixed maturities, available-for-sale	$ 1,195,697	100 %	$ 1,060,784	100 %

Mortgage loans represent $70.257 million (2019: $69.313 million) of the Company's not rated nationally recognized statistical rating organization ("NRSRO") classification. Mortgage loans do not receive NRSRO ratings. The Company assesses the credit quality of the company's mortgage loan portfolio against the National Association of Insurance Commissioners' ("NAIC") commercial mortgage designation methodology.

3. Investments, continued

As it relates to all other fixed maturity securities, for reinsurance trust compliance and BMA capital purposes, the Company primarily utilizes the Securities Valuations Office's ("SVO") loan backed and structured securities methodology to assess and assign credit quality. The NRSRO ratings methodology is focused on the likelihood of recovery of all contractual payments, including principal at par, regardless of an investor's carrying value. In effect, the NRSRO rating assumes that the holder is the original purchaser at par. In contrast, the SVO's loan-backed and structured securities ("LBaSS") methodology is focused on determining the risk associated with the recovery of the amortized cost of each security. Because the NAIC's methodology explicitly considers amortized cost and the likelihood of recovery of such amount, we view the NAIC's methodology as the most appropriate way to view our fixed maturity portfolio for purposes of evaluating credit quality since a large portion of our holdings were purchased and are carried at significant discounts to par.

The SVO has developed a ratings process and provides instruction on modeled LBaSS. For modeled LBaSS, the process is specific to the non-agency residential mortgage-backed security ("RMBS") and commercial mortgage-backed security ("CMBS") asset classes. In order to establish ratings at the individual security level, the SVO obtains loan-level analysis of each RMBS and CMBS using a selected vendor's proprietary financial model. The SVO ensures that the vendor has extensive internal quality-control processes in place and the SVO conducts its own quality-control checks of the selected vendor's valuation process. The SVO has retained the services of Blackrock, Inc. ("Blackrock") to model non-agency RMBS and CMBS owned by U.S. insurers for all years presented herein. Blackrock provides five prices ("breakpoints"), based on each U.S. insurer's statutory book value price, to utilize in determining the NAIC designation for each modeled LBaSS.

Utilizing the above methodology, the Company's credit quality is as follows:

(in thousands of US dollars)	2020		2019	
	Fair value	%	Fair value	%
NAIC 1	$ 733,407	61.4 %	$ 618,741	58.3 %
NAIC 2	258,768	21.6 %	244,711	23.1 %
NAIC 3	79,289	6.6 %	76,443	7.2 %
NAIC 4	36,630	3.1 %	64,902	6.1 %
NAIC 5	45,159	3.8 %	17,510	1.7 %
NAIC 6	42,444	3.5 %	38,477	3.6 %
Total fixed maturities, available-for-sale	$ 1,195,697	100 %	$ 1,060,784	100 %

3. Investments, continued

d) The amortized cost and estimated fair value of fixed maturity securities classified as available-for-sale at December 31, 2020 and 2019 are shown below by contractual maturity.

	2020		2019	
(in thousands of US dollars)	Amortized cost	Fair value	Amortized cost	Fair value
Due in one year or less	$ 24,937	$ 25,028	$ 44,469	$ 44,538
Due after one year through five years	204,483	206,167	150,329	150,942
Due after five years through ten years	145,054	152,880	123,932	128,291
Due after 10 years	237,519	266,145	253,557	268,691
Agency mortgage-backed securities	92,987	93,953	32,422	32,536
Asset backed securities	182,654	179,032	170,472	169,060
Non-agency mortgage-backed securities	272,769	272,492	260,114	266,726
Total fixed maturities, available-for-sale	$ 1,160,403	$ 1,195,697	$ 1,035,295	$ 1,060,784

Expected maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties, and the lenders may have the right to put the securities back to the borrower. Based on expected maturities, the estimated duration of fixed maturity securities excluding cash and cash equivalents at December 31, 2020 was 4.3 years (2019: 4.1 years).

e) The following table presents the components of net investment income.

(in thousands of US dollars)	2020	2019
Fixed maturities, available-for-sale	$ 45,062	$ 54,543
Fair value equity securities	8,158	6,526
Assumed investment income from reinsurance contracts	8,269	20,298
Gross investment income	61,489	81,367
Investments expenses	(18,507)	(18,545)
Net investment income	$ 42,982	$ 62,822

Assumed investment income from funds withheld reinsurance contracts relates to the investment income earned on reinsurance premium receivable related to contracts written during the presentation year end date, calculated from the inception of the reinsurance contracts to the earlier of date of receipt of reinsurance premium or year end.

3. Investments, continued

f) The following table presents net realized investment gains and the change in net unrealized gains on investments.

(in thousands of US dollars)	2020	2019
Realized gains on fixed maturities, available-for-sale		
Cash and cash equivalents	$ 2	$ 2
Corporate bonds	3,010	755
Non-agency mortgage-backed securities	1,364	2,347
U.S. government and govt agency bonds	562	51
Non-U.S. governments	1	90
Municipals	676	350
Agency mortgage-backed securities	645	637
Asset backed securities	224	463
Term loans	718	493
Total realized gains	7,202	5,188
Realized losses on fixed maturities, available-for-sale		
Corporate bonds	(1,905)	(506)
Non-agency mortgage-backed securities	(3,474)	(2,549)
U.S. government and govt agency bonds	(113)	(30)
Non-U.S. governments	—	(45)
Municipals	—	(2)
Agency mortgage-backed securities	(1,015)	(504)
Asset backed securities	(3,134)	(73)
Term loans	(1,209)	(353)
OTTI charge recognized in net income	(4,566)	(1,533)
Total realized losses	(15,416)	(5,595)
Gains (losses) on securities measured at fair value through net income		
Realized investment gains	810	1,251
Realized investment losses	—	—
Total realized gains	810	1,251
Total net realized (losses) gains on all securities	$ (7,404)	$ 844
Unrealized gains on securities measured at fair value through net income	$ 4,392	$ 4,673
Change in net unrealized gain (loss) on investments included in other comprehensive income (loss)		
Fixed maturities, available-for-sale	$ 9,805	$ 45,376
Fair value equity securities	—	—
Net increase in other comprehensive income	$ 9,805	$ 45,376

4. Fair value measurements

At December 31, 2020 and 2019, the Company's financial instruments are measured at fair value between Levels 1, 2, and 3. Our other investments are measured at fair value using NAV as a practical expedient and have not been classified with the fair value hierarchy described.

(in thousands of US dollars)	2020				
	Level 1	Level 2	Level 3	NAV	Fair value
Fixed maturities, available-for-sale					
Corporate bonds	$ —	415,177	—	—	$ 415,177
Non-agency mortgage-backed securities	—	270,346	2,146	—	272,492
U.S. government and govt agency bonds	48,471	3,826	—	—	52,297
Non-U.S. governments	—	5,110	—	—	5,110
Municipals	—	25,508	—	—	25,508
Agency mortgage-backed securities	—	93,953	—	—	93,953
Asset backed securities	—	179,032	—	—	179,032
Term loans	—	—	152,128	—	152,128
Total fixed maturities, available-for-sale	48,471	992,952	154,274	—	1,195,697
Total fair value equity securities	—	—	1,717	175,661	177,378
Total investments	$ 48,471	992,952	155,991	175,661	$ 1,373,075

(in thousands of US dollars)	2019				
	Level 1	Level 2	Level 3	NAV	Fair value
Fixed maturities, available-for-sale					
Corporate bonds	$ —	349,641	—	—	$ 349,641
Non-agency mortgage-backed securities	—	264,537	2,189	—	266,726
U.S. government and govt agency bonds	24,899	4,792	—	—	29,691
Non-U.S. governments	—	3,322	—	—	3,322
Municipals	—	29,535	—	—	29,535
Agency mortgage-backed securities	—	32,536	—	—	32,536
Asset backed securities	—	169,060	—	—	169,060
Term loans	—	—	180,273	—	180,273
Total fixed maturities, available-for-sale	24,899	853,423	182,462	—	1,060,784
Total fair value equity securities	—	—	—	138,489	138,489
Total investments	$ 24,899	853,423	182,462	138,489	$ 1,199,273

4. Fair value measurements, continued

During the year ended December 31, 2020, the Company did not transfer any securities from level 2 into level 3 (2019: nil). The Company purchased $56.694 million of level 3 securities (2019: $79.364 million) and did not issue any level 3 securities (2019: nil). All level 3 purchases during 2020 were term loans.

The following table presents additional information with respect to investments that are measured at fair value using NAV as a practical expedient.

		2020	
(in thousands of US dollars)	Redemption period remaining until liquidation of underlying assets	Fair value	Unfunded capital commitments
Private credit investment funds	Quarterly	$ 110,007	$ —
Real assets and intellectual property	6 to 8 years	19,407	17,320
Residential real estate	4 to 5 years	19,492	—
Commercial real estate	7 to 10 years	7,291	22,010
Financial	5 to 8 years	10,957	7,187
Credit	7 to 10 years	2,561	21,800
Traditional	8 to 11 years	5,946	9,348
Total fair value equity securities		$ 175,661	$ 77,665

		2019	
(in thousands of US dollars)	Redemption period remaining until liquidation of underlying assets	Fair value	Unfunded capital commitments
Private credit investment funds	Quarterly	$ 81,721	$ —
Real assets and intellectual property	5 to 9 years	16,794	16,697
Residential real estate	5 to 6 years	25,148	—
Commercial real estate	10 to 11 years	4,389	25,574
Financial	8 to 9 years	7,729	11,886
Traditional	9 to 12 years	2,708	12,388
Total fair value equity securities		$ 138,489	$ 66,545

For private credit investment funds, the Company's investment in the fund can be redeemed subject to notifying the fund of the Company's intention to redeem prior to the next redemption date. Notice periods for the Company's private credit investment funds range between 65 to 180 days. The Company’s private credit investment funds at December 31, 2020 include approximately $24.913 million (2019: nil) of funds where a full or partial redemption notice has been submitted to the manager.

4. Fair value measurements, continued

With the exception of private credit investment funds, the Company's remaining fair value equity securities (“lock up funds”) contain characteristics similar to traditional private equity funds, such as investment periods, harvest periods, capital draws on committed capital and extension periods. The Company’s Lock Up Funds typically release valuation statements on a one quarter reporting lag. Therefore, the Company estimates the fair value of these funds by beginning with the most recent fund valuations and adjusting for any cash activity during the current quarter such as capital draws on committed capital, redemptions, and distributions. Furthermore, return estimates are often not distributed for these funds and as such, the Company generally has a one quarter reporting lag in its fair value measurements of these funds.

For all lock up funds, the manager may only draw capital and invest/reinvest for the duration of the investment period, after which, any proceeds from the liquidation or maturity of existing investments must be remit to the investors (the “harvest” period). Investment periods for the Company’s existing lock up funds vary from expired to approximately four years. For all lock up funds, the harvest period represents the period after the expiration of the investment period that is the potential length of time until liquidation of the investment in the fund, and which is subject to discretionary extension periods. Discretionary extension periods represent a maximum of three consecutive one year periods after the expiration of the harvest period.

Sector classification	Underlying objective of fund
Private credit investment funds	Investments are in a broad range of credit strategies including exposure to investment grade securities, high yield and other credit opportunities.
Real assets and intellectual property	Investments primarily related to intellectual property, natural resources and infrastructure.
Residential real estate	Investments are primarily focused on residential real estate assets and may take the form of liquidation claims, re-performing loans, receivables, repayment plans and other cash flowing assets.
Commercial real estate	Investments are primarily focused on global commercial real estate assets.
Financial	Investments are primarily focused on financial service companies covering a broad spectrum of sectors.
Credit	Investments are in a broad spectrum of sectors focusing on mispriced, stressed, and distressed credit opportunities.
Traditional private equity	Employs traditional private equity investment strategies across a broad spectrum of sectors.

5. Outstanding losses and loss adjustment expenses

As at December 31, 2020 and 2019, loss and loss adjustment expense reserves on the consolidated balance sheets were comprised of the following:

(in thousands of U.S. dollars)	2020	2019
Reserve for losses and loss adjustment expenses, beginning of year	$ 829,446	$ 1,157,835
Losses assumed during the year	133,377	926,920
Paid losses & ULAE related to losses occurring in prior years	(254,474)	(231,583)
Contract reclassified to deposit accounting	—	(1,025,000)
Gross favorable development on prior year loss reserves	(18,979)	(9,727)
Net foreign exchange loss	14,319	11,001
Reserve for losses and loss adjustment expenses, end of year	703,689	829,446
(-) Reinsurance recoverable on paid and unpaid losses	(22,587)	(35,005)
Reserve for losses and loss adjustment expenses, net of reinsurance	681,102	794,441

An amount of $18.979 million (2019: $9.727 million) in gross favorable development and $5.358 million (2019: $9.062 million) in ceded favorable development on reinsurance loss reserves were recognized in arriving at the overall net favorable loss development of $13.621 million (2019: $0.665 million). Net favorable development is comprised of $21.707 million (2019: $0.665 million) related to decreases in loss reserve estimates offset by $8.086 million (2019: nil) in additional net prior year loss reserves resulting from an $8.561 million (2019: nil) increase in estimated net premium earned in the prior year on certain retroactive reinsurance contracts incepted during the year ending December 31, 2019.

As at December 31, 2020 the favorable development on one of the Company's existing retroactive reinsurance agreement had surpassed the Company's reinsurer margin resulting in the accrual of a commutation amount payable to the cedant to be settled upon the expected commutation at the option of the cedant on or after July 1, 2022. As a result, gross commutation amount payable of $18.159 million and ceded commutation amount receivable of $4.540 million have been included in other liabilities and other assets on the consolidated balance sheets, respectively, as at December 31, 2020. The corresponding impact to net income has been included in net loss and loss adjustment expenses as an off-set to the aforementioned net favorable development. As a result, the impact of development on prior year loss reserves to the Company's net income for the year ending December 31, 2020 was $0.002 million of net favorable development. After applying the Company's accounting policy for retroactive reinsurance to reflect updates to defer and amortize underwriting income or (loss), the net income impact for the year ending December 31, 2020 was $2.952 million of net adverse development.

Included within losses assumed during the year ended December 31, 2020 is an amount of $38.576 million (2019: $116.587 million) increase in loss reserves resulting from $41.316 million (2019: $114.566 million) in net premium earned during the year on certain retroactive reinsurance contracts incepted during the year ending December 31, 2019. Also included within losses assumed during the year ended December 31, 2020 is $7.758 million in net losses related to COVID-19 (2019: nil).

5. Outstanding losses and loss adjustment expenses, continued

During 2019, Premia Re agreed to amend and restate an existing retroactive reinsurance agreement. Management assessed that the amended agreement should be accounted for as a deposit liability and was recognized on the consolidated balance sheets as such. As at December 31, 2020 the deposit liability recognized on the consolidated balance sheets is $739.099 million (2019: $711.715 million). Interest of $27.384 million on the deposit liability (2019: nil) has been recognized as interest expense on the consolidated statements of operations.

During 2019, Premia Re entered into two quota share reinsurance agreements on a funds withheld basis wherein adjustments in estimates of the loss and loss adjustment expense reserve and claim payments in the consolidated statements of operations shall be offset by an adjustment to funds withheld. Funds held by cedants at December 31, 2020 amounted to $507.020 million (2019: $610.062 million) as reported on the consolidated balance sheets.

The consolidated balance sheets as at December 31, 2020 report premiums receivable of $77.077 million (2019 $157.111 million). One of the aforementioned quota share reinsurance agreements receives premiums in three tranches over the span of three years. As a result, premiums receivable of $49.077 million relating to tranche three were included in premiums receivable on the consolidated balance sheet as at December 31, 2020 (2019: $129.417 million relating to tranches two and three). Premiums relating to the tranches received as at the balance sheet dates have been included within funds held by ceding companies.

As at December 31, 2020 and 2019 the DCA and DCL in the consolidated balance sheets were comprised of the following:

(in thousands of U.S. dollars)	2020	2019
Deferred charge asset, beginning of year	$ 12,947	$ 331,744
Deferred charge asset recognized during the year	5,577	15,367
Contract reclassified to deposit accounting	—	(313,285)
Amortization of deferred charge asset	(3,575)	(20,879)
Net foreign exchange gain	1,362	—
		—
Deferred charge asset, end of year	$ 16,311	$ 12,947

(in thousands of U.S. dollars)	2020	2019
Deferred charge liability, beginning of year	$ 8,435	$ —
Deferred charge liability recognized during the year	4,341	10,672
Amortization of deferred charge liability	(2,214)	(2,237)
Deferred charge liability, end of year	$ 10,562	$ 8,435

5. Outstanding losses and loss adjustment expenses, continued

The following table represents the activity in outstanding losses and loss expenses for the years ending December 31, 2020 and 2019.

(in thousands of U.S. dollars)		2020		2019
Change in ceded reinsurance loss reserves	$	(7,879)	$	1,797
Change in deferred charge asset and liability		(126)		(13,947)
Change in incurred loss reserves		121,912		(685,610)
Net losses paid		(247,413)		(222,646)
Net loss and loss adjustment expenses	$	(133,506)	$	(920,406)

Reserving methodologies

The process of establishing loss and loss expense reserves for property and casualty claims can be complex and is subject to considerable uncertainty as it requires the use of informed estimates and judgments based on circumstances known as of the evaluation date. These estimates and judgments are based on numerous factors and may be revised as additional experience and other data becomes available and is reviewed, as new or improved methodologies are developed or laws or circumstances change.

The Company's loss and loss adjustment expense reserves are estimates based on customary actuarial methods including the Loss Development Method and Bornhuetter-Ferguson ("B-F") Method applied to both paid and reported data as described below. The Company's analysis conforms to relevant Actuarial Standards of Practice ("ASP"), including ASP 43 Property/Casualty Unpaid Claim Estimates.

Loss Development Method: The paid or reported loss development method relies on the assumption that, at any given state of maturity, ultimate losses can be predicted by multiplying cumulative paid or reported losses by a cumulative loss development factor ("LDF"). The validity of the results of this method depends on the stability of claim reporting and settlement rates, as well as the consistency of case reserve levels. Case reserves do not have to be adequately stated for the reported method to be effective; they only need to have a consistent level of adequacy at all stages of maturity. Historical "age-to-age" LDFs were calculated to measure the relative development of an accident year from one maturity-point to the next. We then select appropriate age-to-age LDFs based on these historical factors, supplemented with industry benchmarks where necessary. We used the selected factors to project the ultimate losses.

Bornhuetter-Ferguson Method: The reported B-F loss projection method is based on reported loss data and relies on the assumption that remaining unreported losses are a function of the total expected losses rather than a function of currently reported losses. The expected losses used in this analysis are based on initial selected ultimate loss ratios by year derived from either prior analyses or review of more mature years. The expected losses are multiplied by the unreported percentage to produce expected unreported losses. The unreported percentage is calculated as one minus the reciprocal of the selected cumulative incurred LDFs. Finally, the expected unreported losses are added to the current reported losses to produce ultimate losses. The Company also used a paid B-F methodology which applies the same procedures using paid loss data to estimate ultimate losses.

5. Outstanding losses and loss adjustment expenses, continued

Asbestos, pollution and health hazard claims ("APH") are most often associated with occurrences spanning more than one exposure period and/or having more than one theory for applying insurance coverage. The fact that APH claims span multiple years renders customary actuarial methods based on paid and reported losses grouped by accident year or underwriting year ineffective. The Company uses several methods to estimate APH liabilities, including:

Exposure Based Model: The Company maintains a database of historical claims paid information and current notified reserves together with policy information including lines and limits underwritten. This information is used to estimate a range of possible ultimate claims amounts, together with a liability best estimate.

Aggregate Loss Development: Loss development patterns derived from industry APH ultimate loss estimates and inception-to-date losses for all accident years on a combined basis. The resulting patterns are applied to the Company's inception-to-date losses to estimate a range of possible ultimate claims amounts, together with a liability best estimate.

Survival Ratios: Survival ratios express the number of years before a reserve will be exhausted if payments persist at the average rate from recent years (typically a three-year period). Benchmark survival ratios derived from industry estimated ultimate losses and recent payments are used to estimate a range of possible ultimate claims amounts, together with a liability best estimate.

Unpaid-to-Case: The ratio expresses the total reserve, including IBNR, to currently reported case reserves. In combination with inception-to-date payments this information is used to estimate a range of possible ultimate claims amounts, together with a liability best estimate.

Market Share: Industry estimated ultimate losses and the Company's estimated market share are used to estimate a range of possible ultimate claims amounts, together with a liability best estimate.

The Company uses a weighted average of the results from these methods as the basis for its liability best estimate.

Management believes that the assumptions used represent an appropriate basis for estimating the outstanding loss and loss adjustment expenses as of December 31, 2020 and 2019. However, these assumptions are subject to change and the Company regularly reviews its reserve estimates and reserving methodologies taking into account all currently known information and updated assumptions related to unknown information.

Incurred and paid development tables by accident year

The information below includes net loss and loss adjustment expenses incurred ("L&LAE, net") and net losses incurred but not reported ("IBNR, net"), by accident year for the Company's retroactive reinsurance contracts. The Company's retroactive reinsurance contracts incepting in the year ended December 31, 2018 and prior have been presented in aggregation as these contracts share similar characteristics and as a result, have not been disaggregated further.

5. Outstanding losses and loss adjustment expenses, continued

The Company's retroactive reinsurance contracts for subsequent periods have been presented in aggregation by year of inception and by Workers' Compensation ("Workers' Comp"), Liability, Property, and APH exposures. The Company has presented the below development tables for all accident years shown using exchange rates as at December 31, 2020. All accident years prior to the current year have been restated and presented using the current year exchange rate. The information related to L&LAE, net and net loss and loss adjustment expenses paid for the years ended December 31, 2011 through 2019 is presented as supplementary information and is unaudited.

The Company's loss reserve analysis is based in part on underwriting year data. The preparation of accident year development tables requires an allocation of underwriting year data to the corresponding accident years. For instance, a contract written in one particular underwriting year may have exposure to losses from two or more accident years. These allocations are done using accident year loss payment and reporting patterns, along with premium earnings patterns. These patterns are derived from the Company's historical loss data. The Company believes that its allocations are reasonable; however, to the extent that the Company's allocation procedure for loss and loss adjustment expenses incurred differs from actual historical development, the actual loss development may differ materially from the loss development presented.

All information for acquisitions and retroactive reinsurance agreements is presented prospectively. As the reserves are effectively re-underwritten at the date the reserves are acquired or assumed, we believe that the historical loss development prior to being acquired is not relevant to our own experience managing these reserves. In addition, the information required to prepare the loss development on a retrospective basis is not always available to us. For the retroactive reinsurance agreement accounted for as a deposit liability during 2019, claims information related to this contract was removed from all accident years disclosed from the year ended December 31, 2019 onward. As described in the roll forward of loss and loss adjustment expense reserves section above, changes in the Company's loss and loss adjustment expense reserves result from both re-estimating loss reserves as well as changes in premium estimates.

5. Outstanding losses and loss adjustment expenses, continued

Business acquired/incepting prior to December 31, 2018 - All lines ("2018 & Prior - All lines")

Loss and loss adjustment expenses incurred, net
(in thousands of U.S. dollar)

		2017	2018	2019	2020	
Accident year	Acquired Reserves, net	L&LAE, net	L&LAE, net	L&LAE, net	L&LAE, net	IBNR, net
		(unaudited)	(unaudited)	(unaudited)		
2011	$ —	$ —	$ —	$ 2,171	$ 2,033	$ 2,033
2012	5,331	5,327	5,301	3,172	3,385	2,346
2013	28,528	27,900	27,138	7,332	7,099	3,948
2014	220,038	215,558	210,010	14,675	12,356	3,594
2015	411,109	405,781	398,364	31,256	24,012	2,099
2016	450,141	447,318	442,133	44,676	37,489	6,566
2017	55,838	55,838	55,515	—	—	—
2018	—	—	—	—	—	—
2019	—	—	—	—	—	—
2020	—	—	—	—	—	—
Total					$ 86,374	$ 20,586

Cumulative paid loss and loss adjustment expenses, net
(in thousands of U.S. dollar)

Accident year	2017	2018	2019	2020
	(unaudited)	(unaudited)	(unaudited)	
2011	$ —	$ —	$ —	$ —
2012	4	201	622	1,039
2013	628	1,159	2,380	3,151
2014	4,480	7,882	7,169	8,762
2015	5,328	10,433	18,260	21,912
2016	2,823	7,384	21,990	30,924
2017	—	—	—	—
2018	—	—	—	—
2019	—	—	—	—
2020	—	—	—	—
Total				$ 65,788
Net reserves for loss and loss adjustment expenses from 2011 to 2020				20,586
Net reserves for loss and loss adjustment expenses prior to 2011				22,483
Net reserves for loss and loss adjustment expenses, end of year				$ 43,069

5. Outstanding losses and loss adjustment expenses, continued

Business acquired/incepting during the year ending December 31, 2019 - Workers' Comp ("2019 - Workers' Comp")

Loss and loss adjustment expenses incurred, net
(in thousands of U.S. dollar)

Accident year	Acquired Reserves, net	2019 L&LAE, net	2020 L&LAE, net	2020 IBNR, net
		(unaudited)		
2011	$ —	$ —	$ —	$ —
2012	—	—	—	—
2013	—	—	—	—
2014	—	—	—	—
2015	—	—	—	—
2016	9,223	8,682	8,529	6,672
2017	2,623	2,469	1,947	1,603
2018	—	—	—	—
2019	—	—	—	—
2020	—	—	—	—
Total			$ 10,476	$ 8,275

Cumulative paid loss and loss adjustment expenses, net
(in thousands of U.S. dollar)

Accident year	2019	2020
	(unaudited)	
2011	$ —	$ —
2012	—	—
2013	—	—
2014	—	—
2015	—	—
2016	793	1,856
2017	210	345
2018	—	—
2019	—	—
2020	—	—
Total		$ 2,201
Net reserves for loss and loss adjustment expenses from 2011 to 2020		8,275
Net reserves for loss and loss adjustment expenses prior to 2011		—
Net reserves for loss and loss adjustment expenses, end of year		$ 8,275

5. Outstanding losses and loss adjustment expenses, continued

Business acquired/incepting during the year ending December 31, 2019 - Liability ("2019 - Liability")

Loss and loss adjustment expenses incurred, net
(in thousands of U.S. dollar)

		2019	2020	
Accident year	Acquired Reserves, net	L&LAE, net	L&LAE, net	IBNR, net
		(unaudited)		
2011	$ 6,412	$ 6,451	$ 7,211	$ 5,817
2012	9,546	9,662	9,148	6,634
2013	12,204	12,347	11,805	7,814
2014	14,475	14,674	14,722	9,512
2015	22,708	23,046	23,057	14,792
2016	50,079	49,733	50,703	31,849
2017	116,167	129,249	130,455	79,639
2018	187,338	211,821	213,406	135,595
2019	85,592	98,833	102,756	64,211
2020	—	—	25,220	19,626
Total			$ 588,483	$ 375,489

Cumulative paid loss and loss adjustment expenses, net
(in thousands of U.S. dollar)

Accident year	2019	2020
	(unaudited)	
2011	$ 788	$ 1,394
2012	1,726	2,514
2013	1,781	3,991
2014	2,031	5,210
2015	3,109	8,265
2016	6,251	18,854
2017	22,002	50,816
2018	32,504	77,811
2019	15,833	38,545
2020	—	5,594
Total		$ 212,994
Net reserves for loss and loss adjustment expenses from 2011 to 2020		375,489
Net reserves for loss and loss adjustment expenses prior to 2011		5,927
Net reserves for loss and loss adjustment expenses, end of year		$ 381,416

5. Outstanding losses and loss adjustment expenses, continued

Business acquired/incepting during the year ending December 31, 2019 - Property ("2019 - Property")

Loss and loss adjustment expenses incurred, net
(in thousands of U.S. dollar)

		2019	2020	
Accident year	Acquired Reserves, net	L&LAE, net	L&LAE, net	IBNR, net
		(unaudited)		
2011	$ 324	$ 331	$ 396	$ 327
2012	373	380	260	111
2013	271	276	392	375
2014	965	984	841	702
2015	1,920	1,958	1,879	1,371
2016	6,222	6,320	3,426	1,523
2017	77,282	91,903	80,290	22,263
2018	137,272	162,075	163,286	70,502
2019	71,615	83,935	96,911	45,934
2020	—	—	28,073	19,340
Total			$ 375,754	$ 162,448

Cumulative paid loss and loss adjustment expenses, net
(in thousands of U.S. dollar)

Accident year	2019	2020
	(unaudited)	
2011	$ 51	$ 69
2012	132	149
2013	10	17
2014	114	139
2015	288	508
2016	1,455	1,902
2017	37,543	58,028
2018	49,128	92,784
2019	23,048	50,978
2020	—	8,732
Total		$ 213,306
Net reserves for loss and loss adjustment expenses from 2011 to 2020		162,448
Net reserves for loss and loss adjustment expenses prior to 2011		771
Net reserves for loss and loss adjustment expenses, end of year		$ 163,219

5. Outstanding losses and loss adjustment expenses, continued

Business acquired/incepting during the year ending December 31, 2020 - APH ("2020 - APH")

Loss and loss adjustment expenses incurred, net
(in thousands of U.S. dollar)

		2020	
Accident year	Acquired Reserves, net	L&LAE, net	IBNR, net
2011	$ —	$ —	$ —
2012	—	—	—
2013	—	—	—
2014	—	—	—
2015	—	—	—
2016	—	—	—
2017	—	—	—
2018	—	—	—
2019	—	—	—
2020	—	—	—
Total		$ —	$ —

Cumulative paid loss and loss adjustment expenses, net
(in thousands of U.S. dollar)

Accident year	2020
2011	$ —
2012	—
2013	—
2014	—
2015	—
2016	—
2017	—
2018	—
2019	—
2020	—
Total	$ —
Net reserves for loss and loss adjustment expenses from 2011 to 2020	—
Net reserves for loss and loss adjustment expenses prior to 2011	85,123
Net reserves for loss and loss adjustment expenses, end of year	$ 85,123

5. Outstanding losses and loss adjustment expenses, continued

Reconciliation of loss development information to loss and loss adjustment expense reserves

The reconciliation of the net incurred and paid claims development tables to the liability for losses and loss adjustment expenses in the consolidated balance sheet is as follows:

(in thousands of U.S. dollars)		2020
2018 & Prior - All lines	$	43,069
2019 - Workers' Comp		8,275
2019 - Liability		381,416
2019 - Property		163,219
2020 - APH		85,123
Outstanding losses and loss expenses, net of reinsurance		681,102
Reinsurance recoverable on unpaid losses		22,587
Reserve for loss and loss adjustment expenses, end of year	$	703,689

Cumulative claims frequency

The Company’s business is primarily comprised of reinsurance contracts written on a quota share or aggregate loss basis and the underlying claim count information is not provided for most contracts. Furthermore, even if claim counts were made available by the Company’s cedants, the quota share cession percentage varies for each contract, resulting in the cedant claim counts not being a meaningful measure of the Company’s loss exposure. As such, the Company determined that the disclosure of claim frequency analysis was impracticable and as a result, no claims frequency information has been disclosed.

5. Outstanding losses and loss adjustment expenses, continued

Claims duration

The following table is presented as supplementary information and presents the Company's historical average annual percentage payout of loss and loss adjustment expenses incurred, net by age, as of December 31, 2020 (unaudited).

	Year 1	Year 2	Year 3	Year 4
2018 & Prior - All lines	1.13%	1.19%	2.03%	12.49%
2019 - Workers' Comp	8.47%	10.74%	n/a	n/a
2019 - Liability	16.97%	22.73%	n/a	n/a
2019 - Property	37.67%	29.13%	n/a	n/a
2020 - APH	1.98%	n/a	n/a	n/a

Movement during Year 4 of the 2018 & Prior - All lines segment is driven primarily by removal of claims information by accident year in relation to the retroactive reinsurance agreement being accounted for as a deposit liability from 2019 onward.

6. Share capital

The authorized share capital of the Company at December 31, 2020 and 2019 consisted of 1,000,000 common shares, of par value $1.00 per share.

7. Concentrations and contingencies

The Company's investment portfolio is managed by external investment advisors in accordance with the Company's investment guidelines. The Company's investment guidelines limit maximum issuer concentration at 2% of assets. US government and agency securities are excluded from this guideline. There are no significant concentrations of credit risk in excess of the Company's concentration guidelines as at December 31, 2020. As at December 31, 2020 approximately 73.8% (2019: 75.7%) of the Company's investment portfolio is rated as either NAIC 1 or NAIC 2.

Reinsurance recoverable includes outstanding loss and loss expense recoverable. The Company is subject to credit risk with respect to reinsurance ceded as the ceding of risk does not relieve the Company from its primary obligations to its policyholders. Failure of the Company's reinsurer to honor their obligations could result in credit loss. As of December 31, 2020 the Company's largest single reinsurance recoverable exposure, net of collateral, was nil (2019: nil). The Company has not recorded a provision for credit losses and no amounts were written off within the year.

7. Concentrations and contingencies, continued

The Company utilizes trust funds where the trust funds are set up for the benefit of the ceding companies. The fair value of these restricted assets is $1,354.402 million (2019: $1,172.206 million), of which $1,283.562 million (2019: $1,014.696 million) relates to investments and $70.840 million (2019: $157.510 million) relates to cash and cash equivalents from investments, as at December 31, 2020. Included in restricted assets is $100.0 million (2019: $120.0 million) of additional collateral related to retroactive reinsurance contracts. Due to favorable development during 2020, the Company released $40.482 million of collateral from a retroactive reinsurance contract, $20.0 million of which was previously classified as additional collateral at December 31, 2019.

The Company makes contributions to and receives distributions from investment funds measured at fair value. During the year the combination of contributions and distributions resulted in a net contribution of $26.435 million (2019: net distribution of $1.398 million). The Company is committed to fund an additional $77.665 million (2019: $66.545 million) over time.

The Company is, from time to time, involved in various legal proceedings in the ordinary course of business, including litigation and arbitration regarding claims. Estimated losses relating to claims arising in the ordinary course of business, including the anticipated outcome of any pending arbitration or litigation were included in the reserve for losses and loss adjustment expenses on the consolidated balance sheets. In addition to claims litigation, the Company may be subject to other lawsuits and regulatory actions, which may involve, among other things, allegations of underwriting errors or omissions, employment claims or regulatory activity. Management does not believe that the resolution of any currently pending legal proceedings, either individually or taken as a whole, will have a material effect on the Company's business, results of operations or financial condition. Management anticipates that, similar to the rest of the insurance and reinsurance industry, the Company will continue to be subject to litigation and arbitration proceedings in the ordinary course of business, including litigation generally related to the scope of coverage with respect to asbestos and environmental and other claims.

8. Income taxes

Premia Re and its parent company, Premia Holdings, are incorporated under the laws of Bermuda and, under current Bermuda law, they are not obligated to pay any taxes in Bermuda based upon income or capital gains. The Company has received a written undertaking from the Minister of Finance in Bermuda under the Exempted Undertakings Tax Protection Act 1966 that, in the event that any legislation is enacted in Bermuda imposing any tax computed on profits, income, gain or appreciation on any capital asset, or any tax in the nature of estate duty or inheritance tax, such tax will not be applicable to Premia Holdings or any of its operations until March 31, 2035. There can be no assurance that there will not be changes in applicable laws, regulations or treaties, which might require the Company to become subject to additional taxation.

9. Related party transactions

The Company routinely enters into loan agreements with its parent company, Premia Holdings. The receivable from related party balance consists entirely of loans from the Company to Premia Holdings for various funding purposes.

9. Related party transactions, continued

The following table presents the components of the receivable from related party balance at December 31, 2020 and 2019 respectively.

(in thousands of U.S. dollars)	2020	2019
Loans to fund business combinations	$ 87,897	$ 66,826
Loans to support US operations	18,070	12,523
Loans to support European operations	7,621	1,746
Loans to support Bermuda operations	6,305	22,203
Total receivable from related party	$ 119,893	$ 103,298

The Company has a service agreement with Arch Underwriters Ltd. specifying that Arch will provide to the Company services including technical support, consulting services, office space and other miscellaneous services as requested. For the year ending December 31, 2020 Arch invoiced Premia Re $0.383 million (2019: $0.401 million) in relation to the service agreement. Included in other liabilities is $1.181 million (2019: $0.798 million) payable to Arch in relation to the service contract.

Arch Re, along with certain members of senior management, has a 25% equity ownership in Premia Re's parent company.

The Company has retrocession agreements with Arch Re in which varying percentages of contracts written by Premia Re are ceded to Arch Re on a pro rata basis between 12.5% and 25%. As at December 31, 2020 and 2019 the consolidated balance sheets and statements of operations included the following amounts ceded by the Company to Arch Re:

(in thousands of U.S. dollars)	2020	2019
Balance sheets		
Reinsurance recoverable on paid and unpaid losses	$ 22,587	$ 35,005
Ceded funds held	32,650	39,709
Statements of operations		
Ceded written premiums	$ —	$ 13,678
Ceded loss and loss adjustment expenses	819	(10,729)

Immediately following the acquisition of Public Service, the Company entered into a retroactive reinsurance agreement with Western Select in which Western Select cedes 25% to Arch US and 75% to the Company on a pro rata basis.

9. Related party transactions, continued

As at December 31, 2020 and 2019 the consolidated balance sheets and statements of operations included the following amounts ceded by Western Select to the Company:

(in thousands of U.S. dollars)	2020	2019
Balance sheets		
Reserve for losses and loss adjustment expenses	$ 15,647	$ 21,946
Deferred charge liability	(4,281)	(3,741)
Statements of operations		
Gross written premiums	$ —	$ 30,613
Gross loss and loss adjustment expenses	1,031	(21,946)

On December 31, 2019, the Company entered into a retroactive reinsurance related transaction with a wholly owned subsidiary of Arch, pursuant to which the Company assumed a transfer of liability for the 2018 and prior years of account as of July 1, 2019.

As at December 31, 2020 and 2019 the consolidated balance sheets and statements of operations included the following amounts ceded by the wholly owned subsidiary of Arch to the Company:

(in thousands of U.S. dollars)	2020	2019
Balance sheets		
Premiums receivable	$ 49,077	$ 129,417
Funds held by ceding companies	182,963	155,384
Deferred charge asset	11,396	12,545
Reserve for losses and loss adjustment expenses	228,032	279,691
Unearned premiums	5,000	12,471
Statements of operations		
Gross written premiums	$ (4,932)	$ 324,063
Change in unearned premiums	(7,471)	12,471
Gross loss and loss adjustment expenses	12,725	309,699

9. Related party transactions, continued

Immediately following the acquisition of Dominion, the Company entered into a retroactive reinsurance agreement. As at December 31, 2020 and 2019 the consolidated balance sheets and statements of operations included the following amounts ceded by Dominion to the Company:

(in thousands of U.S. dollars)		2020		2019
Balance sheets				
Deferred charge asset	$	3,845	$	—
Reserve for losses and loss adjustment expenses		85,123		—
Statements of operations				
Gross written premiums	$	(82,898)	$	—
Gross loss and loss adjustment expenses		83,006		—

During the year ending December 31, 2020, a U.S. domiciled related party invoiced the Company a sum of $1.343 million (2019: $1.316 million) in relation to claims administration and due diligence services provided.

10. Statutory financial information and dividend restrictions

Under the Insurance Act 1978, as amended, and related regulations of Bermuda (the “Insurance Act”), Premia Re is registered as a Class 4 insurer, and is required to annually prepare and file statutory financial statements and a statutory financial return with the BMA.

The Insurance Act requires Premia Re to maintain statutory economic capital and surplus at a level at least equal to its enhanced capital requirements ("ECR") which is the greater of its minimum solvency margins ("MSM") and the required capital calculated by reference to the Bermuda Solvency Capital Requirement model ("BSCR model"). At December 31, 2020 all such requirements were met.

Premia Re is also required under its Class 4 license to maintain a minimum liquidity ratio whereby the value of its relevant assets is not less than 75% of the amount of its relevant liabilities for general business. As of December 31, 2020 Premia Re met the minimum liquidity ratio.

The actual statutory capital and surplus, required statutory capital and surplus and statutory net income for the Company at December 31, 2020 and 2019 was as follows:

(in thousands of U.S. dollars)		2020		2019
Actual capital and surplus	$	646,735	$	624,499
Required capital and surplus		237,437		223,114
Statutory net income		12,585		61,747

10. Statutory financial information and dividend restrictions, continued

The BSCR for the year ended December 31, 2020 will not be filed with the BMA until April 30, 2021. Following receipt of the submission of Premia Re's ECR, the BMA has the authority to impose additional capital requirements or capital add-ons, if it deems necessary. If an insurer fails to maintain or meet its ECR, the BMA may take various degrees of regulatory action.

The BSCR will be based on an Economic Balance Sheet derived from the Company's U.S. GAAP financial statements, with certain adjustments related to loss reserves, intangibles and contingencies, among others.

Premia Re may declare dividends subject to it continuing to meet its solvency and capital requirements, which includes continuing to hold statutory capital and surplus equal to or exceeding its ECR. Premia Re is prohibited from declaring or paying in any fiscal year dividends of more than 25% of its prior year's statutory capital and surplus unless Premia Re files with the BMA a signed affidavit by at least two members of the Board of Directors attesting that a dividend would not cause the company to fail to meet its relevant margins. While Premia Re's capital is in excess of its ECR, no dividends were paid for the years ended December 31, 2020 or 2019.

11. Subsequent events

On January 1, 2021 Premia Re and Western Select entered into a commutation agreement to terminate the retroactive reinsurance agreement entered into on January 9, 2019. The commutation agreement is pending approval from the Illinois Department of Insurance. On approval, Premia Re will pay Western Select a commutation amount equal to Premia Re's share of carried reserves ceded under the retroactive reinsurance agreement plus Premia Re's share of any billed but unpaid losses due under the retroactive reinsurance agreement prior to December 31, 2020.

On February 18, 2021, the Company completed two Reinsurance to Close ("RITC") transactions, under which it reinsured to close the 2018 underwriting years of account of both Syndicate 1861 ("s1861") and Syndicate 1955 ("s1955"). s1861 was reinsured to close to Syndicate 1884 ("s1884") as per the terms of a Replacement Quota Share Agreement ("Replacement QS Agreement") entered into on December 31, 2019. The Replacement QS Agreement was novated, such that 100% of the remaining outstanding economics under the existing agreements were transferred to s1884. s1955 was reinsured to close to s1884 as per the terms of a Funds Withheld Quota Share Agreement ("QS Agreement") entered into on November 12, 2019 and the adverse development cover agreement. The QS Agreement and the adverse development cover agreement were novated, such that 100% of the remaining outstanding economics under the existing agreements were transferred to s1884.