UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF**

THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2022

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF**

THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission File Number: 001-14428

RENAISSANCERE HOLDINGS LTD.

(Exact Name Of Registrant As Specified In Its Charter)

Bermuda	98-0141974
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification Number)

Renaissance House, 12 Crow Lane, Pembroke, Bermuda **HM 19**

(Address of Principal Executive Offices) (Zip Code)

(441) 295-4513

(Registrant’s telephone number, including area code)

Not Applicable

(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading symbol	Name of each exchange on which registered
Common Shares, Par Value $1.00 per share	RNR	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a Series F 5.750% Preference Share, Par Value $1.00 per share	RNR PRF	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a Series G 4.20% Preference Share, Par Value $1.00 per share	RNR PRG	New York Stock Exchange

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

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

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

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of Common Shares, par value U.S. $1.00 per share, outstanding at July 22, 2022 was 43,705,376.

RENAISSANCERE HOLDINGS LTD.
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GLOSSARY OF DEFINED TERMS

In this Form 10-Q, references to “RenaissanceRe” refer to RenaissanceRe Holdings Ltd. (the parent company) and references to “we,” “us,” “our” and the “Company” refer to RenaissanceRe Holdings Ltd. together with its subsidiaries, unless the context requires otherwise.

“ASC”	Accounting Standards Codification
“A.M. Best”	A.M. Best Company, Inc.
“DaVinci”	DaVinci Reinsurance Ltd.
“DaVinciRe”	DaVinciRe Holdings Ltd.
“ERM”	enterprise risk management
“Exchange Act”	the Securities Exchange Act of 1934, as amended
“FAL”	a deposit that must be submitted to support the underwriting capacity of a member of Lloyd’s
“FASB”	Financial Accounting Standards Board
“FCR”	financial condition report
“Fitch”	Fitch Ratings Ltd.
“Fontana”	Fontana Holdings L.P. and its subsidiaries
“Form 10-K”	Annual Report on Form 10-K
“Form 10-Q”	this Quarterly Report on Form 10-Q for the three months ended June 30, 2022
“IRS”	United States Internal Revenue Service
“Medici”	RenaissanceRe Medici Fund Ltd.
“Moody’s”	Moody’s Investors Service
“Renaissance Reinsurance”	Renaissance Reinsurance Ltd.
“Renaissance Reinsurance of Europe”	Renaissance Reinsurance of Europe Unlimited Company
“Renaissance Reinsurance U.S.”	Renaissance Reinsurance U.S. Inc.
“RenaissanceRe”	RenaissanceRe Holdings Ltd.
“RenaissanceRe Finance”	RenaissanceRe Finance, Inc.
“RenaissanceRe Specialty U.S.”	RenaissanceRe Specialty U.S. Ltd.
“RREAG”	RenaissanceRe Europe AG
“S&P”	Standard and Poor’s Rating Services
“SEC”	U.S. Securities and Exchange Commission
“Securities Act”	Securities Act of 1933, as amended
“Syndicate 1458”	RenaissanceRe Syndicate 1458
“Top Layer Re”	Top Layer Reinsurance Ltd.
“Tower Hill Companies”	collectively, our investments in a group of Tower Hill affiliated companies including Bluegrass Insurance Management, LLC, Tower Hill Claims Service, LLC, Tower Hill Holdings, Inc., Tower Hill Insurance Group, LLC, Tower Hill Insurance Managers, LLC, Tower Hill Re Holdings, Inc., Tower Hill Signature Insurance Holdings, Inc., Tower Hill Risk Management LLC and Tomoka Re Holdings, Inc.
“U.K.”	United Kingdom
“U.S.”	United States of America
“Upsilon Fund”	RenaissanceRe Upsilon Fund Ltd.
“Upsilon RFO”	Upsilon RFO Re Ltd.
“Vermeer”	Vermeer Reinsurance Ltd.

NOTE ON FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q of RenaissanceRe Holdings Ltd. contains forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Exchange Act. Forward-looking statements are necessarily based on estimates and assumptions that are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which, with respect to future business decisions, are subject to change. These uncertainties and contingencies can affect actual results and could cause actual results to differ materially from those expressed in any forward-looking statements made by, or on behalf of, us. In particular, statements using words such as “may,” “should,” “estimate,” “expect,” “anticipate,” “intend,” “believe,” “predict,” “potential,” or words of similar import generally involve forward-looking statements. For example, we may include certain forward-looking statements in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” with regard to trends in results, prices, volumes, operations, investment results, margins, combined ratios, fees, reserves, market conditions, risk management and exchange rates. This Form 10-Q also contains forward-looking statements with respect to our business and industry, such as those relating to our strategy and management objectives, market standing and product volumes, competition and new entrants in our industry, industry capital, insured losses from loss events, government initiatives and regulatory matters affecting the reinsurance and insurance industries.

The inclusion of forward-looking statements in this report should not be considered as a representation by us or any other person that our current objectives or plans will be achieved. Numerous factors could cause our actual results to differ materially from those addressed by the forward-looking statements, including the following:

- our exposure to natural and non-natural catastrophic events and circumstances and the variance they may cause in our financial results;
- the effect of climate change on our business, including the trend towards increasingly frequent and severe climate events;
- the effectiveness of our claims and claim expense reserving process;
- the effect of emerging claims and coverage issues;
- the historically cyclical nature of the (re)insurance industries;
- collection on claimed retrocessional coverage, and new retrocessional reinsurance being available on acceptable terms;
- the ability of our ceding companies and delegated authority counterparties to accurately assess the risks they underwrite;
- our ability to maintain our financial strength ratings;
- the performance of our investment portfolio and financial market volatility;
- the effects of inflation;
- the highly competitive nature of our industry, resulting in consolidation of competitors, customers and (re)insurance brokers, and our reliance on a small and decreasing number of brokers;
- the impact of large non-recurring contracts and reinstatement premiums on our financial results;
- our ability to attract and retain key executives and employees;
- the effect of cybersecurity risks, including technology breaches or failure;
- our ability to successfully implement our business, strategies and initiatives, and the success of any of our strategic investments or acquisitions, including our ability to manage our operations as our product and geographical diversity increases;
- our exposure to credit loss from counterparties;
- our need to make many estimates and judgments in the preparation of our financial statements;
- our ability to effectively manage capital on behalf of investors in joint ventures or other entities we manage;

- changes to the accounting rules and regulatory systems applicable to our business, including changes in Bermuda laws or regulations or as a result of increased global regulation of the insurance and reinsurance industries;
- other political, regulatory or industry initiatives adversely impacting us;
- our ability to comply with covenants in our debt agreements;
- a contention by the IRS that any of our Bermuda subsidiaries are subject to taxation in the U.S.;
- the effects of possible future tax reform legislation and regulations, including changes to the tax treatment of our shareholders or investors in our joint ventures or other entities we manage;
- our ability to determine any impairments taken on our investments;
- the uncertainty of the continuing and future impact of the COVID-19 pandemic, including measures taken in response thereto and the effect of legislative, regulatory and judicial influences on our potential reinsurance, insurance and investment exposures, or other effects that it may have;
- foreign currency exchange rate fluctuations;
- our ability to raise capital if necessary;
- our ability to comply with applicable sanctions and foreign corrupt practices laws;
- our dependence on the ability of our operating subsidiaries to declare and pay dividends;
- aspects of our corporate structure that may discourage third-party takeovers and other transactions; and
- difficulties investors may have in serving process or enforcing judgments against us in the U.S.

As a consequence, our future financial condition and results may differ from those expressed in any forward-looking statements made by or on behalf of us. The factors listed above, which are discussed in more detail in our filings with the SEC, including our Annual Report on Form 10-K for the year ended December 31, 2021 and Item 1A of this Quarterly Report on Form 10-Q, should not be construed as exhaustive. Forward-looking statements speak only as of the date they are made, and we undertake no obligation to revise or update forward-looking statements to reflect new information, events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

PART I FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

RenaissanceRe Holdings Ltd. and Subsidiaries
Consolidated Balance Sheets
(in thousands of United States Dollars, except share and per share amounts)

	June 30, 2022	December 31, 2021
Assets	(Unaudited)	(Audited)
Fixed maturity investments trading, at fair value – amortized cost $13,749,254 at June 30, 2022 (December 31, 2021 – $13,552,579)	$ 13,085,367	$ 13,507,131
Short term investments, at fair value	4,429,483	5,298,385
Equity investments trading, at fair value	692,747	546,016
Other investments, at fair value	2,314,232	1,993,059
Investments in other ventures, under equity method	75,979	98,068
Total investments	20,597,808	21,442,659
Cash and cash equivalents	1,398,095	1,859,019
Premiums receivable	5,408,217	3,781,542
Prepaid reinsurance premiums	1,354,565	854,722
Reinsurance recoverable	4,206,459	4,268,669
Accrued investment income	75,302	55,740
Deferred acquisition costs and value of business acquired	1,089,426	849,160
Receivable for investments sold	279,442	380,442
Other assets	384,436	224,053
Goodwill and other intangible assets	240,647	243,496
Total assets	$ 35,034,397	$ 33,959,502
Liabilities, Noncontrolling Interests and Shareholders' Equity		
Liabilities		
Reserve for claims and claim expenses	$ 13,442,806	$ 13,294,630
Unearned premiums	5,117,217	3,531,213
Debt	1,169,393	1,168,353
Reinsurance balances payable	4,385,834	3,860,963
Payable for investments purchased	517,753	1,170,568
Other liabilities	309,938	755,441
Total liabilities	24,942,941	23,781,168
Commitments and contingencies		
Redeemable noncontrolling interests	4,352,797	3,554,053
Shareholders' Equity		
Preference shares: $1.00 par value – 30,000 shares issued and outstanding at June 30, 2022 (December 31, 2021 – 30,000)	750,000	750,000
Common shares: $1.00 par value – 43,881,035 shares issued and outstanding at June 30, 2022 (December 31, 2021 – 44,444,831)	43,881	44,445
Additional paid-in capital	479,085	608,121
Accumulated other comprehensive income (loss)	(15,168)	(10,909)
Retained earnings	4,480,861	5,232,624
Total shareholders' equity attributable to RenaissanceRe	5,738,659	6,624,281
Total liabilities, noncontrolling interests and shareholders' equity	$ 35,034,397	$ 33,959,502

See accompanying notes to the consolidated financial statements

RenaissanceRe Holdings Ltd. and Subsidiaries
Consolidated Statements of Operations
For the three and six months ended June 30, 2022 and 2021
(in thousands of United States Dollars, except per share amounts) (Unaudited)

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Revenues				
Gross premiums written	$ 2,464,639	$ 2,094,158	$ 5,407,603	$ 4,746,600
Net premiums written	$ 1,863,616	$ 1,512,292	$ 4,028,833	$ 3,336,375
Decrease (increase) in unearned premiums	(407,233)	(319,502)	(1,086,025)	(989,749)
Net premiums earned	1,456,383	1,192,790	2,942,808	2,346,626
Net investment income	107,211	80,925	190,902	160,729
Net foreign exchange gains (losses)	(50,821)	3,234	(66,307)	(19,554)
Equity in earnings (losses) of other ventures	7,383	8,732	993	3,174
Other income (loss)	923	586	2,116	2,757
Net realized and unrealized gains (losses) on investments	(654,107)	191,018	(1,327,124)	(154,545)
Total revenues	866,972	1,477,285	1,743,388	2,339,187
Expenses				
Net claims and claim expenses incurred	706,239	520,021	1,547,972	1,387,072
Acquisition expenses	361,238	285,590	737,745	552,824
Operational expenses	72,520	58,203	140,427	113,514
Corporate expenses	12,352	10,125	24,854	20,530
Interest expense	11,895	11,833	23,850	23,745
Total expenses	1,164,244	885,772	2,474,848	2,097,685
Income (loss) before taxes	(297,272)	591,513	(731,460)	241,502
Income tax benefit (expense)	30,534	(13,862)	67,241	5,654
Net income (loss)	(266,738)	577,651	(664,219)	247,156
Net (income) loss attributable to redeemable noncontrolling interests	(49,331)	(113,544)	(37,419)	(66,694)
Net income (loss) attributable to RenaissanceRe	(316,069)	464,107	(701,638)	180,462
Dividends on preference shares	(8,844)	(7,289)	(17,688)	(14,578)
Net income (loss) available (attributable) to RenaissanceRe common shareholders	$ (324,913)	$ 456,818	$ (719,326)	$ 165,884
Net income (loss) available (attributable) to RenaissanceRe common shareholders per common share – basic	$ (7.53)	$ 9.36	$ (16.64)	$ 3.36
Net income (loss) available (attributable) to RenaissanceRe common shareholders per common share – diluted	$ (7.53)	$ 9.35	$ (16.64)	$ 3.35
Dividends per common share	$ 0.37	$ 0.36	$ 0.74	$ 0.72

See accompanying notes to the consolidated financial statements

RenaissanceRe Holdings Ltd. and Subsidiaries
Consolidated Statements of Comprehensive Income (Loss)
For the three and six months ended June 30, 2022 and 2021
(in thousands of United States Dollars) (Unaudited)

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Comprehensive income (loss)				
Net income (loss)	$ (266,738)	$ 577,651	$ (664,219)	$ 247,156
Change in net unrealized gains (losses) on investments, net of tax	(3,251)	(1,022)	(2,417)	(2,833)
Foreign currency translation adjustments, net of tax	917	(657)	(1,842)	1,414
Comprehensive income (loss)	(269,072)	575,972	(668,478)	245,737
Net (income) loss attributable to redeemable noncontrolling interests	(49,331)	(113,544)	(37,419)	(66,694)
Comprehensive income (loss) attributable to redeemable noncontrolling interests	(49,331)	(113,544)	(37,419)	(66,694)
Comprehensive income (loss) attributable to RenaissanceRe	$ (318,403)	$ 462,428	$ (705,897)	$ 179,043

See accompanying notes to the consolidated financial statements

RenaissanceRe Holdings Ltd. and Subsidiaries
Consolidated Statements of Changes in Shareholders' Equity
For the three and six months ended June 30, 2022 and 2021
(in thousands of United States Dollars) (Unaudited)

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Preference shares				
Beginning balance	$ 750,000	$ 525,000	$ 750,000	$ 525,000
Issuance of shares	—	—	—	—
Repurchase of shares	—	—	—	—
Ending balance	750,000	525,000	750,000	525,000
Common shares				
Beginning balance	44,193	49,970	44,445	50,811
Issuance of shares	—	—	—	—
Repurchase of shares	(298)	(1,944)	(875)	(3,020)
Issuance of restricted stock awards	(14)	—	311	235
Ending balance	43,881	48,026	43,881	48,026
Additional paid-in capital				
Beginning balance	513,631	1,450,627	608,121	1,623,206
Issuance of shares	—	—	—	—
Repurchase of shares	(43,799)	(307,071)	(136,656)	(477,640)
Offering expenses	—	—	—	—
Change in redeemable noncontrolling interests	(3,126)	(825)	(3,989)	(2,690)
Issuance of restricted stock awards	12,379	11,150	11,609	11,005
Ending balance	479,085	1,153,881	479,085	1,153,881
Accumulated other comprehensive income (loss)				
Beginning balance	(12,834)	(12,382)	(10,909)	(12,642)
Change in net unrealized gains (loss) on investments, net of tax	(3,251)	(1,022)	(2,417)	(2,833)
Foreign currency translation adjustments, net of tax	917	(657)	(1,842)	1,414
Ending balance	(15,168)	(14,061)	(15,168)	(14,061)
Retained earnings				
Beginning balance	4,821,970	5,065,122	5,232,624	5,373,873
Net income (loss)	(266,738)	577,651	(664,219)	247,156
Net (income) loss attributable to redeemable noncontrolling interests	(49,331)	(113,544)	(37,419)	(66,694)
Dividends on common shares	(16,196)	(17,180)	(32,437)	(34,997)
Dividends on preference shares	(8,844)	(7,289)	(17,688)	(14,578)
Ending balance	4,480,861	5,504,760	4,480,861	5,504,760
Total shareholders' equity	$ 5,738,659	$ 7,217,606	$ 5,738,659	$ 7,217,606

See accompanying notes to the consolidated financial statements

RenaissanceRe Holdings Ltd. and Subsidiaries
Consolidated Statements of Cash Flows
For the six months ended June 30, 2022 and 2021
(in thousands of United States Dollars) (Unaudited)

	Six months ended	
	June 30, 2022	June 30, 2021
Cash flows provided by (used in) operating activities		
Net income (loss)	$ (664,219)	$ 247,156
Adjustments to reconcile net (loss) income to net cash provided by (used in) operating activities		
Amortization, accretion and depreciation	9,583	(7,927)
Equity in undistributed (earnings) losses of other ventures	13,961	15,848
Net realized and unrealized (gains) losses on investments	1,220,758	160,077
Change in:		
Premiums receivable	(1,626,675)	(1,586,861)
Prepaid reinsurance premiums	(499,843)	(537,459)
Reinsurance recoverable	62,210	(261,628)
Deferred acquisition costs and value of business acquired	(240,266)	(250,405)
Reserve for claims and claim expenses	148,176	563,604
Unearned premiums	1,586,004	1,520,661
Reinsurance balances payable	524,871	1,001,489
Other	(265,391)	(529,386)
Net cash provided by (used in) operating activities	269,169	335,169
Cash flows provided by (used in) investing activities		
Proceeds from sales and maturities of fixed maturity investments trading	10,527,219	8,921,362
Purchases of fixed maturity investments trading	(11,743,171)	(9,251,778)
Net sales (purchases) of equity investments trading	(286,399)	123,242
Net sales (purchases) of short term investments	939,736	624,792
Net sales (purchases) of other investments	(397,523)	(286,511)
Net sales (purchases) of investments in other ventures	2,391	(15,342)
Return of investment from investment in other ventures	2,213	2,622
Net cash provided by (used in) investing activities	(955,534)	118,387
Cash flows provided by (used in) financing activities		
Dividends paid – RenaissanceRe common shares	(32,437)	(34,997)
Dividends paid – preference shares	(17,780)	(14,578)
RenaissanceRe common share repurchases	(141,356)	(480,660)
Net third-party redeemable noncontrolling interest share transactions	408,774	140,439
Taxes paid on withholding shares	(10,848)	(9,897)
Net cash provided by (used in) financing activities	206,353	(399,693)
Effect of exchange rate changes on foreign currency cash	19,088	(920)
Net increase (decrease) in cash and cash equivalents	(460,924)	52,943
Cash and cash equivalents, beginning of period	1,859,019	1,736,813
Cash and cash equivalents, end of period	$ 1,398,095	$ 1,789,756

See accompanying notes to the consolidated financial statements

RENAISSANCERE HOLDINGS LTD. AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2022
(unless otherwise noted, amounts in tables expressed in thousands of United States (“U.S.”) dollars, except shares, per share amounts and percentages) (Unaudited)

NOTE 1. ORGANIZATION

This report on Form 10-Q should be read in conjunction with RenaissanceRe’s Annual Report on Form 10-K (“Form 10-K”) for the fiscal year ended December 31, 2021. RenaissanceRe was formed under the laws of Bermuda on June 7, 1993. Together with its wholly owned and majority-owned subsidiaries, joint ventures and managed funds, the Company provides property, casualty and specialty reinsurance and certain insurance solutions to its customers.

- Renaissance Reinsurance Ltd. (“Renaissance Reinsurance”), a Bermuda-domiciled reinsurance company, is the Company’s principal reinsurance subsidiary and provides property, casualty and specialty reinsurance coverages to insurers and reinsurers on a worldwide basis.
- Renaissance Reinsurance U.S. Inc. is a reinsurance company domiciled in the state of Maryland that provides property, casualty and specialty reinsurance coverages to insurers and reinsurers, primarily in the Americas.
- RenaissanceRe Syndicate 1458 (“Syndicate 1458”) is the Company’s Lloyd’s syndicate. RenaissanceRe Corporate Capital (UK) Limited, a wholly owned subsidiary of RenaissanceRe, is Syndicate 1458’s sole corporate member. RenaissanceRe Syndicate Management Ltd., a wholly owned subsidiary of RenaissanceRe, is the managing agent for Syndicate 1458.
- RenaissanceRe Europe AG (“RREAG”), a Swiss-domiciled reinsurance company, which has branches in Australia, Bermuda, the U.K. and the U.S., provides property, casualty and specialty reinsurance coverages to insurers and reinsurers on a worldwide basis.
- RenaissanceRe Specialty U.S. Ltd., a Bermuda-domiciled insurer, which operates subject to U.S. federal income tax.
- DaVinci Reinsurance Ltd. (“DaVinci”), a wholly-owned subsidiary of DaVinciRe Holdings Ltd. (“DaVinciRe”), is a managed joint venture formed by the Company to principally write property catastrophe reinsurance and certain casualty and specialty reinsurance lines of business on a global basis.
- Fontana Holdings L.P. and its subsidiaries (collectively, “Fontana”) are a managed joint venture formed by the Company to write casualty and specialty risks in line with the Company’s book of business. Fontana launched effective April 1, 2022.
- Top Layer Reinsurance Ltd. is a managed joint venture formed by the Company to write high excess non-U.S. property catastrophe reinsurance.
- RenaissanceRe Underwriting Managers U.S. LLC, is licensed as a reinsurance intermediary broker in the State of Connecticut and underwrites specialty treaty reinsurance solutions on both a quota share and excess of loss basis on behalf of affiliates.
- Renaissance Underwriting Managers, Ltd. (“RUM”), a wholly-owned subsidiary of RenaissanceRe, acts as exclusive underwriting manager for certain of our joint ventures or managed funds in return for fee-based income and profit participation.
- RenaissanceRe Fund Management Ltd. (“RFM”) is a wholly-owned Bermuda exempted company and acts as the exclusive investment fund manager for several of the Company’s joint ventures or managed funds, in return for a management fee, a performance based incentive fee, or both. RFM is registered as an Exempt Reporting Adviser with the Securities and Exchange Commission and serves as the investment adviser to third-party investors in the various private investment partnerships and insurance-related investment products offered by the Company.

- RenaissanceRe Medici Fund Ltd. (“Medici”) is an exempted company, incorporated in Bermuda and registered as an institutional fund. Medici invests, primarily on behalf of third-party investors, in various instruments that have returns primarily tied to property catastrophe risk.
- Upsilon RFO Re Ltd. (“Upsilon RFO”), an exempted company incorporated in Bermuda and registered as a segregated accounts company and as a collateralized insurer, is a managed fund formed by the Company principally to provide additional capacity to the worldwide aggregate and per-occurrence primary and retrocessional property catastrophe excess of loss market.
- RenaissanceRe Upsilon Fund Ltd., an exempted company incorporated in Bermuda and registered as a segregated accounts company and a Class A Professional Fund, provides a fund structure through which third-party investors can invest in reinsurance risk managed by the Company.
- Vermeer Reinsurance Ltd. (“Vermeer”), an exempted company incorporated in Bermuda and registered as a Class 3B insurer, provides capacity focused on risk remote layers in the U.S. property catastrophe market. The Company maintains a majority voting control of Vermeer, while Stichting Pensioenfonds Zorg en Welzijn (“PFZW”), a pension fund represented by PGGM Vermogensbeheer B.V., a Dutch pension fund manager, retains economic benefits.
- Mona Lisa Re Ltd. (“Mona Lisa Re”), a Bermuda domiciled special purpose insurer (“SPI”), provides reinsurance capacity to subsidiaries of RenaissanceRe, namely Renaissance Reinsurance and DaVinci, through reinsurance agreements which are collateralized and funded by Mona Lisa Re through the issuance of one or more series of principal-at-risk variable rate notes.
- Fibonacci Reinsurance Ltd. (“Fibonacci Re”), an exempted company incorporated in Bermuda and registered as a SPI, provides collateralized capacity to Renaissance Reinsurance and its affiliates. Fibonacci Re raises capital from third-party investors and the Company, via private placements of participating notes which are listed on the Bermuda Stock Exchange.
- The Company and Reinsurance Group of America, Incorporated are engaged in an initiative (“Langhorne”) to source third-party capital to support reinsurers targeting large in-force life and annuity blocks. Langhorne Holdings LLC (“Langhorne Holdings”) was incorporated to own and manage certain reinsurance entities within Langhorne. Langhorne Partners LLC (“Langhorne Partners”) is the general partner for Langhorne and manages the third-parties investing in Langhorne Holdings.
- Following the acquisition of Tokio Millennium Re AG and certain associated entities and subsidiaries (collectively, “TMR”) on March 22, 2019, the Company managed Shima Reinsurance Ltd. (“Shima Re”), Norwood Re Ltd. (“Norwood Re”) and Blizzard Re Ltd. (“Blizzard,” together with Shima Re and Norwood Re, the “TMR managed third-party capital vehicles”), which provided third-party investors with access to reinsurance risk. The TMR managed third-party capital vehicles no longer write new business. The Company ceased providing management services to Blizzard effective November 1, 2020, and to Shima Re and Norwood Re effective December 1, 2020.

NOTE 2. SIGNIFICANT ACCOUNTING POLICIES

There have been no material changes to the Company’s significant accounting policies as described in its Form 10-K for the year ended December 31, 2021, except as described below.

BASIS OF PRESENTATION

These consolidated financial statements have been prepared on the basis of accounting principles generally accepted in the U.S. (“GAAP”) for interim financial information and in conformity with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete consolidated financial statements. In the opinion of management, these unaudited consolidated financial statements reflect all adjustments (consisting of normal recurring accruals) considered necessary for a fair statement of the Company’s financial position and results of operations as at the end of and for the periods presented. All significant intercompany accounts and transactions have been eliminated from these statements.

Certain comparative information has been reclassified to conform to the current presentation. Because of the seasonality of the Company's business, the results of operations and cash flows for any interim period will not necessarily be indicative of the results of operations and cash flows for the full fiscal year or subsequent quarters.

USE OF ESTIMATES IN FINANCIAL STATEMENTS

The preparation of consolidated 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 consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates. The major estimates reflected in the Company's consolidated financial statements include, but are not limited to, the reserve for claims and claim expenses; reinsurance recoverable and premiums receivable, including provisions for reinsurance recoverable and premiums receivable to reflect expected credit losses; estimates of written and earned premiums; fair value, including the fair value of investments, financial instruments and derivatives; impairment charges; deferred acquisition costs and the value of business acquired and the Company's deferred tax valuation allowance.

NOTE 3. INVESTMENTS

Fixed Maturity Investments Trading

The following table summarizes the fair value of fixed maturity investments trading:

	June 30, 2022	December 31, 2021
U.S. treasuries	$ 6,012,779	$ 6,247,779
Agencies	366,752	361,684
Non-U.S. government	450,590	549,613
Corporate (1)	3,901,805	3,689,286
Residential mortgage-backed	902,508	955,301
Commercial mortgage-backed	443,070	634,925
Asset-backed	1,007,863	1,068,543
Total fixed maturity investments trading	$ 13,085,367	$ 13,507,131

(1) Corporate fixed maturity investments include non-U.S. government-backed corporate fixed maturity investments.

Contractual maturities of fixed maturity investments trading are described in the following table. Expected maturities will differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

June 30, 2022		Amortized Cost		Fair Value
Due in less than one year	$	466,719	$	458,871
Due after one through five years		6,996,959		6,771,940
Due after five through ten years		3,543,454		3,271,012
Due after ten years		271,530		230,103
Mortgage-backed		1,421,935		1,345,578
Asset-backed		1,048,657		1,007,863
Total	$	13,749,254	$	13,085,367

Equity Investments Trading

The following table summarizes the fair value of equity investments trading:

		June 30, 2022		December 31, 2021
Fixed income exchange traded funds	$	413,101	$	90,422
Financials		101,119		146,615
Equity exchange traded funds		89,054		114,919
Communications and technology		34,294		82,444
Consumer		22,880		51,083
Healthcare		15,130		28,796
Industrial, utilities and energy		14,798		26,645
Basic materials		2,371		5,092
Total	$	692,747	$	546,016

Pledged Investments

At June 30, 2022, $7.7 billion of cash and investments at fair value were on deposit with, or in trust accounts for the benefit of, various counterparties, including with respect to the Company’s letter of credit facilities (December 31, 2021 - $8.7 billion). Of this amount, $1.2 billion is on deposit with, or in trust accounts for the benefit of, U.S. state regulatory authorities (December 31, 2021 - $1.8 billion). The reduction in pledged assets relates to the release of excess regulatory collateral.

Reverse Repurchase Agreements

At June 30, 2022, the Company held $39.6 million (December 31, 2021 - $5.1 million) of reverse repurchase agreements. These loans are fully collateralized, are generally outstanding for a short period of time and are presented on a gross basis as part of short term investments on the Company’s consolidated balance sheets. The required collateral for these loans typically includes high-quality, readily marketable instruments at a minimum amount of 102% of the loan principal. Upon maturity, the Company receives principal and interest income.

Net Investment Income

The components of net investment income are as follows:

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Fixed maturity investments trading	$ 76,547	$ 59,510	$ 138,964	$ 122,443
Short term investments	4,397	782	5,533	1,355
Equity investments trading	4,516	1,626	7,270	3,117
Other investments				
Catastrophe bonds	20,235	16,681	37,595	31,149
Other	6,894	9,339	12,446	13,140
Cash and cash equivalents	(95)	159	(136)	261
	112,494	88,097	201,672	171,465
Investment expenses	(5,283)	(7,172)	(10,770)	(10,736)
Net investment income	$ 107,211	$ 80,925	$ 190,902	$ 160,729

Net Realized and Unrealized Gains (Losses) on Investments

Net realized and unrealized gains (losses) on investments are as follows:

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Net realized gains (losses) on fixed maturity investments trading	$ (287,154)	$ 33,161	$ (408,306)	$ 53,559
Net unrealized gains (losses) on fixed maturity investments trading	(149,820)	64,015	(613,997)	(233,003)
Net realized and unrealized gains (losses) on fixed maturity investments trading	(436,974)	97,176	(1,022,303)	(179,444)
Net realized and unrealized gains (losses) on investments-related derivatives	(66,078)	(9,329)	(106,366)	5,532
Net realized gains (losses) on equity investments trading sold during the period	35,592	93,411	35,572	203,298
Net unrealized gains (losses) on equity investments trading still held at reporting date	(127,104)	(27,845)	(175,773)	(205,654)
Net realized and unrealized gains (losses) on equity investments trading	(91,512)	65,566	(140,201)	(2,356)
Net realized and unrealized gains (losses) on other investments - catastrophe bonds	(24,660)	2	(32,921)	(19,081)
Net realized and unrealized gains (losses) on other investments - other	(34,883)	37,603	(25,333)	40,804
Net realized and unrealized gains (losses) on investments	$ (654,107)	$ 191,018	$ (1,327,124)	$ (154,545)

(1) Net realized and unrealized gains (losses) on investment-related derivatives includes fixed maturity investments related derivatives (interest rate futures, interest rate swaps, credit default swaps and total return swaps), and equity investments related derivatives (equity futures). See “Note 13. Derivative Instruments” for additional information.

NOTE 4. FAIR VALUE MEASUREMENTS

The use of fair value to measure certain assets and liabilities with resulting unrealized gains or losses is pervasive within the Company's consolidated financial statements. Fair value is defined under accounting guidance currently applicable to the Company as the price that would be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between open market participants at the measurement date. The Company recognizes the change in unrealized gains or losses arising from changes in fair value in its consolidated statements of operations.

FASB ASC Topic *Fair Value Measurements and Disclosures* prescribes a fair value hierarchy that prioritizes the inputs to the respective valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to valuation techniques that use at least one significant input that is unobservable (Level 3). The three levels of the fair value hierarchy are described below:

- Fair values determined by Level 1 inputs utilize unadjusted quoted prices obtained from active markets for identical assets or liabilities for which the Company has access at the measurement date. The fair value is determined by multiplying the quoted price by the quantity held by the Company;
- Fair values determined by Level 2 inputs utilize inputs (other than quoted prices included in Level 1) that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include quoted prices for similar assets and liabilities in active markets, and inputs other than quoted prices that are observable for the asset or liability, such as interest rates and yield curves that are observable at commonly quoted intervals, broker quotes and certain pricing indices; and
- Level 3 inputs are based all or in part on significant unobservable inputs for the asset or liability, and include situations where there is little, if any, market activity for the asset or liability. In these cases, significant management assumptions can be used to establish management's best estimate of the assumptions used by other market participants in determining the fair value of the asset or liability.

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, the level in the fair value hierarchy within which the fair value measurement in its entirety falls has been determined based on the lowest level input that is significant to the fair value measurement of the asset or liability. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment, and the Company considers factors specific to the asset or liability.

In order to determine if a market is active or inactive for a security, the Company considers a number of factors, including, but not limited to, the spread between what a seller is asking for a security and what a buyer is bidding for the same security, the volume of trading activity for the security in question, the price of the security compared to its par value (for fixed maturity investments), and other factors that may be indicative of market activity.

There have been no material changes in the Company's valuation techniques, nor have there been any transfers between Level 1 and Level 2, or Level 2 and Level 3 during the period represented by these consolidated financial statements.

Below is a summary of the assets and liabilities that are measured at fair value on a recurring basis and also represents the carrying amount on the Company's consolidated balance sheets:

At June 30, 2022	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Fixed maturity investments trading				
U.S. treasuries	$ 6,012,779	$ 6,012,779	$ —	$ —
Agencies	366,752	—	366,752	—
Non-U.S. government	450,590	—	450,590	—
Corporate [1]	3,901,805	—	3,901,805	—
Residential mortgage-backed	902,508	—	902,508	—
Commercial mortgage-backed	443,070	—	443,070	—
Asset-backed	1,007,863	—	1,007,863	—
Total fixed maturity investments trading	13,085,367	6,012,779	7,072,588	—
Short term investments	4,429,483	—	4,429,483	—
Equity investments trading	692,747	692,747	—	—
Other investments				
Catastrophe bonds	1,261,145	—	1,261,145	—
Direct private equity investments	81,610	—	—	81,610
Term loans	100,000	—	—	100,000
	1,442,755	—	1,261,145	181,610
Fund investments [2]	871,477			
Total other investments	2,314,232	—	1,261,145	181,610
Other assets and (liabilities)				
Assumed and ceded (re)insurance contracts [3]	(3,064)	—	—	(3,064)
Derivative assets [4]	30,720	9,164	21,556	—
Derivative liabilities [4]	(23,876)	(6,873)	(17,003)	—
Total other assets and (liabilities)	3,780	2,291	4,553	(3,064)
	$ 20,525,609	$ 6,707,817	$ 12,767,769	$ 178,546

(1) Corporate fixed maturity investments include non-U.S. government-backed corporate fixed maturity investments.

(2) Fund investments, which are comprised of private equity funds and private credit funds, are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient and have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

(3) Included in assumed and ceded (re)insurance contracts at June 30, 2022 was $2.9 million of other assets and $6.0 million of other liabilities.

(4) Refer to "Note 13. Derivative Instruments" for additional information related to the fair value, by type of contract, of derivatives entered into by the Company.

At December 31, 2021	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Fixed maturity investments trading				
U.S. treasuries	$ 6,247,779	$ 6,247,779	$ —	$ —
Agencies	361,684	—	361,684	—
Non-U.S. government	549,613	—	549,613	—
Corporate (1)	3,689,286	—	3,689,286	—
Residential mortgage-backed	955,301	—	955,301	—
Commercial mortgage-backed	634,925	—	634,925	—
Asset-backed	1,068,543	—	1,068,543	—
Total fixed maturity investments trading	13,507,131	6,247,779	7,259,352	—
Short term investments	5,298,385	—	5,298,385	—
Equity investments trading	546,016	546,016	—	—
Other investments				
Catastrophe bonds	1,104,034	—	1,104,034	—
Direct private equity investments	88,373	—	—	88,373
Term loans	74,850			74,850
	1,267,257	—	1,104,034	163,223
Fund investments (2)	725,802			
Total other investments	1,993,059	—	1,104,034	163,223
Other assets and (liabilities)				
Assumed and ceded (re)insurance contracts (3)	(4,727)	—	—	(4,727)
Derivative assets (4)	17,889	1,067	16,822	—
Derivative liabilities (4)	(16,954)	(1,598)	(15,356)	—
Total other assets and (liabilities)	(3,792)	(531)	1,466	(4,727)
	$ 21,340,799	$ 6,793,264	$ 13,663,237	$ 158,496

(1) Corporate fixed maturity investments include non-U.S. government-backed corporate fixed maturity investments.

(2) Fund investments, which are comprised of private equity funds, private credit funds and hedge funds, are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient and have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

(3) Included in assumed and ceded (re)insurance contracts at December 31, 2021 was $6.1 million of other assets and $10.8 million of other liabilities.

(4) Refer to “Note 13. Derivative Instruments” for additional information related to the fair value, by type of contract, of derivatives entered into by the Company.

Level 1 and Level 2 Assets and Liabilities Measured at Fair Value

Fixed Maturity Investments

Fixed maturity investments included in Level 1 consist of the Company’s investments in U.S. treasuries. Fixed maturity investments included in Level 2 are agencies, non-U.S. government, corporate, residential mortgage-backed, commercial mortgage-backed and asset-backed.

The Company’s fixed maturity investments are primarily priced using pricing services, such as index providers and pricing vendors, as well as broker quotations. In general, the pricing vendors provide pricing 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. Observable inputs include benchmark yields, reported trades, broker-dealer quotes, issuer spreads, bids, offers, reference data and industry and economic events. Index pricing generally relies on market traders as the primary source for pricing; however, models are also utilized to provide prices for all index eligible securities. The models use a variety of observable inputs such as benchmark yields, transactional data, dealer runs, broker-dealer quotes and corporate actions. Prices are generally verified using third-party data. Securities which are priced by an index provider are generally included in the index.

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 and non-distressed markets.

The Company considers these broker quotations to be Level 2 inputs as they are corroborated with other market observable inputs. The techniques generally used to determine the fair value of the Company’s fixed maturity investments are detailed below by asset class.

U.S. Treasuries

Level 1 - At June 30, 2022, the Company’s U.S. treasuries fixed maturity investments were primarily priced by pricing services and had a weighted average yield to maturity of 3.0% and a weighted average credit quality of AA (December 31, 2021 - 1.1% and AA, respectively). When pricing these securities, the pricing services utilize daily data from many real time market sources, including active broker-dealers. Certain data sources are regularly reviewed for accuracy to attempt to ensure the most reliable price source is used for each issue and maturity date.

Agencies

Level 2 - At June 30, 2022, the Company’s agency fixed maturity investments had a weighted average yield to maturity of 3.2% and a weighted average credit quality of AA (December 31, 2021 - 1.2% and AA, respectively). The issuers of the Company’s agency fixed maturity investments primarily consist of the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation and other agencies. Fixed maturity investments included in agencies 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.

Non-U.S. Government

Level 2 - At June 30, 2022, the Company’s non-U.S. government fixed maturity investments had a weighted average yield to maturity of 3.4% and a weighted average credit quality of AA (December 31, 2021 - 1.2% and AA, respectively). The issuers of securities in this sector are non-U.S. governments and their respective agencies as well as supranational organizations. Securities held in these sectors are primarily priced by pricing services that 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.

Corporate

Level 2 - At June 30, 2022, the Company’s corporate fixed maturity investments principally consisted of U.S. and international corporations and non-U.S. government-backed corporations and had a weighted average yield to maturity of 5.3% and a weighted average credit quality of BBB (December 31, 2021 - 2.6% and BBB, respectively).

The Company’s corporate fixed maturity investments, other than non-U.S. government-backed corporations, 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.

Non-U.S. government-backed corporate fixed maturity investments are primarily priced by pricing services that 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 quality credits. The pricing services then apply a credit spread to the respective curve 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.

Residential Mortgage-backed

Level 2 - At June 30, 2022, the Company’s residential mortgage-backed fixed maturity investments had a weighted average yield of maturity of 4.2%, a weighted average credit quality of A, and a weighted average life of 8.5 years (December 31, 2021 - 2.2%, A and 5.6 years, respectively). Residential mortgage-backed securities include both agency and non-agency mortgage-backed securities. The Company’s agency mortgage-backed fixed maturity investments 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 active market quotes.

Non-agency mortgage-based securities are primarily priced by pricing services using an option adjusted spread model or other relevant models, which principally utilize inputs including benchmark yields, available trade information or broker quotes, and issuer spreads. The pricing services also review collateral prepayment speeds, loss severity and delinquencies among other collateral performance indicators for the securities valuation, when applicable.

Commercial Mortgage-backed

Level 2 - At June 30, 2022, the Company’s commercial mortgage-backed fixed maturity investments had a weighted average yield to maturity of 4.7%, a weighted average credit quality of AA, and a weighted average life of 4.0 years (December 31, 2021 - 1.9%, AA and 4.1 years, respectively). 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 speeds 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 discount the expected cash flows for each security held in this sector using a spread adjusted benchmark yield based on the characteristics of the security.

Asset-backed

Level 2 - At June 30, 2022, the Company’s asset-backed fixed maturity investments had a weighted average yield to maturity of 4.5%, a weighted average credit quality of AA and a weighted average life of 5.5 years (December 31, 2021 - 1.8%, AA and 5.4 years, respectively). The underlying collateral for the

Company’s asset-backed fixed maturity investments primarily consists of collateralized loan obligations and other receivables. 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 speeds 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.

Short Term Investments

Level 2 - At June 30, 2022, the Company’s short term investments had a weighted average yield to maturity of 1.5% and a weighted average credit quality of AAA (December 31, 2021 - 0.1% and AAA, respectively). The fair value of the Company’s portfolio of short term investments is generally determined using amortized cost which approximates fair value and, in certain cases, in a manner similar to the Company’s fixed maturity investments noted above.

Equity Investments, Classified as Trading

Level 1 - The fair value of the Company’s portfolio of equity investments, classified as trading is primarily priced by pricing services, reflecting the closing price quoted for the final trading day of the period. When pricing these securities, the pricing services utilize daily data from many real time market sources, including applicable securities exchanges. All data sources are regularly reviewed for accuracy to attempt to ensure the most reliable price source was used for each security.

Other Investments

Catastrophe Bonds

Level 2 - The Company’s other investments include investments in catastrophe bonds which are recorded at fair value based on broker or underwriter bid indications.

Other Assets and Liabilities

Derivatives

Level 1 and Level 2 - Other assets and liabilities include certain derivatives entered into by the Company. The fair value of these transactions includes certain exchange traded futures contracts which are considered Level 1, and foreign currency contracts and certain credit derivatives, determined using standard industry valuation models and considered Level 2, as the inputs to the valuation model are based on observable market inputs. For credit derivatives, these inputs include credit spreads, credit ratings of the underlying referenced security, the risk-free rate and the contract term. For foreign currency contracts, these inputs include spot rates and interest rate curves

Level 3 Assets and Liabilities Measured at Fair Value

Below is a summary of quantitative information regarding the significant unobservable inputs (Level 3) used in determining the fair value of assets and liabilities measured at fair value on a recurring basis:

At June 30, 2022	Fair Value (Level 3)	Valuation Technique	Unobservable Inputs	Low	High	Weighted Average or Actual
Other investments						
Direct private equity investments	$ 81,610	Internal valuation model	Discount rate	n/a	n/a	7.5%
			Liquidity discount	n/a	n/a	15.0 %
Term loans	100,000	Discounted cash flow	Credit spread adjustment	n/a	n/a	0.2 %
			Risk premium	n/a	n/a	2.6 %
Total other investments	181,610					
Other assets and (liabilities)						
Assumed and ceded (re)insurance contracts	(3,064)	Internal valuation model	Net undiscounted cash flows	n/a	n/a	$ 14,933
			Expected loss ratio	n/a	n/a	8.4 %
			Discount rate	n/a	n/a	3.0 %
Total other assets and (liabilities)	(3,064)					
Total other assets and (liabilities) measured at fair value on a recurring basis using Level 3 inputs	$ 178,546					

At December 31, 2021	Fair Value (Level 3)	Valuation Technique	Unobservable Inputs	Low	High	Weighted Average or Actual
Direct private equity investments	$ 88,373	Internal valuation model	Discount rate	n/a	n/a	7.5 %
			Liquidity discount	n/a	n/a	15.0 %
Term loans	74,850	Discounted cash flow	Credit Spread Adjustment	n/a	n/a	0.2 %
			Risk Premium	n/a	n/a	2.6 %
Total other investments	163,223					
Other assets and (liabilities)						
Assumed and ceded (re)insurance contracts	(4,727)	Internal valuation model	Net undiscounted cash flows	n/a	n/a	$ 14,920
			Expected loss ratio	n/a	n/a	14.7 %
			Discount rate	n/a	n/a	1.3 %
Total other assets and (liabilities)	(4,727)					
Total other assets and (liabilities) measured at fair value on a recurring basis using Level 3 inputs	$ 158,496					

Below is a reconciliation of the beginning and ending balances, for the periods shown, of assets and liabilities measured at fair value on a recurring basis using Level 3 inputs. Interest and dividend income are included in net investment income and are excluded from the reconciliation.

	Other Investments		Other Assets and (Liabilities)	Total
	Direct private equity investments	Term loans		
Balance - April 1, 2022	$ 80,213	$ 85,000	$ (4,099)	$ 161,114
Included in net investment income	—	—	—	—
Included in net realized and unrealized gains (losses) on investments	(3,603)	—	—	(3,603)
Included in other income (loss)	—	—	280	280
Total foreign exchange gains (losses)	—	—	—	—
Purchases	5,000	15,000	755	20,755
Settlements	—	—	—	—
Balance - June 30, 2022	$ 81,610	$ 100,000	$ (3,064)	$ 178,546

	Other Investments		Other Assets and (Liabilities)	Total
	Direct private equity investments	Term loans		
Balance - January 1, 2022	$ 88,373	$ 74,850	$ (4,727)	$ 158,496
Included in net investment income	—	605	—	605
Included in net realized and unrealized gains (losses) on investments	(11,753)	—	—	(11,753)
Included in other income (loss)	—	—	1,189	1,189
Total foreign exchange gains (losses)	(10)	—	—	(10)
Purchases	5,000	25,000	474	30,474
Settlements	—	(455)	—	(455)
Balance - June 30, 2022	$ 81,610	$ 100,000	$ (3,064)	$ 178,546

	Other investments		Other assets and (liabilities)	Total
	Direct private equity investments	Term loans		
Balance - April 1, 2021	$ 75,874	$ —	$ (6,421)	$ 69,453
Included in net realized and unrealized gains (losses) on investments	1,415	—	—	1,415
Included in other income (loss)	—	—	440	440
Total foreign exchange gains (losses)	1	—	—	1
Purchases	5,000	—	(212)	4,788
Sales	(946)	—	—	(946)
Balance - June 30, 2021	$ 81,344	$ —	$ (6,193)	$ 75,151

	Other investments		Other assets and (liabilities)	Total
	Direct private equity investments	Term loans		
Balance - January 1, 2021	$ 79,807	$ —	$ (6,211)	$ 73,596
Total realized and unrealized losses				
Included in net realized and unrealized gains on investments	(2,521)	—	—	(2,521)
Included in other income (loss)	—	—	536	536
Total foreign exchange losses	4	—	—	4
Purchases	5,000	—	(518)	4,482
Sales	(946)	—	—	(946)
Balance - June 30, 2021	$ 81,344	$ —	$ (6,193)	$ 75,151

Other Investments

Direct Private Equity Investments

Level 3 - At June 30, 2022, the Company's other investments included $81.6 million (December 31, 2021 - $88.4 million) of direct private equity investments which are recorded at fair value, with the fair value obtained through the use of internal valuation models. The Company measured the fair value of these investments using multiples of net tangible book value of the underlying entity. The significant unobservable inputs used in the fair value measurement of these investments are liquidity discount rates applied to each of the net tangible book value multiples used in the internal valuation models, and discount rates applied to the expected cash flows of the underlying entity in various scenarios. These unobservable inputs in isolation can cause significant increases or decreases in fair value. Generally, an increase in the liquidity discount rate or discount rates would result in a decrease in the fair value of these private equity investments.

Term Loans

Level 3 - At June 30, 2022, the Company's other investments included a $100.0 million (December 31, 2021 - $74.9 million) investment in a term loan which is recorded at fair value, with the fair value obtained through the use of a discounted cash flow model. The significant unobservable inputs used in the discounted cash flow model are the cash flow projection of the associated term loan, and the discount rate. The discount rate used is based on the Secured Overnight Financing Rate, or SOFR, which is then adjusted for credit risk and a risk premium. These adjustments may be impacted by market movements implied by transactions of similar or related assets, loan-to-value, tenor, liquidity, credit risk adjustment or other risk factors. Assumptions used in the valuation process may significantly impact the resulting fair value.

Other Assets and Liabilities

Assumed and Ceded (Re)insurance Contracts

Level 3 - At June 30, 2022, the Company had a $3.1 million net liability (December 31, 2021 - $4.7 million net liability) related to assumed and ceded (re)insurance contracts accounted for at fair value, with the fair value obtained through the use of an internal valuation model. The inputs to the internal valuation model are principally based on proprietary data as observable market inputs are generally not available. The most significant unobservable inputs include the assumed and ceded expected net cash flows related to the contracts, including the expected premium, acquisition expenses and losses; the expected loss ratio and the relevant discount rate used to present value the net cash flows. The contract period and acquisition expense ratio are considered an observable input as each is defined in the contract. Generally, an increase in the net expected cash flows and expected term of the contract and a decrease in the discount rate, expected loss ratio or acquisition expense ratio, would result in an increase in the expected profit and ultimate fair value of these assumed and ceded (re)insurance contracts.

Financial Instruments Disclosed, But Not Carried, at Fair Value

The Company uses various financial instruments in the normal course of its business. The Company’s (re)insurance contracts are excluded from the fair value of financial instruments accounting guidance, unless the Company elects the fair value option, and therefore, are not included in the amounts discussed herein. The carrying values of cash and cash equivalents, accrued investment income, receivables for investments sold, certain other assets, payables for investments purchased, certain other liabilities, and other financial instruments not included herein approximated their fair values.

Debt

Included on the Company’s consolidated balance sheet at June 30, 2022 were debt obligations of $1.2 billion (December 31, 2021 - $1.2 billion). At June 30, 2022, the fair value of the Company’s debt obligations was $1.1 billion (December 31, 2021 – $1.3 billion).

The fair value of the Company’s debt obligations is determined using indicative market pricing obtained from third-party service providers, which the Company considers Level 2 in the fair value hierarchy. There have been no changes during the period in the Company’s valuation technique used to determine the fair value of the Company’s debt obligations. Refer to “Note 7. Debt and Credit Facilities” for additional information related to the Company’s debt obligations.

The Fair Value Option for Financial Assets and Financial Liabilities

The Company has elected to account for certain financial assets and financial liabilities at fair value using the guidance under FASB ASC Topic *Financial Instruments* as the Company believes it represents the most meaningful measurement basis for these assets and liabilities. Below is a summary of the balances the Company has elected to account for at fair value:

	June 30, 2022	December 31, 2021
Other investments	$ 2,314,232	$ 1,993,059
Other assets	$ 2,937	$ 6,100
Other liabilities	$ 6,001	$ 10,827

The change in fair value of other investments resulted in net unrealized losses on investments for the three and six months ended June 30, 2022 of $64.6 million and $70.7 million, respectively (June 30, 2021 – net unrealized gains of $41.9 million and $26.0 million, respectively).

Measuring the Fair Value of Other Investments Using Net Asset Valuations

The table below shows the Company's portfolio of other investments measured using net asset valuations as a practical expedient:

At June 30, 2022	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period (Minimum Days)	Redemption Notice Period (Maximum Days)
Private credit funds	$ 619,003	$ 812,427	See below	See below	See below
Private equity funds	252,474	402,637	See below	See below	See below
Total other investments measured using net asset valuations	$ 871,477	$ 1,215,064			

At December 31, 2021	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period (Minimum Days)	Redemption Notice Period (Maximum Days)
Private credit funds	$ 473,112	$ 868,571	See below	See below	See below
Private equity funds	241,297	458,566	See below	See below	See below
Hedge funds	11,394	—	See below	See below	See below
Total other investments measured using net asset valuations	$ 725,803	$ 1,327,137			

Private Credit Funds

The Company's investments in private credit funds include limited partnership or similar interests that invest in certain private credit asset classes, including senior secured bank loan funds, U.S. direct lending funds, secondaries, mezzanine investments and distressed securities. The Company generally has no right to redeem its interest in any of these private credit funds in advance of dissolution of the applicable limited partnerships. Instead, distributions are received by the Company in connection with the liquidation or maturity of the underlying private credit assets of the fund. It is estimated that the majority of the underlying assets of the limited partnerships would liquidate over 5 to 10 years from inception of the limited partnership.

Private Equity Funds

The Company's investments in private equity funds include limited partnership or similar interests that invest in certain private equity asset classes including U.S. and global leveraged buyouts. The Company generally has no right to redeem its interest in any of these private equity funds in advance of dissolution of the applicable limited partnerships. Instead, distributions are received by the Company in connection with the exit from the underlying private equity investments of the fund. It is estimated that the majority of the underlying assets of the limited partnerships would liquidate over 5 to 10 years from inception of the limited partnership.

Hedge Funds

At June 30, 2022, the Company had an investment in a hedge fund of $Nil (December 31, 2021 - $11.4 million). The hedge fund was primarily focused on global credit opportunities which were generally redeemable at the option of the limited partnership interest holder. During the first quarter of 2022, the Company fully redeemed its investment in the hedge fund.

Limited Partnerships Entities

The Company's fund investments represent variable interests in limited partnerships entities with unaffiliated fund managers in the normal course of business. The Company determined that certain of these limited partnership interests represent investments in variable interest entities ("VIEs") and that it is not required to consolidate these investments because it is not the primary beneficiary of these VIEs. The Company's maximum exposure to loss with respect to these VIEs is limited to the carrying amounts reported in the Company's consolidated balance sheet and any unfunded commitment.

The following table summarizes the aggregate carrying amount of the unconsolidated fund investments in VIEs, as well as our maximum exposure to loss associated with these VIEs:

		Maximum Exposure to Loss	
At June 30, 2022	**Carrying amount**	**Unfunded Commitments**	**Total**
Other investments	$ 691,065	$ 1,167,352	$ 1,858,417
At December 31, 2021			
Other investments	$ 539,866	$ 1,282,451	$ 1,822,317

NOTE 5. REINSURANCE

The Company purchases reinsurance and other protection to manage its risk portfolio and to reduce its exposure to large losses. The Company currently has in place contracts that provide for recovery of a portion of certain claims and claim expenses, generally in excess of various retentions or on a proportional basis. In addition to loss recoveries, certain of the Company's ceded reinsurance contracts provide for payments of additional premiums, for reinstatement premiums and for lost no-claims bonuses, which are incurred when losses are ceded to the respective reinsurance contracts. The Company remains liable to the extent that any reinsurer fails to meet its obligations.

The following table sets forth the effect of reinsurance and retrocessional activity on premiums written and earned and on net claims and claim expenses incurred:

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Premiums Written				
Direct	$ 338,761	$ 259,712	$ 639,866	$ 484,851
Assumed	2,125,878	1,834,446	4,767,737	4,261,749
Ceded	(601,023)	(581,866)	(1,378,770)	(1,410,225)
Net premiums written	$ 1,863,616	$ 1,512,292	$ 4,028,833	$ 3,336,375
Premiums Earned				
Direct	$ 278,609	$ 188,414	$ 521,370	$ 350,503
Assumed	1,610,214	1,455,002	3,300,482	2,871,648
Ceded	(432,440)	(450,626)	(879,044)	(875,525)
Net premiums earned	$ 1,456,383	$ 1,192,790	$ 2,942,808	$ 2,346,626
Claims and Claim Expenses				
Gross claims and claim expenses incurred	$ 799,218	$ 666,106	$ 1,816,773	$ 1,916,352
Claims and claim expenses recovered	(92,979)	(146,085)	(268,801)	(529,280)
Net claims and claim expenses incurred	$ 706,239	$ 520,021	$ 1,547,972	$ 1,387,072

In assessing an allowance for reinsurance assets, which includes premiums receivable and reinsurance recoverable, the Company considers historical information, financial strength of reinsurers, collateralization amounts, and counterparty credit ratings to determine the appropriateness of the allowance. In assessing future default for reinsurance assets, the Company evaluates the provision for current expected credit losses under the probability of default and loss given default method. The Company utilizes its internal capital and risk models, which use counterparty ratings from major rating agencies, and assesses the current market conditions for the likelihood of default. The Company updates its internal capital and risk models for counterparty credit ratings and current market conditions on a periodic basis. Historically, the Company has not experienced material credit losses from reinsurance assets.

Premiums receivable reflect premiums written based on contract and policy terms and include estimates based on information received from both insureds and ceding companies, supplemented by our own judgement, including our estimates of premiums that are written but not reported. Due to the nature of reinsurance, ceding companies routinely report and remit premiums to us subsequent to the contract coverage period, although the time lag involved in the process of reporting and collecting premiums is typically shorter than the lag in reporting losses.

At June 30, 2022, the Company’s premiums receivable balance was $5.4 billion (December 31, 2021 - $3.8 billion). Of the Company’s premiums receivable balance as of June 30, 2022, the majority are receivable from highly rated counterparties. The provision for current expected credit losses on the Company’s premiums receivable was $4.4 million at June 30, 2022 (December 31, 2021 - $2.8 million). The following table provides a roll forward of the provision for current expected credit losses of the Company’s premiums receivable:

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Beginning balance	$ 2,776	$ 3,782	$ 2,776	$ 5,961
Provision for allowance	1,574	(57)	1,574	(2,236)
Ending balance	$ 4,350	$ 3,725	$ 4,350	$ 3,725

Reinsurance recoverable reflects amounts due from reinsurers based on the claim liabilities associated with the reinsured policy. The Company accrues amounts that are due from assuming companies based on estimated ultimate losses applicable to the contracts.

At June 30, 2022, the Company’s reinsurance recoverable balance was $4.2 billion (December 31, 2021 - $4.3 billion). Of the Company’s reinsurance recoverable balance at June 30, 2022, 46.4% is fully collateralized by our reinsurers, 52.6% is recoverable from reinsurers rated A- or higher by major rating agencies and 1.0% is recoverable from reinsurers rated lower than A- by major rating agencies (December 31, 2021 - 46.9%, 52.1% and 1.0%, respectively). The reinsurers with the three largest balances accounted for 19.9%, 8.1% and 5.0%, respectively, of the Company’s reinsurance recoverable balance at June 30, 2022 (December 31, 2021 - 19.9%, 8.4% and 4.3%, respectively). The provision for current expected credit losses was $9.0 million at June 30, 2022 (December 31, 2021 - $8.3 million). The three largest company-specific components of the provision for current expected credit losses represented 13.4%, 8.8% and 8.3%, respectively, of the Company’s total provision for current expected credit losses at June 30, 2022 (December 31, 2021 - 18.0%, 13.9% and 11.2%, respectively). The following table provides a roll forward of the provision for current expected credit losses of the Company’s reinsurance recoverable:

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Beginning balance	$ 8,344	$ 6,605	$ 8,344	$ 6,334
Provision for allowance	661	419	661	690
Ending balance	$ 9,005	$ 7,024	$ 9,005	$ 7,024

NOTE 6. RESERVE FOR CLAIMS AND CLAIM EXPENSES

The Company believes the most significant accounting judgment made by management is its estimate of claims and claim expense reserves. Claims and claim expense reserves represent estimates, including actuarial and statistical projections at a given point in time, of the ultimate settlement and administration costs for unpaid claims and claim expenses arising from the insurance and reinsurance contracts the Company sells. The Company establishes its claims and claim expense reserves by taking claims reported to the Company by insureds and ceding companies, but which have not yet been paid ("case reserves"), adding estimates for the anticipated cost of claims incurred but not yet reported to the Company, or incurred but not enough reported to the Company (collectively referred to as "IBNR") and, if deemed necessary, adding costs for additional case reserves which represent the Company's estimates for claims related to specific contracts previously reported to the Company which it believes may not be adequately estimated by the client as of that date, or adequately covered in the application of IBNR ("additional case reserves"). The Company's reserving committee, which includes members of the Company's senior management, reviews, discusses, and assesses the reasonableness and adequacy of the reserving estimates included in our unaudited financial statements.

The following table summarizes the Company's claims and claim expense reserves by segment, allocated between case reserves, additional case reserves and IBNR:

At June 30, 2022	Case Reserves	Additional Case Reserves	IBNR	Total
Property	$ 1,867,749	$ 1,863,120	$ 2,168,573	$ 5,899,442
Casualty and Specialty	1,875,398	147,793	5,520,173	7,543,364
Total	$ 3,743,147	$ 2,010,913	$ 7,688,746	$ 13,442,806
At December 31, 2021				
Property	$ 1,555,210	$ 1,996,760	$ 2,825,718	$ 6,377,688
Casualty and Specialty	1,784,334	128,065	5,004,543	6,916,942
Total	$ 3,339,544	$ 2,124,825	$ 7,830,261	$ 13,294,630

Activity in the liability for unpaid claims and claim expenses is summarized as follows:

Six months ended June 30	2022	2021
Reserve for claims and claim expenses, net of reinsurance recoverable, as of beginning of period	$ 9,025,961	$ 7,455,128
Net incurred related to:		
Current year	1,608,762	1,448,133
Prior years	(60,790)	(61,061)
Total net incurred	1,547,972	1,387,072
Net paid related to:		
Current year	41,124	65,278
Prior years	1,129,979	995,826
Total net paid	1,171,103	1,061,104
Foreign exchange (1)	(166,483)	(23,992)
Reserve for claims and claim expenses, net of reinsurance recoverable, as of end of period	9,236,347	7,757,104
Reinsurance recoverable as of end of period	4,206,459	3,187,638
Reserve for claims and claim expenses as of end of period	$ 13,442,806	$ 10,944,742

(1) Reflects the impact of the foreign exchange revaluation of the net reserve for claims and claim expenses denominated in non-U.S. dollars as at the balance sheet date.

Prior Year Development of the Reserve for Net Claims and Claim Expenses

The Company's estimates of claims and claim expense reserves are not precise in that, among other things, they are based on predictions of future developments and estimates of future trends and other variable factors. Some, but not all, of the Company's reserves are further subject to the uncertainty inherent in actuarial methodologies and estimates. Because a reserve estimate is simply an insurer's estimate at a point in time of its ultimate liability, and because there are numerous factors that affect reserves and claims payments that cannot be determined with certainty in advance, the Company's ultimate payments will vary, perhaps materially, from its estimates of reserves. If the Company determines in a subsequent period that adjustments to its previously established reserves are appropriate, such adjustments are recorded in the period in which they are identified. On a net basis, the Company's cumulative favorable or unfavorable development is generally reduced by offsetting changes in its reinsurance recoverable, as well as changes to loss related premiums such as reinstatement premiums and redeemable noncontrolling interest, all of which generally move in the opposite direction to changes in the Company's ultimate claims and claim expenses.

The following table details the Company's prior year net development by segment of its liability for net unpaid claims and claim expenses:

Six months ended June 30	2022	2021
	(Favorable) adverse development	(Favorable) adverse development
Property	$ (51,810)	$ (56,145)
Casualty and Specialty	(8,980)	(4,916)
Total net (favorable) adverse development of prior accident years net claims and claim expenses	$ (60,790)	$ (61,061)

Changes to prior year estimated net claims reserves decreased net loss by $60.8 million during the six months ended June 30, 2022 (2021 - increased net income by $61.1 million), excluding the consideration of changes in reinstatement, adjustment or other premium changes, profit commissions, redeemable noncontrolling interests - DaVinciRe and Vermeer, and income tax.

Property Segment

The following tables detail the development of the Company’s liability for net unpaid claims and claim expenses for its Property segment, allocated between large and small catastrophe net claims and claim expenses and attritional net claims and claim expenses, included in the other line item:

Six months ended June 30	2022 (Favorable) adverse development
Catastrophe net claims and claim expenses	
Large catastrophe events	
2021 Weather-Related Large Loss Events	$ 4,385
2020 Weather-Related Large Loss Events	(10,887)
2019 Large Loss Events	(25,821)
2018 Large Loss Events	(10,300)
2017 Large Loss Events	(22,143)
Other	(2,578)
Total large catastrophe events	(67,344)
Small catastrophe events and attritional loss movements	
Other small catastrophe events and attritional loss movements	15,534
Total small catastrophe events and attritional loss movements	15,534
Total catastrophe and attritional net claims and claim expenses	(51,810)
Total net (favorable) adverse development of prior accident years net claims and claim expenses	$ (51,810)

The net favorable development of prior accident years net claims and claim expenses within the Company’s Property segment for the six months ended June 30, 2022 of $51.8 million included net favorable development on prior accident years net claims and claim expenses associated with the following large catastrophe events:

- $4.4 million of net adverse development associated with Winter Storm Uri, the European Floods, Hurricane Ida, the hail storm in Europe in late June 2021, the wildfires in California during the third quarter of 2021, the tornadoes in the Central and Midwest U.S. in December 2021, the Midwest Derecho in December 2021, and losses associated with aggregate loss contracts (collectively, the “2021 Weather-Related Large Loss Events”);
- $10.9 million of net favorable development associated with Hurricanes Laura, Sally, Isaias, Delta, Zeta and Eta, the California, Oregon and Washington wildfires, Typhoon Maysak, the August 2020 Derecho, and losses associated with aggregate loss contracts (collectively, the “2020 Weather-Related Large Loss Events”);
- $25.8 million of net favorable development associated with Hurricane Dorian and Typhoons Faxai and Hagibis and certain losses associated with aggregate loss contracts (collectively, the “2019 Large Loss Events”);
- $10.3 million of net favorable development associated with Typhoons Jebi, Mangkhut and Trami, Hurricane Florence, the wildfires in California during the third and fourth quarters of 2018, Hurricane Michael and certain losses associated with aggregate loss contracts (collectively, the “2018 Large Loss Events”); and
- $22.1 million of net favorable development associated with Hurricanes Harvey, Irma and Maria, the Mexico City Earthquake, the wildfires in California during the fourth quarter of 2017 and certain losses associated with aggregate loss contracts (collectively, the “2017 Large Loss Events”).

The Company’s Property segment also experienced net adverse development of $15.5 million in the six months ended June 30, 2022 associated with a number of other small catastrophe events as well as attritional loss movements related to lines of business where the Company principally estimates net claims and claim expenses using traditional actuarial methods.

Six months ended June 30	2021 (Favorable) adverse development
Catastrophe net claims and claim expenses	
Large catastrophe events	
2020 Weather-Related Large Loss Events	$ 16,932
2019 Large Loss Events	(1,424)
2018 Large Loss Events	(37,910)
2017 Large Loss Events	(5,708)
Other	(2,993)
Total large catastrophe events	(31,103)
Small catastrophe events and attritional loss movements	
Other small catastrophe events and attritional loss movements	(25,042)
Total small catastrophe events and attritional loss movements	(25,042)
Total catastrophe and attritional net claims and claim expenses	(56,145)
Total net (favorable) adverse development of prior accident years net claims and claim expenses	$ (56,145)

The net favorable development of prior accident years net claims and claim expenses within the Company’s Property segment in the six months ended June 30, 2021 of $56.1 million was primarily comprised of net favorable development on prior accident years net claims and claim expenses associated with the following large catastrophe events:

- $37.9 million associated with the 2018 Large Loss Events;
- $5.7 million associated with the 2017 Large Loss Events; and partially offset by
- $16.9 million of net adverse development associated with the 2020 Large Loss Events.

The Company’s Property segment also experienced net favorable development of $25.0 million in the six months ended June 30, 2021 associated with a number of other small catastrophe events as well as attritional loss movements related to lines of business where the Company principally estimates net claims and claim expenses using traditional actuarial methods.

Casualty and Specialty Segment

The following table details the development of the Company’s liability for unpaid claims and claim expenses for its Casualty and Specialty segment:

Six months ended June 30	2022 (Favorable) adverse development	2021 (Favorable) adverse development
Actuarial methods - actual reported claims less than expected claims	$ (27,315)	$ (4,916)
Actuarial assumption changes	18,335	—
Total net (favorable) adverse development of prior accident years net claims and claim expenses	$ (8,980)	$ (4,916)

The net favorable development of prior accident years net claims and claim expenses within the Company’s Casualty and Specialty segment of $9.0 million in the six months ended June 30, 2022 was due to reported losses generally coming in lower than expected on attritional net claims and claim expenses, principally within our specialty lines of business.

The net favorable development of prior accident years net claims and claim expenses within the Company's Casualty and Specialty segment of $4.9 million in the six months ended June 30, 2021 was also due to reported losses generally coming in lower than expected on attritional net claims and claim expenses, principally within our specialty lines of business.

NOTE 7. DEBT AND CREDIT FACILITIES

There have been no material changes to the Company's debt obligations and credit facilities as described in its Form 10-K for the year ended December 31, 2021.

The agreements governing the Company's debt obligations and credit facilities contain certain customary representations, warranties and covenants. At June 30, 2022, the Company was not in violation of any of its debt covenants.

Debt Obligations

A summary of the Company's debt obligations on its consolidated balance sheets is set forth below:

	June 30, 2022		December 31, 2021	
	Fair Value	Carrying Value	Fair Value	Carrying Value
3.600% Senior Notes due 2029	$ 374,180	$ 393,762	$ 432,316	$ 393,305
3.450% Senior Notes due 2027	287,397	297,527	321,204	297,281
3.700% Senior Notes due 2025	297,375	298,981	318,852	298,798
4.750% Senior Notes due 2025 (DaVinciRe) (1)	147,282	149,123	166,071	148,969
Total senior notes	1,106,234	1,139,393	1,238,443	1,138,353
Medici Revolving Credit Facility (2)	30,000	30,000	30,000	30,000
Total debt	$ 1,136,234	$ 1,169,393	$ 1,268,443	$ 1,168,353

(1) RenaissanceRe owns a noncontrolling economic interest in its joint venture DaVinciRe. Because RenaissanceRe controls a majority of DaVinciRe's issued voting shares, the consolidated financial statements of DaVinciRe are included in the consolidated financial statements of RenaissanceRe. However, RenaissanceRe does not guarantee or provide credit support for DaVinciRe and RenaissanceRe's financial exposure to DaVinciRe is limited to its investment in DaVinciRe's shares and counterparty credit risk arising from reinsurance transactions.

(2) RenaissanceRe owns a noncontrolling economic interest in Medici. Because RenaissanceRe controls all of Medici's issued voting shares, the financial statements of Medici are included in RenaissanceRe's consolidated financial statements.

Credit Facilities

The outstanding amounts issued or drawn under each of the Company's significant credit facilities is set forth below:

At June 30, 2022	Issued or Drawn
Revolving Credit Facility (1)	$ —
Medici Revolving Credit Facility (2)	30,000
Bilateral Letter of Credit Facilities	
Secured	384,079
Unsecured	450,289
Funds at Lloyd's Letter of Credit Facility	275,000
	$ 1,139,368

(1) At June 30, 2022, no amounts were issued or drawn under this facility.

(2) RenaissanceRe owns a noncontrolling economic interest in Medici. Because RenaissanceRe controls all of Medici's issued voting shares, the financial statements of Medici are included in RenaissanceRe's consolidated financial statements. The drawn amount of the Medici Revolving Credit Facility is included on the Company's consolidated balance sheets under debt.

NOTE 8. NONCONTROLLING INTERESTS

A summary of the Company's redeemable noncontrolling interests on its consolidated balance sheets is set forth below:

	June 30, 2022	December 31, 2021
Redeemable noncontrolling interest - DaVinciRe	$ 1,762,677	$ 1,499,451
Redeemable noncontrolling interest - Medici	1,052,560	856,820
Redeemable noncontrolling interest - Vermeer	1,269,417	1,197,782
Redeemable noncontrolling interest - Fontana	268,143	—
Redeemable noncontrolling interests	$ 4,352,797	$ 3,554,053

A summary of the Company's redeemable noncontrolling interests on its consolidated statements of operations is set forth below:

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Redeemable noncontrolling interest - DaVinciRe	$ 58,822	$ 84,266	$ 33,499	$ 44,332
Redeemable noncontrolling interest - Medici	(26,887)	11,989	(32,174)	(1,454)
Redeemable noncontrolling interest - Vermeer	22,937	17,289	41,635	23,816
Redeemable noncontrolling interest - Fontana	(5,541)	—	(5,541)	—
Net income (loss) attributable to redeemable noncontrolling interests	$ 49,331	$ 113,544	$ 37,419	$ 66,694

Redeemable Noncontrolling Interest – DaVinciRe

RenaissanceRe owns a noncontrolling economic interest in DaVinciRe; however, because RenaissanceRe controls a majority of DaVinciRe's issued voting shares, the Company consolidates DaVinciRe and all significant intercompany transactions have been eliminated. The portion of DaVinciRe's earnings owned by third parties is recorded in the consolidated statements of operations as net income (loss) attributable to redeemable noncontrolling interests. The Company's noncontrolling economic ownership in DaVinciRe was 33.8% at June 30, 2022 (December 31, 2021 - 28.7%).

DaVinciRe shareholders are party to a shareholders agreement which provides DaVinciRe shareholders, excluding RenaissanceRe, with certain redemption rights that enable each shareholder to notify DaVinciRe of such shareholder's desire for DaVinciRe to repurchase up to half of such shareholder's initial aggregate number of shares held, subject to certain limitations, such as limiting the aggregate of all share repurchase requests to 25% of DaVinciRe's capital in any given year and satisfying all applicable regulatory requirements. If total shareholder requests exceed 25% of DaVinciRe's capital, the number of shares repurchased will be reduced among the requesting shareholders pro-rata, based on the amounts desired to be repurchased. Shareholders desiring to have DaVinci repurchase their shares must notify DaVinciRe before March 1 of each year. The repurchase price will be based on GAAP book value as of the end of the year in which the shareholder notice is given, and the repurchase will be effective as of December 31 of that year. The repurchase price can be subject to a holdback and true-up for potential development on outstanding loss reserves after settlement of claims relating to the applicable years. Similarly, when shares are issued by DaVinci and sold to DaVinci shareholders, the sale price is based on GAAP book value as of the end of the period preceding the sale and can be subject to a true-up for potential development on outstanding loss reserves.

2022

During the six months ended June 30, 2022, DaVinciRe completed an equity capital raise of $500.0 million, comprised of $284.8 million from third-party investors and $215.2 million from RenaissanceRe. In addition, RenaissanceRe sold an aggregate of $102.9 million of its shares in DaVinciRe to third-party investors and purchased an aggregate of $161.6 million of shares from third-party investors. The Company's noncontrolling economic ownership in DaVinciRe subsequent to these transactions was 33.8%.

Refer to "Note 15. Subsequent Events" for additional information related to the Company's noncontrolling economic ownership in DaVinciRe subsequent to June 30, 2022.

2021

During the six months ended June 30, 2021, DaVinciRe completed an equity capital raise of $250.0 million, comprised of $150.9 million from third-party investors and $99.1 million from RenaissanceRe. In addition, RenaissanceRe sold an aggregate of $40.0 million of its shares in DaVinciRe to third-party investors and purchased an aggregate of $156.7 million of shares from third-party investors. The Company's noncontrolling economic ownership in DaVinciRe subsequent to these transactions was 28.7%.

The Company expects its noncontrolling economic ownership in DaVinciRe to fluctuate over time.

The activity in redeemable noncontrolling interest – DaVinciRe is detailed in the table below:

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Beginning balance	$ 1,775,503	$ 1,555,714	$ 1,499,451	$ 1,560,693
Redemption of shares from redeemable noncontrolling interests, net of adjustments	(74,141)	2,676	(161,569)	(153,295)
Sale of shares to redeemable noncontrolling interests, net of adjustments	2,493	—	391,296	190,926
Net income (loss) attributable to redeemable noncontrolling interest	58,822	84,266	33,499	44,332
Ending balance	$ 1,762,677	$ 1,642,656	$ 1,762,677	$ 1,642,656

Redeemable Noncontrolling Interest - Medici

RenaissanceRe owns a noncontrolling economic interest in Medici; however, because RenaissanceRe controls all of Medici's issued voting shares, the Company consolidates Medici and all significant intercompany transactions have been eliminated. The portion of Medici's earnings owned by third parties is recorded in the consolidated statements of operations as net (loss) income attributable to redeemable noncontrolling interests. Any shareholder may redeem all or any portion of its shares as of the last day of any calendar month, upon at least 30 calendar days' prior irrevocable written notice to Medici.

2022

During the six months ended June 30, 2022, third-party investors subscribed for $325.0 million and redeemed $97.1 million of the participating, non-voting common shares of Medici. As a result of these net subscriptions, the Company's noncontrolling economic ownership in Medici was 13.0% at June 30, 2022.

2021

During the six months ended June 30, 2021, third-party investors subscribed for $171.5 million and redeemed $7.7 million of the participating, non-voting common shares of Medici. As a result of these net subscriptions, the Company's noncontrolling economic ownership in Medici was 13.4% at June 30, 2021.

The Company expects its noncontrolling economic ownership in Medici to fluctuate over time.

The activity in redeemable noncontrolling interest – Medici is detailed in the table below:

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Beginning balance	$ 941,912	$ 737,702	$ 856,820	$ 717,999
Redemption of shares from redeemable noncontrolling interests, net of adjustments	(20,204)	(46)	(97,112)	(7,745)
Sale of shares to redeemable noncontrolling interests	157,739	130,675	325,026	171,520
Net income (loss) attributable to redeemable noncontrolling interest	(26,887)	11,989	(32,174)	(1,454)
Ending balance	$ 1,052,560	$ 880,320	$ 1,052,560	$ 880,320

Redeemable Noncontrolling Interest – Vermeer

RenaissanceRe owns 100% of the voting non-participating shares of Vermeer, while the sole third-party investor, PFZW, owns 100% of the non-voting participating shares of Vermeer and retains all of the economic benefits. Vermeer is managed by RUM in return for a management fee. The Company has concluded that Vermeer is a VIE as it has voting rights that are not proportional to its participating rights, and the Company is the primary beneficiary of Vermeer. As a result, the Company consolidates Vermeer and all significant inter-company transactions have been eliminated. As PFZW owns all of the economics of Vermeer, all of Vermeer's earnings are allocated to PFZW in the consolidated statement of operations as net (loss) income attributable to redeemable noncontrolling interests. The Company has not provided any financial or other support to Vermeer that it was not contractually required to provide.

2022

During the six months ended June 30, 2022, PFZW subscribed for $30 million of the participating, non-voting common shares of Vermeer.

2021

During the six months ended June 30, 2021, PFZW subscribed for $Nil of the participating, non-voting common shares of Vermeer.

The Company does not expect its noncontrolling economic ownership in Vermeer to fluctuate over time.

The activity in redeemable noncontrolling interest – Vermeer is detailed in the table below:

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Beginning balance	$ 1,246,480	$ 1,116,154	$ 1,197,782	$ 1,109,627
Sale of shares to redeemable noncontrolling interest	—	—	30,000	—
Net income (loss) attributable to redeemable noncontrolling interest	22,937	17,289	41,635	23,816
Ending balance	$ 1,269,417	$ 1,133,443	$ 1,269,417	$ 1,133,443

Redeemable Noncontrolling Interest – Fontana

RenaissanceRe owns a noncontrolling economic interest in Fontana and controls a majority of Fontana's issued voting shares. The Company concluded that Fontana meets the definition of a VIE as the voting rights are not proportional with the obligations to absorb losses and rights to receive residual returns. The Company evaluated its relationship with Fontana and concluded it is the primary beneficiary of Fontana, as it has power over the activities that most significantly impact the economic performance of Fontana. As a result, the Company consolidates Fontana and all significant inter-company transactions have been eliminated. The portion of Fontana's earnings owned by third parties is recorded in the consolidated statements of operations as net income (loss) attributable to redeemable noncontrolling interests. The Company may be obligated to repurchase all or a portion of the shares held by shareholders of Fontana upon request, subject to certain restrictions. The Company has not provided any financial or other support to Fontana that it was not contractually required to provide.

2022

During the six months ended June 30, 2022, the Company launched Fontana with capital commitments of $475.0 million, of which $400 million was funded on April 1, 2022. Of this amount, $273.7 million was funded by third-party investors. As a result of these subscriptions, the Company's noncontrolling economic ownership in Fontana was 31.6% at June 30, 2022.

The Company's investment in Fontana may fluctuate, perhaps materially, in future quarters.

The activity in redeemable noncontrolling interest – Fontana is detailed in the table below:

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Beginning balance	$ —	$ —	$ —	$ —
Sale of shares to redeemable noncontrolling interest	273,684	—	273,684	—
Net income (loss) attributable to redeemable noncontrolling interest	(5,541)	—	(5,541)	—
Ending balance	$ 268,143	$ —	$ 268,143	$ —

NOTE 9. VARIABLE INTEREST ENTITIES

Upsilon RFO

RenaissanceRe indirectly owns a portion of the participating non-voting preference shares of Upsilon RFO and all of Upsilon RFO's voting Class A shares. The shareholders (other than the voting Class A shareholder) participate in all of the profits or losses of Upsilon RFO while their shares remain outstanding. The shareholders (other than the voting Class A shareholder) indemnify Upsilon RFO against losses relating to insurance risk, and therefore, these shares have been accounted for as prospective reinsurance under FASB ASC Topic *Financial Services - Insurance*.

Upsilon RFO is considered a VIE as it has insufficient equity capital to finance its activities without additional financial support. The Company is the primary beneficiary of Upsilon RFO as it has the power over the activities that most significantly impact the economic performance of Upsilon RFO and has the obligation to absorb expected losses and the right to receive expected benefits that could be significant to Upsilon RFO, in accordance with the accounting guidance. As a result, the Company consolidates Upsilon RFO and all significant inter-company transactions have been eliminated. Other than its equity investment in Upsilon RFO, the Company has not provided financial or other support to Upsilon RFO that it was not contractually required to provide.

2022

During the six months ended June 30, 2022, $89.0 million of Upsilon RFO non-voting preference shares were issued to existing investors, including $10.0 million to the Company. Also during the six months ended June 30, 2022 and following the release of collateral that was previously held by cedants associated with prior years' contracts, Upsilon RFO returned $188.1 million of capital to investors, including $41.4 million to the Company. At June 30, 2022, the Company's participation in the risks assumed by Upsilon RFO was 12.7%.

At June 30, 2022, the Company's consolidated balance sheet included total assets and total liabilities of Upsilon RFO of $4.1 billion and $4.1 billion, respectively (December 31, 2021 - $3.9 billion and $3.9 billion, respectively). Of the total assets and liabilities, a net amount of $0.2 billion (December 31, 2021 - $0.2 billion) is attributable to the Company, and $1.5 billion (December 31, 2021 - $1.5 billion) is attributable to third-party investors.

2021

During the six months ended June 30, 2021, $544.6 million of Upsilon RFO non-voting preference shares were issued to existing investors, including $32.3 million to the Company. In addition, during the six months ended June 30, 2021 and following the release of collateral that was previously held by cedants associated with prior years' contracts, Upsilon RFO returned $276.0 million of capital to its investors, including $24.9 million to the Company. At June 30, 2021, the Company's participation in the risks assumed by Upsilon RFO was 12.3%.

Vermeer

Vermeer provides capacity focused on risk remote layers in the U.S. property catastrophe market. Refer to "Note 8. Noncontrolling Interests" for additional information regarding Vermeer.

At June 30, 2022, the Company's consolidated balance sheet included total assets and total liabilities of Vermeer of $1.4 billion and $107.6 million, respectively (December 31, 2021 - $1.3 billion and $69.9 million, respectively). In addition, the Company's consolidated balance sheet included redeemable noncontrolling interests associated with Vermeer of $1.3 billion at June 30, 2022 (December 31, 2021 - $1.2 billion).

Fontana

Fontana provides reinsurance capacity focused on business written within the Company's casualty and specialty segment. Refer to "Note 8. Noncontrolling Interests" for additional information regarding Fontana.

At June 30, 2022, the Company's consolidated balance sheet included total assets and total liabilities of Fontana of $520.5 million and $128.6 million, respectively. In addition, the Company's consolidated balance sheet included redeemable noncontrolling interests associated with Fontana of $268.1 million at June 30, 2022.

Mona Lisa Re Ltd.

Mona Lisa Re provides reinsurance capacity to subsidiaries of RenaissanceRe through reinsurance agreements which are collateralized and funded by Mona Lisa Re through the issuance of one or more series of principal-at-risk variable rate notes to third-party investors.

Upon issuance of a series of notes by Mona Lisa Re, all of the proceeds from the issuance are deposited into collateral accounts, separated by series, to fund any potential obligation under the reinsurance agreements entered into with Renaissance Reinsurance and/or DaVinci underlying such series of notes. The outstanding principal amount of each series of notes generally will be returned to holders of such notes upon the expiration of the risk period underlying such notes, unless an event occurs which causes a loss under the applicable series of notes, in which case the amount returned will be reduced by such noteholder's pro rata share of such loss, as specified in the applicable governing documents of such notes.

In addition, holders of such notes are generally entitled to interest payments, payable quarterly, as determined by the applicable governing documents of each series of notes.

The Company concluded that Mona Lisa Re meets the definition of a VIE as it does not have sufficient equity capital to finance its activities. The Company evaluated its relationship with Mona Lisa Re and concluded it is not the primary beneficiary of Mona Lisa Re as it does not have the power over the activities that most significantly impact the economic performance of Mona Lisa Re, in accordance with the accounting guidance. As a result, the financial position and results of operations of Mona Lisa Re are not consolidated by the Company.

The only transactions related to Mona Lisa Re that are recorded in the Company's consolidated financial statements are the ceded reinsurance agreements entered into by Renaissance Reinsurance and DaVinci which are accounted for as prospective reinsurance under FASB ASC Topic *Financial Services - Insurance*, and the fair value of the principal-at-risk variable rate notes owned by the Company. Other than its investment in the principal-at-risk variable rate notes of Mona Lisa Re, the Company has not provided financial or other support to Mona Lisa Re that it was not contractually required to provide.

Renaissance Reinsurance and DaVinci have together entered into ceded reinsurance contracts with Mona Lisa Re with ceded premiums written of $25.1 million and $6.2 million, respectively, during the six months ended June 30, 2022 (2021 - $25.4 million and $6.3 million, respectively). In addition, Renaissance Reinsurance and DaVinci recognized ceded premiums earned related to the ceded reinsurance contracts with Mona Lisa Re of $19.5 million and $4.8 million, respectively, during the six months ended June 30, 2022 (2021 - $12.6 million and $3.1 million, respectively).

Effective June 29, 2021, Mona Lisa Re issued a series of principal-at-risk variable rate notes to investors for a total principal amount of $250.0 million. Effective January 10, 2020, Mona Lisa Re issued two series of principal-at-risk variable rate notes to investors for principal amounts of $250.0 million and $150.0 million. At June 30, 2022, the total assets and total liabilities of Mona Lisa Re were $675.4 million and $675.4 million, respectively (December 31, 2021 - $650.5 million and $650.5 million, respectively).

The fair value of the Company's investment in the principal-at-risk variable rate notes of Mona Lisa Re is included in other investments. Net of third-party investors, the fair value of the Company's investment in Mona Lisa Re was $3.5 million at June 30, 2022 (December 31, 2021 - $6.5 million).

Fibonacci Re

Fibonacci Re provides collateralized capacity to Renaissance Reinsurance and its affiliates.

The Company concluded that Fibonacci Re meets the definition of a VIE as it does not have sufficient equity capital to finance its activities. The Company evaluated its relationship with Fibonacci Re and concluded it is not the primary beneficiary of Fibonacci Re as it does not have power over the activities that most significantly impact the economic performance of Fibonacci Re. As a result, the Company does not consolidate the financial position or results of operations of Fibonacci Re. The Company has not provided financial or other support to Fibonacci Re that it was not contractually required to provide.

Renaissance Reinsurance had no outstanding balances with Fibonacci Re as of June 30, 2022 and December 31, 2021, and there was no material impact on the Company's consolidated statements of operations for the three and six months ended June 30, 2022 and June 30, 2021.

Langhorne

The Company and Reinsurance Group of America, Incorporated formed Langhorne, an initiative to source third-party capital to support reinsurers targeting large in-force life and annuity blocks. In connection with Langhorne, as of June 30, 2022, the Company has invested $2.4 million in Langhorne Holdings (December 31, 2021 - $2.3 million), a company that owns and manages certain reinsurance entities within Langhorne. In addition, as of June 30, 2022 the Company has invested $0.1 million in Langhorne Partners (December 31, 2021 - $0.1 million), the general partner for Langhorne and the entity which manages the third-party investors investing into Langhorne Holdings.

The Company concluded that Langhorne Holdings meets the definition of a VIE as the voting rights are not proportional with the obligations to absorb losses and rights to receive residual returns. The Company evaluated its relationship with Langhorne Holdings and concluded it is not the primary beneficiary of Langhorne Holdings, as it does not have power over the activities that most significantly impact the economic performance of Langhorne Holdings. As a result, the Company does not consolidate the financial position or results of operations of Langhorne Holdings. The Company separately evaluated Langhorne Partners and concluded that it was not a VIE. The Company accounts for its investments in Langhorne Holdings and Langhorne Partners under the equity method of accounting, one quarter in arrears.

The Company anticipates that its absolute investment in Langhorne will increase, perhaps materially, if in-force life and annuity blocks of businesses are written. The Company expects its absolute and relative ownership in Langhorne Partners to remain stable. Other than its current and committed future equity investment in Langhorne, the Company has not provided financial or other support to Langhorne that it was not contractually required to provide.

Shima Re

Shima Re was acquired on March 22, 2019 in connection with the acquisition of TMR. Shima Re is a Bermuda domiciled Class 3 insurer. Shima Re is registered as a segregated accounts company and provides third-party investors with access to reinsurance risk. The maximum remaining exposure of each segregated account is fully collateralized and is funded by cash or investments as prescribed by the participant thereto. Shima Re no longer writes new business and the last in-force contract written by Shima Re expired on December 31, 2019. The Company ceased providing management services to Shima Re effective December 1, 2020.

Shima Re is considered a VIE as it has voting rights that are not proportional to its participating rights. The Company evaluated its relationship with Shima Re and concluded it is not the primary beneficiary of any segregated account, as it does not have power over the activities that most significantly impact the economic performance of any segregated account. As a result, the Company does not consolidate the financial position or results of operations of Shima Re or its segregated accounts. The Company has not provided any financial or other support to any segregated account of Shima Re that it was not contractually required to provide.

Norwood Re

Until December 1, 2020, Norwood Re was managed by a subsidiary of RREAG that the Company acquired in the acquisition of TMR. Norwood Re is a Bermuda domiciled SPI registered as a segregated accounts company formed to provide solutions for reinsurance-linked asset investors. Norwood Re is wholly owned by the Norwood Re Purpose Trust. Risks assumed by the segregated accounts of Norwood Re were fronted by, or ceded from, only one cedant - RREAG and/or its insurance affiliates. The obligations of each segregated account are funded through the issuance of non-voting preference shares to third-party investors. The maximum exposure of each segregated account is fully collateralized and is funded by cash and term deposits or investments as prescribed by the participant thereto. Norwood Re no longer writes new business, and the last in-force contract written by Norwood Re expired on June 30, 2020. The Company ceased providing management services to Norwood Re effective December 1, 2020.

Norwood Re is considered a VIE as it has voting rights that are not proportional to its participating rights. The Company evaluated its relationship with Norwood Re and concluded it is not the primary beneficiary of Norwood Re and its segregated accounts, as it does not have power over the activities that most significantly impact the economic performance of Norwood Re and its segregated accounts. As a result, the Company does not consolidate the financial position or results of operations of Norwood Re and its segregated accounts. The Company has not provided any financial or other support to Norwood Re that it was not contractually required to provide.

Fund Investments

The Company's fund investments represent variable interests in limited partnerships entities with unaffiliated fund managers in the normal course of business. Refer to "Note 4. Fair Value Measurements" for additional information.

NOTE 10. SHAREHOLDERS' EQUITY

Series G Preference Shares

In July 2021, RenaissanceRe raised $500.0 million through the issuance of 20,000 shares of its 4.20% Series G Preference Shares, $1.00 par value and liquidation preference $25,000 per share (equivalent to 20,000,000 Depositary Shares, each of which represents a 1/1,000th interest in a 4.20% Series G Preference Share). The 4.20% Series G Preference Shares have no stated maturity date and may be redeemed at a redemption price of $25,000 per share (equivalent to $25.00 per Depositary Share), plus declared and unpaid dividends, at RenaissanceRe's option on or after July 15, 2026, provided that no redemption may occur prior to July 15, 2026 unless certain redemption requirements are met.

Series E 5.375% Preference Shares Redemption

The Series E 5.375% Preference Shares were redeemed on August 11, 2021 for $275.0 million plus accrued and unpaid dividends thereon. Following the redemption, no Series E 5.375% Preference Shares remain outstanding.

Dividends

The Board of Directors of RenaissanceRe declared dividends of $0.37 per common share, payable to common shareholders of record on March 15, 2022 and June 15, 2022, and the Company paid the dividends on March 31, 2022 and June 30, 2022, respectively.

The Board of Directors approved the payment of quarterly dividends on each of RenaissanceRe's several series of preference shares to preference shareholders of record in the amounts and on the quarterly record dates and dividend payment dates set forth in the prospectus supplement and Certificate of Designation for the applicable series of preference shares, unless and until further action is taken by the Board of Directors. The dividend payment dates for the preference shares will be the first day of March, June, September and December of each year (or if this date is not a business day, on the business day immediately following this date). The record dates for the preference share dividends are one day prior to the dividend payment dates.

The amount of the dividend on the 5.750% Series F Preference Shares is an amount per share equal to 5.750% of the liquidation preference per annum (the equivalent to $1,437.50 per 5.750% Series F Preference Share per annum, or $359.375 per 5.750% Series F Preference Share per quarter, or $1.4375 per Depositary Share per annum, or $0.359375 per Depositary Share per quarter). The amount of the dividend on the 4.20% Series G Preference Shares is an amount per share equal to 4.20% of the liquidation preference per annum (the equivalent to $1,050 per 4.20% Series G Preference Share per annum, or $262.50 per 4.20% Series G Preference Share per quarter, or $1.05 per Depositary Share per annum, or $0.2625 per quarter).

The amount of the dividend on the Series E 5.375% Preference Shares was an amount per share equal to 5.375% of the liquidation preference per annum (the equivalent to $1.34375 per share per annum, or $0.3359375 per share per quarter), and was paid prior to the redemption in full of the Series E 5.375% Preference Shares on August 11, 2021.

During the six months ended June 30, 2022, the Company paid $17.7 million in preference share dividends (2021 - $14.6 million) and $32.4 million in common share dividends (2021 - $35.0 million).

Share Repurchases

The Company's share repurchase program may be effected from time to time, depending on market conditions and other factors, through open market purchases and privately negotiated transactions. On May 16, 2022, RenaissanceRe's Board of Directors approved a renewal of its authorized share repurchase program for an aggregate amount of up to $500.0 million. Unless terminated earlier by RenaissanceRe's Board of Directors, the program will expire when the Company has repurchased the full value of the common shares authorized. The Company's decision to repurchase common shares will depend on, among other matters, the market price of the common shares and the capital requirements of the Company. During the six months ended June 30, 2022, the Company repurchased 874,912 common shares at an aggregate cost of $137.5 million and an average price of $157.19 per common share. At June 30, 2022, $475.2 million remained available for repurchase under the share repurchase program.

Refer to Note 15. "Subsequent Events" for additional information related to common share repurchases subsequent to June 30, 2022.

NOTE 11. EARNINGS PER SHARE

The following table sets forth the computation of basic and diluted earnings per common share:

(common shares in thousands)	Three months ended June 30, 2022	Three months ended June 30, 2021	Six months ended June 30, 2022	Six months ended June 30, 2021
Numerator:				
Net income (loss) available (attributable) to RenaissanceRe common shareholders	$ (324,913)	$ 456,818	$ (719,326)	$ 165,884
Amount allocated to participating common shareholders [1]	(272)	(5,809)	(507)	(1,864)
Net income (loss) allocated to RenaissanceRe common shareholders	$ (325,185)	$ 451,009	$ (719,833)	$ 164,020
Denominator:				
Denominator for basic income (loss) per RenaissanceRe common share - weighted average common shares	43,170	48,163	43,264	48,871
Per common share equivalents of non-vested shares	—	63	—	69
Denominator for diluted income (loss) per RenaissanceRe common share - adjusted weighted average common shares and assumed conversions	43,170	48,226	43,264	48,940
Net income (loss) available (attributable) to RenaissanceRe common shareholders per common share – basic	$ (7.53)	$ 9.36	$ (16.64)	$ 3.36
Net income (loss) available (attributable) to RenaissanceRe common shareholders per common share – diluted	$ (7.53)	$ 9.35	$ (16.64)	$ 3.35

(1) Represents earnings and dividends attributable to holders of unvested shares issued pursuant to the Company's stock compensation plans.

NOTE 12. SEGMENT REPORTING

The Company's reportable segments are defined as follows: (1) Property, which is comprised of catastrophe and other property (re)insurance written on behalf of the Company's operating subsidiaries, joint ventures and managed funds, and (2) Casualty and Specialty, which is comprised of casualty and specialty (re)insurance written on behalf of the Company's operating subsidiaries, joint ventures and managed funds. In addition to its reportable segments, the Company has an Other category, which primarily includes its strategic investments, investments unit, corporate expenses, capital servicing costs, noncontrolling interests and certain expenses related to acquisitions and dispositions.

The Company's Property segment is managed by the Chief Underwriting Officer - Property and the Casualty and Specialty segment is managed by the Chief Underwriting Officer - Casualty and Specialty, each of whom operate under the direction of the Company's Group Chief Underwriting Officer, who in turn reports to the Company's President and Chief Executive Officer.

The Company does not manage its assets by segment; accordingly, net investment income and total assets are not allocated to the segments.

A summary of the significant components of the Company's revenues and expenses by segment is as follows:

Three months ended June 30, 2022	Property	Casualty and Specialty	Other	Total
Gross premiums written	$ 1,218,321	$ 1,246,318	$ —	$ 2,464,639
Net premiums written	$ 887,975	$ 975,641	$ —	$ 1,863,616
Net premiums earned	$ 623,581	$ 832,802	$ —	$ 1,456,383
Net claims and claim expenses incurred	171,924	534,315	—	706,239
Acquisition expenses	137,567	223,671	—	361,238
Operational expenses	49,627	22,893	—	72,520
Underwriting income (loss)	$ 264,463	$ 51,923	$ —	316,386
Net investment income			107,211	107,211
Net foreign exchange gains (losses)			(50,821)	(50,821)
Equity in earnings of other ventures			7,383	7,383
Other income (loss)			923	923
Net realized and unrealized gains (losses) on investments			(654,107)	(654,107)
Corporate expenses			(12,352)	(12,352)
Interest expense			(11,895)	(11,895)
Income (loss) before taxes and redeemable noncontrolling interests				(297,272)
Income tax benefit (expense)			30,534	30,534
Net (income) loss attributable to redeemable noncontrolling interests			(49,331)	(49,331)
Dividends on preference shares			(8,844)	(8,844)
Net income (loss) available (attributable) to RenaissanceRe common shareholders				$ (324,913)
Net claims and claim expenses incurred – current accident year	$ 206,976	$ 542,220	$ —	$ 749,196
Net claims and claim expenses incurred – prior accident years	(35,052)	(7,905)	—	(42,957)
Net claims and claim expenses incurred – total	$ 171,924	$ 534,315	$ —	$ 706,239
Net claims and claim expense ratio – current accident year	33.2 %	65.1 %		51.4 %
Net claims and claim expense ratio – prior accident years	(5.6)%	(0.9)%		(2.9)%
Net claims and claim expense ratio – calendar year	27.6 %	64.2 %		48.5 %
Underwriting expense ratio	30.0 %	29.6 %		29.8 %
Combined ratio	57.6 %	93.8 %		78.3 %

Six months ended June 30, 2022	Property		Casualty and Specialty		Other		Total	
Gross premiums written	$	2,561,829	$	2,845,774	$	—	$	5,407,603
Net premiums written	$	1,778,141	$	2,250,692	$	—	$	4,028,833
Net premiums earned	$	1,242,172	$	1,700,636	$	—	$	2,942,808
Net claims and claim expenses incurred		431,685		1,116,287		—		1,547,972
Acquisition expenses		264,663		473,082		—		737,745
Operational expenses		96,559		43,868		—		140,427
Underwriting income (loss)	$	449,265	$	67,399	$	—		516,664
Net investment income						190,902		190,902
Net foreign exchange gain (loss)						(66,307)		(66,307)
Equity in earnings of other ventures						993		993
Other income (loss)						2,116		2,116
Net realized and unrealized gain (loss) on investments						(1,327,124)		(1,327,124)
Corporate expenses						(24,854)		(24,854)
Interest expense						(23,850)		(23,850)
Income (loss) before taxes and redeemable noncontrolling interests								(731,460)
Income tax benefit (expense)						67,241		67,241
Net (income) loss attributable to redeemable noncontrolling interests						(37,419)		(37,419)
Dividends on preference shares						(17,688)		(17,688)
Net income (loss) available (attributable) to RenaissanceRe common shareholders							$	(719,326)
Net claims and claim expenses incurred – current accident year	$	483,495	$	1,125,267	$	—	$	1,608,762
Net claims and claim expenses incurred – prior accident years		(51,810)		(8,980)		—		(60,790)
Net claims and claim expenses incurred – total	$	431,685	$	1,116,287	$	—	$	1,547,972
Net claims and claim expense ratio – current accident year		38.9 %		66.2 %				54.7 %
Net claims and claim expense ratio – prior accident years		(4.1)%		(0.6)%				(2.1)%
Net claims and claim expense ratio – calendar year		34.8 %		65.6 %				52.6 %
Underwriting expense ratio		29.0 %		30.4 %				29.8 %
Combined ratio		63.8 %		96.0 %				82.4 %

Three months ended June 30, 2021	Property	Casualty and Specialty	Other	Total
Gross premiums written	$ 1,183,556	$ 910,602	$ —	$ 2,094,158
Net premiums written	$ 803,335	$ 708,957	$ —	$ 1,512,292
Net premiums earned	$ 560,397	$ 632,393	$ —	$ 1,192,790
Net claims and claim expenses incurred	97,150	422,871	—	520,021
Acquisition expenses	109,238	176,352	—	285,590
Operational expenses	38,887	19,316	—	58,203
Underwriting income (loss)	$ 315,122	$ 13,854	$ —	328,976
Net investment income			80,925	80,925
Net foreign exchange gains (losses)			3,234	3,234
Equity in earnings of other ventures			8,732	8,732
Other income (loss)			586	586
Net realized and unrealized gains (losses) on investments			191,018	191,018
Corporate expenses			(10,125)	(10,125)
Interest expense			(11,833)	(11,833)
Income (loss) before taxes and redeemable noncontrolling interests				591,513
Income tax benefit (expense)			(13,862)	(13,862)
Net (income) loss attributable to redeemable noncontrolling interests			(113,544)	(113,544)
Dividends on preference shares			(7,289)	(7,289)
Net income (loss) available (attributable) to RenaissanceRe common shareholders				$ 456,818
Net claims and claim expenses incurred – current accident year	$ 148,133	$ 423,917	$ —	$ 572,050
Net claims and claim expenses incurred – prior accident years	(50,983)	(1,046)	—	(52,029)
Net claims and claim expenses incurred – total	$ 97,150	$ 422,871	$ —	$ 520,021
Net claims and claim expense ratio – current accident year	26.4 %	67.0 %		48.0 %
Net claims and claim expense ratio – prior accident years	(9.1)%	(0.1)%		(4.4)%
Net claims and claim expense ratio – calendar year	17.3 %	66.9 %		43.6 %
Underwriting expense ratio	26.5 %	30.9 %		28.8 %
Combined ratio	43.8 %	97.8 %		72.4 %

Six months ended June 30, 2021	Property	Casualty and Specialty	Other	Total
Gross premiums written	$ 2,800,375	$ 1,946,225	$ —	$ 4,746,600
Net premiums written	$ 1,811,795	$ 1,524,580	$ —	$ 3,336,375
Net premiums earned	$ 1,165,563	$ 1,181,063	$ —	$ 2,346,626
Net claims and claim expenses incurred	595,982	791,090	—	1,387,072
Acquisition expenses	221,992	330,832	—	552,824
Operational expenses	74,262	39,252	—	113,514
Underwriting income (loss)	$ 273,327	$ 19,889	$ —	293,216
Net investment income			160,729	160,729
Net foreign exchange gain (loss)			(19,554)	(19,554)
Equity in earnings of other ventures			3,174	3,174
Other income (loss)			2,757	2,757
Net realized and unrealized gain (loss) on investments			(154,545)	(154,545)
Corporate expenses			(20,530)	(20,530)
Interest expense			(23,745)	(23,745)
Income (loss) before taxes and redeemable noncontrolling interests				241,502
Income tax benefit (expense)			5,654	5,654
Net (income) loss attributable to redeemable noncontrolling interests			(66,694)	(66,694)
Dividends on preference shares			(14,578)	(14,578)
Net income (loss) available (attributable) to RenaissanceRe common shareholders				$ 165,884
Net claims and claim expenses incurred – current accident year	$ 652,127	$ 796,006	$ —	$ 1,448,133
Net claims and claim expenses incurred – prior accident years	(56,145)	(4,916)	—	(61,061)
Net claims and claim expenses incurred – total	$ 595,982	$ 791,090	$ —	$ 1,387,072
Net claims and claim expense ratio – current accident year	55.9 %	67.4 %		61.7 %
Net claims and claim expense ratio – prior accident years	(4.8)%	(0.4)%		(2.6)%
Net claims and claim expense ratio – calendar year	51.1 %	67.0 %		59.1 %
Underwriting expense ratio	25.4 %	31.3 %		28.4 %
Combined ratio	76.5 %	98.3 %		87.5 %

NOTE 13. DERIVATIVE INSTRUMENTS

From time to time, the Company may enter into derivative instruments such as futures, options, swaps, forward contracts and other derivative contracts primarily to manage its foreign currency exposure, obtain exposure to a particular financial market, for yield enhancement, or for trading and to assume risk. The Company’s derivative instruments can be exchange traded or over-the-counter, with over-the-counter derivatives generally traded under International Swaps and Derivatives Association master agreements, which establish the terms of the transactions entered into with the Company’s derivative counterparties. In the event a party becomes insolvent or otherwise defaults on its obligations, a master agreement generally permits the non-defaulting party to accelerate and terminate all outstanding transactions and net the transactions’ marked-to-market values so that a single sum in a single currency will be owed by, or owed to, the non-defaulting party. Effectively, this contractual close-out netting reduces credit exposure from gross to net exposure. Where the Company has entered into master netting agreements with counterparties, or the Company has the legal and contractual right to offset positions, the derivative positions are generally netted by counterparty and are reported accordingly in other assets and other liabilities.

The Company is not aware of the existence of any credit-risk related contingent features that it believes would be triggered in its derivative instruments that are in a net liability position at June 30, 2022.

The tables below show the gross and net amounts of recognized derivative assets and liabilities at fair value, including the location on the consolidated balance sheets of the Company’s principal derivative instruments:

At June 30, 2022	Derivative Assets: Gross Amounts of Recognized Assets	Gross Amounts Offset in the Balance Sheet	Net Amounts of Assets Presented in the Balance Sheet	Balance Sheet Location	Collateral Received	Net Amount
Derivative instruments not designated as hedges						
Interest rate futures	$ 9,164	$ —	$ 9,164	Other assets	$ —	$ 9,164
Foreign currency forward contracts [(1)]	16,810	—	16,810	Other assets	—	16,810
Foreign currency forward contracts [(2)]	3,299	—	3,299	Other assets	—	3,299
Foreign currency option contracts	22	—	22	Other assets	—	22
Credit default swaps	5	—	5	Other assets	—	5
Total derivative instruments not designated as hedges	29,300	—	29,300		—	29,300
Derivative instruments designated as hedges						
Foreign currency forward contracts [(3)]	1,420	—	1,420	Other assets	—	1,420
Total	$ 30,720	$ —	$ 30,720		$ —	$ 30,720

At June 30, 2022	Derivative Liabilities: Gross Amounts of Recognized Liabilities	Gross Amounts Offset in the Balance Sheet	Net Amounts of Liabilities Presented in the Balance Sheet	Balance Sheet Location	Collateral Pledged	Net Amount
Derivative instruments not designated as hedges						
Interest rate futures	$ 4,119	$ —	$ 4,119	Other liabilities	$ 3,948	$ 171
Foreign currency forward contracts [(1)]	13,120	—	13,120	Other liabilities	—	13,120
Foreign currency forward contracts [(2)]	3,647	—	3,647	Other liabilities	—	3,647
Foreign currency option contracts	230	—	230	Other liabilities	—	230
Credit default swaps	6	—	6	Other assets	6	—
Equity futures	2,754	—	2,754	Other liabilities	2,754	—
Total	$ 23,876	$ —	$ 23,876		$ 6,708	$ 17,168

(1) Contracts used to manage foreign currency risks in underwriting and non-investment operations.

(2) Contracts used to manage foreign currency risks in investment operations.

(3) Contracts designated as hedges of net investments in foreign operations.

At December 31, 2021	Derivative Assets					
	Gross Amounts of Recognized Assets	Gross Amounts Offset in the Balance Sheet	Net Amounts of Assets Presented in the Balance Sheet	Balance Sheet Location	Collateral Received	Net Amount
Derivative instruments not designated as hedges						
Interest rate futures	$ 1,068	$ —	$ 1,068	Other assets	$ —	$ 1,068
Foreign currency forward contracts (1)	13,730	—	13,730	Other assets	—	13,730
Foreign currency forward contracts (2)	1,247	—	1,247	Other assets	—	1,247
Credit default swaps	478	—	478	Other assets	—	478
Total derivative instruments not designated as hedges	16,523	—	16,523		—	16,523
Derivative instruments designated as hedges						
Foreign currency forward contracts (3)	1,366	—	1,366	Other assets	—	1,366
Total	$ 17,889	$ —	$ 17,889		$ —	$ 17,889

At December 31, 2021	Derivative Liabilities					
	Gross Amounts of Recognized Liabilities	Gross Amounts Offset in the Balance Sheet	Net Amounts of Liabilities Presented in the Balance Sheet	Balance Sheet Location	Collateral Pledged	Net Amount
Derivative instruments not designated as hedges						
Interest rate futures	$ 1,426	$ —	$ 1,426	Other liabilities	$ 1,426	$ —
Foreign currency forward contracts (1)	7,880	—	7,880	Other liabilities	—	7,880
Foreign currency forward contracts (2)	3,412	—	3,412	Other liabilities	—	3,412
Equity futures	173	—	173	Other liabilities	173	—
Total derivative instruments not designated as hedges	12,891	—	12,891		1,599	11,292
Derivative instruments designated as hedges						
Foreign currency forward contracts (3)	4,063	—	4,063	Other liabilities	—	4,063
Total	$ 16,954	$ —	$ 16,954		$ 1,599	$ 15,355

(1) Contracts used to manage foreign currency risks in underwriting and non-investment operations.

(2) Contracts used to manage foreign currency risks in investment operations.

(3) Contracts designated as hedges of net investments in foreign operations.

The location and amount of the gain (loss) recognized in the Company’s consolidated statements of operations related to its principal derivative instruments are shown in the following table:

Three months ended June 30	Location of gain (loss) recognized on derivatives	Amount of gain (loss) recognized on derivatives 2022	2021
Derivative instruments not designated as hedges			
Interest rate futures (4)	Net realized and unrealized gains (losses) on investments	$ (14,699)	$ (11,295)
Interest rate swaps (4)	Net realized and unrealized gains (losses) on investments	—	(78)
Foreign currency forward contracts (1)	Net foreign exchange gains (losses)	(51,834)	240
Foreign currency forward contracts (2)	Net foreign exchange gains (losses)	10,062	(1,840)
Foreign currency option contracts	Net foreign exchange gains (losses)	(225)	—
Credit default swaps (4)	Net realized and unrealized gains (losses) on investments	(2,337)	1,169
Total return swaps (4)	Net realized and unrealized gains (losses) on investments	—	875
Equity futures (5)	Net realized and unrealized gains (losses) on investments	(49,042)	—
Total derivative instruments not designated as hedges		(108,075)	(10,929)
Derivative instruments designated as hedges			
Foreign currency forward contracts (3)	Accumulated other comprehensive income (loss)	7,321	2,437
Total		$ (100,754)	$ (8,492)

Six months ended June 30	Location of gain (loss) recognized on derivatives	Amount of gain (loss) recognized on derivatives 2022	2021
Derivative instruments not designated as hedges			
Interest rate futures	Net realized and unrealized gains (losses) on investments	$ (43,486)	$ 4,212
Interest rate swaps	Net realized and unrealized gains (losses) on investments	—	(979)
Foreign currency forward contracts (1)	Net foreign exchange gains (losses)	(72,757)	(3,401)
Foreign currency forward contracts (2)	Net foreign exchange gains (losses)	8,171	(6,901)
Foreign currency option contracts	Net foreign exchange gains (losses)	(444)	—
Credit default swaps	Net realized and unrealized gains (losses) on investments	(6,474)	1,424
Total return swaps	Net realized and unrealized gains (losses) on investments	—	875
Equity futures	Net realized and unrealized gains (losses) on investments	(56,406)	—
Total derivative instruments not designated as hedges		(171,396)	(4,770)
Derivative instruments designated as hedges			
Foreign currency forward contracts (3)	Accumulated other comprehensive income (loss)	4,294	348
Total		$ (167,102)	$ (4,422)

(1) Contracts used to manage foreign currency risks in underwriting and non-investment operations.

(2) Contracts used to manage foreign currency risks in investment operations.

(3) Contracts designated as hedges of net investments in foreign operations.

(4) Fixed income related derivatives included in net realized and unrealized gains (losses) on investment-related derivatives. See “Note 3. Investments” for additional information.

(5) Equity related derivatives included in net realized and unrealized gains (losses) on investment-related derivatives. See “Note 3. Investments” for additional information.

Derivative Instruments Not Designated as Hedges

Interest Rate Derivatives

The Company uses interest rate futures and swaps within its portfolio of fixed maturity investments to manage its exposure to interest rate risk, which may result in increasing or decreasing its exposure to this risk.

Interest Rate Futures

The fair value of interest rate futures is determined using exchange traded prices. At June 30, 2022, the Company had $1.6 billion of notional long positions and $0.6 billion of notional short positions of primarily Eurodollar and U.S. treasury futures contracts (December 31, 2021 - $2.2 billion and $0.5 billion, respectively).

Interest Rate Swaps

The fair value of interest rate swaps is determined using the relevant exchange traded price where available or a discounted cash flow model based on the terms of the contract and inputs, including, where applicable, observable yield curves. At June 30, 2022 and December 31, 2021, the Company had no outstanding total return swaps.

Foreign Currency Derivatives

The Company’s functional currency is the U.S. dollar. The Company writes a portion of its business in currencies other than U.S. dollars and may, from time to time, experience foreign exchange gains and losses in the Company’s consolidated financial statements. The impact of changes in exchange rates on the Company’s assets and liabilities denominated in currencies other than the U.S. dollar, excluding non-monetary assets and liabilities, are recognized in the Company’s consolidated statements of operations.

Underwriting and Non-investments Operations Related Foreign Currency Contracts

The Company’s foreign currency policy with regard to its underwriting operations is generally to enter into foreign currency forward and option contracts for notional values that approximate the foreign currency liabilities, including claims and claim expense reserves and reinsurance balances payable, net of any cash, investments and receivables held in the respective foreign currency. The Company’s use of foreign currency forward and option contracts is intended to minimize the effect of fluctuating foreign currencies on the value of non-U.S. dollar denominated assets and liabilities associated with its underwriting operations. The Company may determine not to match a portion of its projected underwriting related assets or liabilities with underlying foreign currency exposure with investments in the same currencies, which would increase its exposure to foreign currency fluctuations and potentially increase the impact and volatility of foreign exchange gains and losses on its results of operations. The fair value of the Company’s underwriting operations related foreign currency contracts is determined using indicative pricing obtained from counterparties or broker quotes. The fair value of the Company’s foreign currency option contracts is determined using market-based prices from pricing vendors.

At June 30, 2022, the Company had outstanding underwriting related foreign currency forward contracts of $1.1 billion in notional long positions and $727.5 million in notional short positions, denominated in U.S. dollars (December 31, 2021 - $915.0 million and $329.3 million, respectively).

At June 30, 2022, the Company had $34.6 million of notional long positions in foreign currency option contracts, denominated in U.S. dollars (December 31, 2021 – $Nil).

Investment Portfolio Related Foreign Currency Forward Contracts

The Company's investment operations are exposed to currency fluctuations through its investments in non-U.S. dollar fixed maturity investments, short term investments and other investments. From time to time, the Company may employ foreign currency forward contracts in its investment portfolio to either assume foreign currency risk or to economically hedge its exposure to currency fluctuations from these investments. The fair value of the Company's investment portfolio related foreign currency forward contracts is determined using an interpolated rate based on closing forward market rates. At June 30, 2022, the Company had outstanding investment portfolio related foreign currency contracts of $232.4 million in notional long positions and $87.3 million in notional short positions, denominated in U.S. dollars (December 31, 2021 - $245.8 million and $131.0 million, respectively).

Credit Derivatives

The Company's exposure to credit risk is primarily due to its fixed maturity investments, short term investments, premiums receivable and reinsurance recoverable. From time to time, the Company may purchase credit derivatives to manage its exposures in the insurance industry, and to assist in managing the credit risk associated with ceded reinsurance. The Company also employs credit derivatives in its investment portfolio to either assume credit risk or manage its credit exposure.

Credit Default Swaps

The fair value of the Company's credit default swaps is determined using industry valuation models, broker bid indications or internal pricing valuation techniques. The fair value of these credit default swaps can change based on a variety of factors including changes in credit spreads, default rates and recovery rates, the correlation of credit risk between the referenced credit and the counterparty, and market rate inputs such as interest rates. At June 30, 2022, the Company had outstanding credit default swaps of $3.4 million in notional positions to hedge credit risk and $2.7 million in notional positions to assume credit risk, denominated in U.S. dollars (December 31, 2021 - $Nil and $218.5 million, respectively).

Total Return Swaps

From time to time, the Company uses total return swaps as a means to manage spread duration and credit exposure in its investment portfolio. The fair value of the Company's total return swaps is determined using broker-dealer bid quotations, market-based prices from pricing vendors or valuation models. At June 30, 2022 and December 31, 2021, the Company had no outstanding total return swaps.

Equity Derivatives

Equity Futures

From time to time, the Company uses equity derivatives in its investment portfolio to either assume equity risk or hedge its equity exposure. The fair value of the Company's equity futures is determined using market-based prices from pricing vendors. At June 30, 2022, the Company had a $328.7 million notional long position of equity futures, denominated in U.S. dollars (December 31, 2021 - $74.3 million).

Derivative Instruments Designated as Hedges of Net Investments in Foreign Operations

Foreign Currency Derivatives

Hedges of Net Investments in Foreign Operations

Certain of the Company's subsidiaries use non-U.S. dollar functional currencies. The Company, from time to time, enters into foreign exchange forwards to hedge currencies, which includes hedges of net investments in foreign operations, on an after-tax basis, from changes in the exchange rate between the U.S. dollar and these currencies. These currencies included the Australian dollar as of June 30, 2022, and both the Australian dollar and Euro as of June 30, 2021.

The Company utilizes foreign exchange forward contracts to hedge the fair value of its net investment in a foreign operation. The Company has entered into foreign exchange forward contracts that were formally designated as hedges of its investment in subsidiaries with non-U.S. dollar functional currencies. There was no ineffectiveness in these transactions.

The table below provides a summary of derivative instruments designated as hedges of net investments in foreign operations, including the weighted average U.S. dollar equivalent of foreign denominated net (liabilities) assets that were hedged and the resulting derivative gains (losses) that are recorded in foreign currency translation adjustments, net of tax, within accumulated other comprehensive income (loss) on the Company's consolidated statements of changes in shareholders' equity:

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Weighted average of U.S. dollar equivalent of foreign denominated net assets (liabilities)	$ 79,933	$ 58,876	$ 83,769	$ (48,790)
Derivative gains (losses) [(1)]	$ 7,321	$ 2,437	$ 4,294	$ 348

(1) Derivative gains (losses) from derivative instruments designated as hedges of the net investment in a foreign operation are recorded in foreign currency translation adjustments, net of tax, within accumulated other comprehensive income (loss) on the Company's consolidated statements of changes in shareholders' equity.

NOTE 14. COMMITMENTS, CONTINGENCIES AND OTHER ITEMS

There are no material changes from the commitments, contingencies and other items previously disclosed in the Company's Form 10-K for the year ended December 31, 2021.

Legal Proceedings

The Company and its subsidiaries are subject to lawsuits and regulatory actions in the normal course of business that do not arise from or directly relate to claims on reinsurance treaties or contracts or direct surplus lines insurance policies. In the Company's industry, business litigation may involve allegations of underwriting or claims-handling errors or misconduct, disputes relating to the scope of, or compliance with, the terms of delegated underwriting agreements, employment claims, regulatory actions or disputes arising from the Company's business ventures. The Company's operating subsidiaries are subject to claims litigation involving, among other things, disputed interpretations of policy coverages. Generally, the Company's direct surplus lines insurance operations are subject to greater frequency and diversity of claims and claims-related litigation than its reinsurance operations and, in some jurisdictions, may be subject to direct actions by allegedly injured persons or entities seeking damages from policyholders. These lawsuits, involving or arising out of claims on policies issued by the Company's subsidiaries which are typical to the insurance industry in general and in the normal course of business, are considered in its loss and loss expense reserves. In addition, the Company may from time to time engage in litigation or arbitration related to its claims for payment in respect of ceded reinsurance, including disputes that challenge the Company's ability to enforce its underwriting intent. Such matters could result, directly or indirectly, in providers of protection not meeting their obligations to the Company or not doing so on a timely basis. The Company may also be subject to other disputes from time to time, relating to operational or other matters distinct from insurance or reinsurance claims. Any litigation or arbitration, or regulatory process contains an element of uncertainty, and the value of an exposure or a gain contingency related to a dispute is difficult to estimate. The Company believes that no individual litigation or arbitration to which it is presently a party is likely to have a material adverse effect on its financial condition, business or operations.

NOTE 15. SUBSEQUENT EVENTS

Effective July 1, 2022, the Company sold an aggregate of $75.0 million shares in DaVinciRe to a third-party investor. This amount was received in advance, and is included in other liabilities on the Company's consolidated balance sheet, and also included in other operating cash flows on the Company's consolidated statements of cash flows for the quarter ended June 30, 2022. The Company's noncontrolling economic ownership in DaVinciRe subsequent to this transaction was 30.9%.

Subsequent to June 30, 2022 and through the period ended July 22, 2022, the Company repurchased 175.7 thousand common shares at an aggregate cost of $25.3 million and an average price of $144.07 per common share.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following is a discussion and analysis of our results of operations for the three and six months ended June 30, 2022 and 2021, as well as our liquidity and capital resources at June 30, 2022. This discussion and analysis should be read in conjunction with the unaudited consolidated financial statements and notes thereto included in this filing and the audited consolidated financial statements and notes thereto contained in our Form 10-K for the fiscal year ended December 31, 2021. This filing contains forward-looking statements that involve risks and uncertainties. Actual results may differ materially from the results described or implied by these forward-looking statements. See "Note on Forward-Looking Statements."

In this Form 10-Q, references to "RenaissanceRe" refer to RenaissanceRe Holdings Ltd. (the parent company) and references to "we," "us," "our" and the "Company" refer to RenaissanceRe Holdings Ltd. together with its subsidiaries, unless the context requires otherwise. Defined terms used throughout this Form 10-Q are included in the "Glossary of Defined Terms" at the beginning of this Form 10-Q.

All dollar amounts referred to in this Form 10-Q are in U.S. dollars unless otherwise indicated.

Due to rounding, numbers presented in the tables included in this Form 10-Q may not add up precisely to the totals provided.

INDEX TO MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

RenaissanceRe is a global provider of reinsurance and insurance. We provide property, casualty and specialty reinsurance and certain insurance solutions to customers, principally through intermediaries. Established in 1993, we have offices in Bermuda, Australia, Ireland, Singapore, Switzerland, the U.K., and the U.S. To best serve our clients in the places they do business, we have operating subsidiaries, branches, joint ventures, managed funds and underwriting platforms around the world. Our operating subsidiaries include Renaissance Reinsurance, Renaissance Reinsurance U.S., RenaissanceRe Specialty U.S., RREAG, Renaissance Reinsurance of Europe and our Lloyd’s syndicate, Syndicate 1458. We write property and casualty and specialty reinsurance through our wholly-owned operating subsidiaries, joint ventures, managed funds and Syndicate 1458 and certain insurance products primarily through Syndicate 1458 and RenaissanceRe Specialty U.S. Syndicate 1458 provides us with access to Lloyd’s extensive distribution network and worldwide licenses, and also writes business through delegated authority arrangements. We also underwrite reinsurance on behalf of joint ventures, including DaVinci, Fontana, Top Layer Re, Upsilon RFO and Vermeer. In addition, through Medici, we invest in various insurance-based investment instruments that have returns primarily tied to property catastrophe risk.

Our mission is to match desirable, well-structured risks with efficient sources of capital to achieve our vision of being the best underwriter. We believe that this will allow us to produce superior returns for our shareholders over the long term, and to further our purpose of protecting communities and enabling prosperity. We seek to accomplish these goals by being a trusted, long-term partner to our customers for assessing and managing risk, delivering responsive and innovative solutions, leveraging our core capabilities of risk assessment and information management, investing in these core capabilities in order to serve our customers across market cycles, and keeping our promises. Our strategy focuses on superior risk selection, superior customer relationships and superior capital management. We provide value to our customers and joint venture and managed fund partners in the form of financial security, innovative products, and responsive service. We are known as a leader in paying valid claims promptly. We principally measure our financial success through long-term growth in tangible book value per common share plus the change in accumulated dividends. We believe this metric is the most appropriate measure of our financial performance, and in respect of which we believe we have delivered superior performance over time. The principal drivers of our profit are underwriting income, investment income, and fee income generated by our third-party capital management business.

Our core products include property, casualty and specialty reinsurance, and certain insurance products principally distributed through intermediaries, with whom we have cultivated strong long-term relationships. We believe we have been one of the world’s leading providers of catastrophe reinsurance since our founding. Through the strategic execution of several initiatives, including organic growth and acquisitions, we have expanded and diversified our casualty and specialty platform and products, and believe we are a leader in certain casualty and specialty lines of business.

Our current business strategy focuses predominantly on writing reinsurance, although as we grow our casualty and specialty and other property lines of business, we are increasingly writing excess and surplus lines insurance through delegated authority arrangements. We also pursue a number of other opportunities, such as creating and managing our joint ventures and managed funds, executing customized reinsurance transactions to assume or cede risk, and managing certain strategic investments directed at classes of risk other than catastrophe reinsurance. From time to time we consider diversification into new ventures, either through organic growth, the formation of new joint ventures or managed funds, or the acquisition of, or the investment in, other companies or books of business of other companies.

We have determined our business consists of the following reportable segments: (1) Property, which is comprised of catastrophe and other property (re)insurance written on behalf of our operating subsidiaries, joint ventures and managed funds, and (2) Casualty and Specialty, which is comprised of casualty and specialty (re)insurance written on behalf of our operating subsidiaries, joint ventures and managed funds. In addition to our two reportable segments, we have an Other category, which primarily includes our strategic investments, investments unit, corporate expenses, capital servicing costs, noncontrolling interests and certain expenses related to acquisitions and disposals. The underwriting results of our operating subsidiaries and underwriting platforms are included in our Property and Casualty and Specialty segment results as appropriate.

A meaningful portion of the reinsurance and insurance we write provides protection from damages relating to natural and man-made catastrophes. Our results depend to a large extent on the frequency and severity of these catastrophic events, and the coverages we offer to customers that are affected by these events. We are exposed to significant losses from these catastrophic events and other exposures we cover, which primarily impact our Property segment, in both the property catastrophe and other property lines of business. Accordingly, we expect a significant degree of volatility in our financial results and our financial results may vary significantly from quarter-to-quarter and from year-to-year, based on the level of insured catastrophic losses occurring around the world. Our Casualty and Specialty business, which represents approximately half of our gross premiums written annually, is an efficient use of capital that is generally less correlated with our Property business. It allows us to bring additional capacity to our clients, across a wider range of product offerings, while continuing to be good stewards of our shareholders’ capital.

We continually explore appropriate and efficient ways to address the risk needs of our clients and the impact of various regulatory and legislative changes on our operations. We have created and manage multiple capital vehicles across several jurisdictions and may create additional risk bearing vehicles or enter into additional jurisdictions in the future. In addition, our differentiated strategy and capabilities position us to pursue bespoke or large solutions for clients, which may be non-recurring. This, and other factors including the timing of contract inception, could result in significant volatility of premiums in both our Property and Casualty and Specialty segments.

Our revenues are principally derived from three sources: (1) net premiums earned from the reinsurance and insurance policies we sell; (2) net investment income and net realized and unrealized gains from the investment of our capital funds and the investment of the cash we receive on the policies which we sell; and (3) fees received from our joint ventures, managed funds, and structured reinsurance products, which are primarily reflected in redeemable non-controlling interest or as an offset to acquisition or operating expenses.

Our expenses primarily consist of: (1) net claims and claim expenses incurred on the policies of reinsurance and insurance we sell; (2) acquisition costs, which typically represent a percentage of the premiums we write; (3) operating expenses, which primarily consist of personnel expenses, rent and other expenses; (4) corporate expenses, which include certain executive, legal and consulting expenses, costs for research and development, transaction and integration-related expenses, and other miscellaneous costs, including those associated with operating as a publicly traded company; (5) redeemable noncontrolling interests, which represent the interests of third parties with respect to the net income of DaVinciRe, Medici and Vermeer; and (6) interest and dividends related to our debt and preference shares. We are also subject to taxes in certain jurisdictions in which we operate. Since the majority of our income is currently earned in Bermuda, which does not have a corporate income tax, the tax impact to our operations has historically been minimal.

The underwriting results of an insurance or reinsurance company are discussed frequently by reference to its net claims and claim expense ratio, underwriting expense ratio, and combined ratio. The net claims and claim expense ratio is calculated by dividing net claims and claim expenses incurred by net premiums earned. The underwriting expense ratio is calculated by dividing underwriting expenses (acquisition expenses and operational expenses) by net premiums earned. The combined ratio is the sum of the net claims and claim expense ratio and the underwriting expense ratio. A combined ratio below 100% indicates profitable underwriting prior to the consideration of investment income. A combined ratio over 100% indicates unprofitable underwriting prior to the consideration of investment income. We also discuss our net claims and claim expense ratio on a current accident year basis and a prior accident years basis. The current accident year net claims and claim expense ratio is calculated by taking current accident year net claims and claim expenses incurred, divided by net premiums earned. The prior accident years net claims and claim expense ratio is calculated by taking prior accident years net claims and claim expenses incurred, divided by net premiums earned.

Effects of Inflation

General economic inflation has increased and there is a risk of inflation remaining elevated for an extended period, which could cause claims and claim expenses to increase, impact the performance of our investment portfolio or have other adverse effects. This risk may be exacerbated by the steps taken by governments and central banks throughout the world in responding to the COVID-19 pandemic, the impact from the war in Ukraine and global supply chain issues. More recently, many central banks have begun to raise interest rates, which could act as a countervailing force against some inflationary pressures. The actual effects of the current and potential future increase in inflation on our results cannot be accurately known until, among other items, claims are ultimately settled. The onset, duration and severity of an inflationary period cannot be estimated with precision. We consider the anticipated effects of inflation on us in our catastrophe loss models and on our investment portfolio. Our estimates of the potential effects of inflation are also considered in pricing and in estimating reserves for unpaid claims and claim expenses. The potential exists, after a catastrophe loss, for the development of inflationary pressures in a local economy.

COVID-19 Pandemic

Due to the ongoing nature of the COVID-19 pandemic, we are continuing to evaluate its impact on our business, operations and financial condition, including our potential loss exposures. We continue to expect historically significant industry losses to emerge over time as the full impact of the pandemic and its effects on the global economy are realized.

SUMMARY OF CRITICAL ACCOUNTING ESTIMATES

Our critical accounting estimates include “Claims and Claim Expense Reserves,” “Premiums and Related Expenses,” “Reinsurance Recoverables,” “Fair Value Measurements and Impairments” and “Income Taxes,” and are discussed in Management’s Discussion and Analysis of Financial Condition and Results of Operations in our Form 10-K for the year ended December 31, 2021. There have been no material changes to our critical accounting estimates as disclosed in our Form 10-K for the year ended December 31, 2021.

SUMMARY OF RESULTS OF OPERATIONS

Below is a discussion of the results of operations for the second quarter of 2022, compared to the second quarter of 2021.

Three months ended June 30 (in thousands, except per share amounts and percentages)	2022	2021	Change
Statement of operations highlights			
Gross premiums written	$ 2,464,639	$ 2,094,158	$ 370,481
Net premiums written	$ 1,863,616	$ 1,512,292	$ 351,324
Net premiums earned	$ 1,456,383	$ 1,192,790	$ 263,593
Net claims and claim expenses incurred	706,239	520,021	186,218
Acquisition expenses	361,238	285,590	75,648
Operational expenses	72,520	58,203	14,317
Underwriting income (loss)	$ 316,386	$ 328,976	$ (12,590)
Net investment income	$ 107,211	$ 80,925	$ 26,286
Net realized and unrealized gains (losses) on investments	(654,107)	191,018	(845,125)
Total investment result	$ (546,896)	$ 271,943	$ (818,839)
Net income (loss)	$ (266,738)	$ 577,651	$ (844,389)
Net income (loss) available (attributable) to RenaissanceRe common shareholders	$ (324,913)	$ 456,818	$ (781,731)
Net income (loss) available (attributable) to RenaissanceRe common shareholders per common share – diluted	$ (7.53)	$ 9.35	$ (16.88)
Dividends per common share	$ 0.37	$ 0.36	$ 0.01
Key ratios			
Net claims and claim expense ratio – current accident year	51.4 %	48.0 %	3.4 %
Net claims and claim expense ratio – prior accident years	(2.9)%	(4.4)%	1.5 %
Net claims and claim expense ratio – calendar year	48.5 %	43.6 %	4.9 %
Underwriting expense ratio	29.8 %	28.8 %	1.0 %
Combined ratio	78.3 %	72.4 %	5.9 %
Return on average common equity - annualized	(25.1)%	27.6 %	(52.7)%
Book value	June 30, 2022	March 31, 2022	Change
Book value per common share	$ 113.69	$ 121.44	$ (7.75)
Accumulated dividends per common share	24.26	23.89	0.37
Book value per common share plus accumulated dividends	$ 137.95	$ 145.33	$ (7.38)
Change in book value per common share plus change in accumulated dividends	(6.1)%		

Net loss attributable to RenaissanceRe common shareholders was $324.9 million in the second quarter of 2022, compared to net income available to RenaissanceRe common shareholders of $456.8 million in the second quarter of 2021, a decrease of $781.7 million. As a result of our net loss attributable to RenaissanceRe common shareholders in the second quarter of 2022, we generated an annualized return on average common equity of negative 25.1% and our book value per common share decreased from $121.44 at March 31, 2022 to $113.69 at June 30, 2022, a 6.1% decrease, after considering the change in accumulated dividends paid to our common shareholders.

The most significant items affecting our financial performance during the second quarter of 2022, on a comparative basis to the second quarter of 2021, include:

- *Investment Results* - our total investment result, which includes the sum of net investment income and net realized and unrealized gains (losses) on investments, was a loss of $546.9 million in the second quarter of 2022, compared to a gain of $271.9 million in the second quarter of 2021. The primary driver of the lower total investment result in the second quarter of 2022 was net realized and unrealized losses on investments of $654.1 million, principally within our fixed maturity and equity investments trading portfolios. The investment result in the second quarter of 2021 was impacted by net realized and unrealized gains on investments of $191.0 million, principally within our fixed maturity and equity investments trading portfolios and other investments;
- *Underwriting Results* - we generated underwriting income of $316.4 million and had a combined ratio of 78.3% in the second quarter of 2022, compared to underwriting income of $329.0 million and a combined ratio of 72.4% in the second quarter of 2021. Our underwriting income in the second quarter of 2022 was comprised of our Property segment, which generated underwriting income of $264.5 million and had a combined ratio of 57.6%, and our Casualty and Specialty segment, which generated underwriting income of $51.9 million and had a combined ratio of 93.8%. In comparison, our underwriting income in the second quarter of 2021 was comprised of our Property segment, which generated underwriting income of $315.1 million, and our Casualty and Specialty segment, which generated underwriting income of $13.9 million;
- *Gross Premiums Written* - our gross premiums written increased by $370.5 million, or 17.7%, to $2.5 billion, in the second quarter of 2022, compared to the second quarter of 2021. This was comprised of an increase of $335.7 million in our Casualty and Specialty segment and an increase of $34.8 million in our Property segment; and
- *Net Income Attributable to Redeemable Noncontrolling Interests* - our net income attributable to redeemable noncontrolling interests was $49.3 million in the second quarter of 2022, compared to $113.5 million in the second quarter of 2021.
- *Net foreign exchange gains (losses)* - our net foreign exchange losses were $50.8 million in the second quarter of 2022, compared to net foreign exchange gains of $3.2 million in the second quarter of 2021.

Underwriting Results by Segment

Property Segment

Below is a summary of the underwriting results and ratios for our Property segment:

Three months ended June 30 (in thousands, except percentages)	2022	2021	Change
Gross premiums written	$ 1,218,321	$ 1,183,556	$ 34,765
Net premiums written	$ 887,975	$ 803,335	$ 84,640
Net premiums earned	$ 623,581	$ 560,397	$ 63,184
Net claims and claim expenses incurred	171,924	97,150	74,774
Acquisition expenses	137,567	109,238	28,329
Operational expenses	49,627	38,887	10,740
Underwriting income (loss)	$ 264,463	$ 315,122	$ (50,659)
Net claims and claim expenses incurred – current accident year	$ 206,976	$ 148,133	$ 58,843
Net claims and claim expenses incurred – prior accident years	(35,052)	(50,983)	15,931
Net claims and claim expenses incurred – total	$ 171,924	$ 97,150	$ 74,774
Net claims and claim expense ratio – current accident year	33.2 %	26.4 %	6.8 %
Net claims and claim expense ratio – prior accident years	(5.6)%	(9.1)%	3.5 %
Net claims and claim expense ratio – calendar year	27.6 %	17.3 %	10.3 %
Underwriting expense ratio	30.0 %	26.5 %	3.5 %
Combined ratio	57.6 %	43.8 %	13.8 %

Property Gross Premiums Written

In the second quarter of 2022, our Property segment gross premiums written increased by $34.8 million, or 2.9%, to $1.2 billion, compared to the second quarter of 2021.

Gross premiums written in the catastrophe class of business were $803.3 million in the second quarter of 2022, an increase of $42.0 million, or 5.5%, compared to the second quarter of 2021. The increase in gross premiums written in the catastrophe class of business in the second quarter of 2022 was primarily driven by rate improvements, combined with new opportunities across underwriting platforms.

Gross premiums written in the other property class of business were $415.0 million in the second quarter of 2022, a decrease of $7.2 million, or 1.7%, compared to the second quarter of 2021. The decrease in gross premiums written in the other property class of business was principally due to the non-renewal of deals that did not meet our return hurdles, partially offset by growth and rate improvement across other areas of business.

Property Ceded Premiums Written

Three months ended June 30 (in thousands)	2022	2021	Change
Ceded premiums written	$ 330,346	$ 380,221	$ (49,875)

Ceded premiums written in our Property segment were $330.3 million in the second quarter of 2022, a decrease of $49.9 million, or 13.1%, compared to the second quarter of 2021. The decrease in ceded premiums written was driven by lower levels of retrocessional purchases as a part of our gross-to-net strategy, in conjunction with the growth in our managed third-party capital vehicles.

Property Net Premiums Written

Three months ended June 30 (in thousands)	2022	2021	Change
Net premiums written	$ 887,975	$ 803,335	$ 84,640

Net premiums written in our Property segment were $888.0 million in the second quarter of 2022, an increase of $84.6 million, or 10.5%, compared to the second quarter of 2021. This increase was driven by the increase in gross premiums written, as well as a reduction in ceded premiums written of $49.9 million due to lower levels of retrocessional purchases as a part of our gross-to-net strategy.

Property Underwriting Results

Our Property segment generated underwriting income of $264.5 million in the second quarter of 2022, compared to underwriting income of $315.1 million in the second quarter of 2021. In the second quarter of 2022, our Property segment generated a net claims and claim expense ratio of 27.6%, an underwriting expense ratio of 30.0% and a combined ratio of 57.6%, compared to 17.3%, 26.5% and 43.8%, respectively, in the second quarter of 2021.

The net claims and claim expense ratio of 27.6% reflects the relatively low level of catastrophe activity in the quarter and is comprised of a current accident year net claims and claim expense ratio of 33.2% and 5.6 percentage points of prior accident year net favorable development. In comparison, the second quarter of 2021 had a net claims and claim expense ratio of 17.3%, comprised of a current accident year net claims and claim expense ratio of 26.4% and 9.1 percentage points of prior accident year net favorable development. The increase of 10.3 percentage points in the net claims and claim expense ratio is primarily a result of the continued impact of the other property class of business on the segment, which has a higher attritional loss ratio than the catastrophe class of business, slightly higher current accident year catastrophe activity and a lower level of prior accident year net favorable development when compared to the second quarter of 2021.

The underwriting expense ratio increased 3.5 percentage points, driven by the increased impact of the other property class on the segment, which generally has a higher expense ratio than the catastrophe class of business, as well as the reduced benefit to the ratio due to lower management fee income driven by the reduced size of our structured reinsurance products and lower capital managed at Upsilon Fund.

See “Note 6. Reserve for Claims and Claim Expenses” in our “Notes to the Consolidated Financial Statements” for additional information related to the development of prior accident years net claims and claim expenses.

Casualty and Specialty Segment

Below is a summary of the underwriting results and ratios for our Casualty and Specialty segment:

Three months ended June 30 (in thousands, except percentages)	2022	2021	Change
Gross premiums written	$ 1,246,318	$ 910,602	$ 335,716
Net premiums written	$ 975,641	$ 708,957	$ 266,684
Net premiums earned	$ 832,802	$ 632,393	$ 200,409
Net claims and claim expenses incurred	534,315	422,871	111,444
Acquisition expenses	223,671	176,352	47,319
Operational expenses	22,893	19,316	3,577
Underwriting income (loss)	$ 51,923	$ 13,854	$ 38,069
Net claims and claim expenses incurred – current accident year	$ 542,220	$ 423,917	$ 118,303
Net claims and claim expenses incurred – prior accident years	(7,905)	(1,046)	(6,859)
Net claims and claim expenses incurred – total	$ 534,315	$ 422,871	$ 111,444
Net claims and claim expense ratio – current accident year	65.1 %	67.0 %	(1.9)%
Net claims and claim expense ratio – prior accident years	(0.9)%	(0.1)%	(0.8)%
Net claims and claim expense ratio – calendar year	64.2 %	66.9 %	(2.7)%
Underwriting expense ratio	29.6 %	30.9 %	(1.3)%
Combined ratio	93.8 %	97.8 %	(4.0)%

Casualty and Specialty Gross Premiums Written

In the second quarter of 2022, our Casualty and Specialty segment gross premiums written increased by $335.7 million, or 36.9%, to $1.2 billion, compared to $910.6 million in the second quarter of 2021. The growth was across most lines of business, and principally in the professional liability and financial lines classes of business. This growth was primarily driven by increases in new and existing business written in the current and prior periods, combined with rate improvements.

Our relative mix of business between proportional business and excess of loss business has fluctuated in the past and will likely continue to do so in the future. Proportional business typically has a higher expense ratio, and tends to be exposed to more attritional and frequent losses, while being subject to less expected volatility and severity as compared to traditional excess of loss business.

Casualty and Specialty Ceded Premiums Written

Three months ended June 30 (in thousands)	2022	2021	Change
Ceded premiums written	$ 270,677	$ 201,645	$ 69,032

Ceded premiums written in our Casualty and Specialty segment increased by $69.0 million, to $270.7 million in the second quarter of 2022, compared to $201.6 million in the second quarter of 2021, primarily driven by the increase in gross premiums written subject to our retrocessional quota share reinsurance programs.

As in our Property segment, the purchase of ceded reinsurance protection in our Casualty and Specialty segment is based on market opportunities and is not based on placing a specific reinsurance program each year.

Casualty and Specialty Net Premiums Written

Three months ended June 30 (in thousands)	2022	2021	Change
Net premiums written	$ 975,641	$ 708,957	$ 266,684

Net premiums written in our Casualty and Specialty segment increased by $266.7 million, or 37.6%, to $1.0 billion in the second quarter of 2022, compared to $709.0 million in the second quarter of 2021, primarily driven by growth in the casualty and financial lines of business, consistent with the changes in gross premiums written.

Casualty and Specialty Underwriting Results

Our Casualty and Specialty segment generated underwriting income of $51.9 million in the second quarter of 2022, compared to underwriting income of $13.9 million in the second quarter of 2021. In the second quarter of 2022, our Casualty and Specialty segment generated a net claims and claim expense ratio of 64.2%, an underwriting expense ratio of 29.6% and a combined ratio of 93.8%, compared to 66.9%, 30.9% and 97.8%, respectively, in the second quarter of 2021.

The decrease in the Casualty and Specialty segment combined ratio in the second quarter of 2022 was primarily driven by the decrease of 2.7 percentage points in the net claims and claims expense ratio.

The net claims and claim expense ratio decreased 2.7 percentage points from the second quarter of 2021, principally as a result of lower current accident year losses, reflecting improving profitability of the portfolios. The net claims and claim expense ratio was also positively impacted by higher favorable prior accident year loss development as compared to the second quarter of 2021, as reported losses came in better than expected on certain prior underwriting years.

The decrease in the underwriting expense ratio in the second quarter of 2022, as compared to the second quarter of 2021, was principally due to a 1.0 percentage point decrease in the net acquisition expense ratio due to changes in estimated profit commissions, combined with a 0.3 percentage point improvement in the operating expense ratio driven by improved operating leverage.

See “Note 6. Reserve for Claims and Claim Expenses” in our “Notes to the Consolidated Financial Statements” for additional information related to the development of prior accident years net claims and claim expenses.

Fee Income

Three months ended June 30 (in thousands)	2022	2021	Change
Management Fee Income			
Joint ventures	$ 17,703	$ 14,741	$ 2,962
Structured reinsurance products	6,649	8,677	(2,028)
Managed funds	6,355	8,552	(2,197)
Total management fee income	30,707	31,970	(1,263)
Performance Fee Income			
Joint ventures	1,037	7,347	(6,310)
Structured reinsurance products	2,486	2,581	(95)
Managed funds	25	4,259	(4,234)
Total performance fee income	3,548	14,187	(10,639)
Total fee income	$ 34,255	$ 46,157	$ (11,902)

The table above shows total fee income earned through third-party capital management activities, including various joint ventures, managed funds and certain structured retrocession agreements to which we are a party. Performance fees are based on the performance of the individual vehicles or products, and may be zero or negative in a particular period if, for example, large losses occur, which can potentially result in no performance fees or the reversal of previously accrued performance fees. Joint ventures include DaVinciRe, Top Layer Re, Vermeer, Fontana and certain entities investing in Langhorne Holdings LLC. Managed funds include Upsilon Fund and Medici. Structured reinsurance products and other includes certain reinsurance contracts which transfer risk to capital.

In the second quarter of 2022, total fee income earned through third-party capital management activities decreased $11.9 million, to $34.3 million, compared to $46.2 million in the second quarter of 2021, primarily due to lower performance fee income in the second quarter of 2022 compared to the second quarter of 2021. Performance fee income continued to be negatively impacted by the underwriting deficit carried forward from weather-related losses in 2021. We expect this negative impact to decrease over time as our joint ventures and structured retroactive agreements earn back the prior period underwriting losses.

Management fee income was lower in the second quarter of 2022, primarily due to the reduced size of our structured reinsurance products and lower capital managed at Upsilon Fund, partially offset by increased capital managed at DaVinci, Vermeer, Medici, and Fontana, which was launched in the second quarter of 2022.

The fees earned through third-party capital management activities are principally recorded through redeemable noncontrolling interest, or as an increase to underwriting income (reduction to underwriting loss), through a decrease in operating expenses or acquisition expenses, as detailed in the table below.

Three months ended June 30 (in thousands)	2022	2021	Change
Underwriting income (loss) - fee income on third-party capital management activities (1)	$ 12,751	$ 19,239	$ (6,488)
Equity in earnings of other ventures	27	17	10
Net income (loss) attributable to redeemable noncontrolling interest	21,477	26,901	(5,424)
Total fee income	$ 34,255	$ 46,157	$ (11,902)

(1) Reflects total fee income earned through third-party capital management activities recorded through underwriting income (loss) as a decrease (increase) to operating expenses or acquisition expenses. The $12.8 million includes $11.6 million of management fee income, recorded as a reduction to operating expenses and $1.1 million of performance fee income recorded as a reduction to acquisition expenses (2021 - $19.2 million, $16.2 million and $3.1 million, respectively).

In addition to the $34.3 million of fee income earned through our third-party capital management activities described above, we earned $25.8 million of additional fees on other underwriting-related activities, primarily related to expense overrides paid to us by our reinsurers. These additional fees on other underwriting-related activities are recorded as a reduction to operating expenses or acquisition expenses, as applicable. The total fees recorded through underwriting income (loss) are detailed in the table below.

Three months ended June 30 (in thousands)	2022	2021	Change
Underwriting income (loss) - fee income on third-party capital management activities	$ 12,751	$ 19,239	$ (6,488)
Underwriting income (loss) - additional fee income on other underwriting-related activities	25,750	23,902	1,848
Total fees recorded through underwriting income (loss) [(1)]	$ 38,501	$ 43,141	$ (4,640)
Impact of total fees recorded through underwriting income (loss) on the combined ratio	2.6 %	3.6 %	(1.0)%

(1) The $38.5 million includes $27.9 million of management fee income, recorded as a reduction to operating expenses and $10.6 million of performance fee income recorded as a reduction to acquisition expenses (2021 - $43.1 million, $33.6 million and $9.6 million, respectively).

Net Investment Income

Three months ended June 30 (in thousands)	2022	2021	Change
Fixed maturity investments trading	$ 76,547	$ 59,510	$ 17,037
Short term investments	4,397	782	3,615
Equity investments trading	4,516	1,626	2,890
Other investments			
Catastrophe bonds	20,235	16,681	3,554
Other	6,894	9,339	(2,445)
Cash and cash equivalents	(95)	159	(254)
	112,494	88,097	24,397
Investment expenses	(5,283)	(7,172)	1,889
Net investment income	$ 107,211	$ 80,925	$ 26,286

Net investment income was $107.2 million in the second quarter of 2022, compared to $80.9 million in the second quarter of 2021, an increase of $26.3 million. This increase was primarily driven by higher investment yields in our fixed maturity trading and short term investments along with higher yields and an increase in average invested assets in our catastrophe bonds and equity investments trading portfolios.

Net Realized and Unrealized Gains (Losses) on Investments

Three months ended June 30 (in thousands)	2022	2021	Change
Gross realized gains on fixed maturity investments trading	$ 5,334	$ 66,268	$ (60,934)
Gross realized losses on fixed maturity investments trading	(292,488)	(33,107)	(259,381)
Net realized gains (losses) on fixed maturity investments trading	(287,154)	33,161	(320,315)
Net unrealized gains (losses) on fixed maturity investments trading	(149,820)	64,015	(213,835)
Net realized and unrealized gains (losses) on investments-related derivatives (1)	(66,078)	(9,329)	(56,749)
Net realized gains (losses) on equity investments trading	35,592	93,411	(57,819)
Net unrealized gains (losses) on equity investments trading	(127,104)	(27,845)	(99,259)
Net realized and unrealized gains (losses) on other investments - catastrophe bonds	(24,660)	2	(24,662)
Net realized and unrealized gains (losses) on other investments - other	(34,883)	37,603	(72,486)
Net realized and unrealized gains (losses) on investments	$ (654,107)	$ 191,018	$ (845,125)

(1) Net realized and unrealized gains (losses) on investment-related derivatives includes fixed maturity investments related derivatives (interest rate futures, interest rate swaps, credit default swaps and total return swaps), and equity investments related derivatives (equity futures). See "Note 13. Derivative Instruments" for additional information.

Our investment portfolio strategy seeks to preserve capital and provide us with a high level of liquidity, to be well diversified across market sectors and to generate relatively attractive returns on a risk-adjusted basis over time. A large majority of our investments are invested in the fixed income markets and, therefore, our realized and unrealized gains and losses on investments are highly correlated to fluctuations in interest rates. Therefore, as interest rates decline, we will tend to have realized and unrealized gains from our investment portfolio, and as interest rates rise, we will tend to have realized and unrealized losses from our investment portfolio.

Net realized and unrealized losses on investments were $654.1 million in the second quarter of 2022, compared to net realized and unrealized gains of $191.0 million in the second quarter of 2021. Impacting our net realized and unrealized losses on investments in the second quarter of 2022 were:

- net realized and unrealized losses on our fixed maturity investments trading of $437.0 million compared to net realized and unrealized gains of $97.2 million in the second quarter of 2021, a decrease of $534.2 million. The net realized and unrealized losses in the second quarter of 2022 were driven by unrealized mark-to-market losses resulting from a significant increase in interest rates in the second quarter of 2022 as compared to the second quarter of 2021.
- net realized and unrealized losses on equity investments trading of $91.5 million compared to gains of $65.6 million in the second quarter of 2021, a decrease of $157.1 million. The net realized and unrealized losses in the second quarter of 2022 were principally driven by broad equity market declines, whereas in the second quarter of 2021, the gains were driven principally by a net realized and unrealized gain of $42.7 million from our investment in Trupanion, Inc.
- net realized and unrealized losses on investments-related derivatives of $66.1 million compared to $9.3 million in the second quarter of 2021, an increase in net realized and unrealized losses of $56.7 million, principally driven by the decline in the performance of the equity markets, which negatively impacted our long equity futures positions.

Net Foreign Exchange Gains (Losses)

Three months ended June 30 (in thousands)	2022	2021	Change
Net foreign exchange gains (losses)	$ (50,821)	$ 3,234	$ (54,055)

In the second quarter of 2022, net foreign exchange losses were $50.8 million compared to gains of $3.2 million in the second quarter of 2021. The net foreign exchange losses in the second quarter of 2022 were driven by losses attributable to third-party investors in Medici which are allocated through noncontrolling interest, and the impact of certain foreign exchange exposures related to our underwriting activities, which we do not anticipate will recur.

Our functional currency is the U.S. dollar. We routinely write a portion of our business in currencies other than U.S. dollars and invest a portion of our cash and investment portfolio in those currencies. In addition, we have subsidiaries with non-U.S. dollar functional currencies. As a result, we may experience foreign exchange gains or losses in our consolidated financial statements. We are primarily impacted by the foreign currency risk exposures associated with our underwriting operations and our investment portfolio, and may, from time to time, enter into foreign currency forward and option contracts to minimize the effect of fluctuating foreign currencies on the value of non-U.S. dollar denominated assets and liabilities.

Refer to “Part II, Item 7A. Quantitative and Qualitative Disclosures About Market Risk” in our Form 10-K for the year ended December 31, 2021 for additional information related to our exposure to foreign currency risk and “Note 13. Derivative Instruments” in our “Notes to the Consolidated Financial Statements” for additional information related to foreign currency forward and option contracts we have entered into.

Equity in Earnings (Losses) of Other Ventures

Three months ended June 30 (in thousands)	2022	2021	Change
Tower Hill Companies	$ 1,620	$ 4,909	$ (3,289)
Top Layer Re	1,484	2,439	(955)
Other	4,279	1,384	2,895
Total equity in earnings (losses) of other ventures	$ 7,383	$ 8,732	$ (1,349)

Equity in earnings (losses) of other ventures represents our pro-rata share of the net income (loss) from our investments in the Tower Hill Companies, Top Layer Re, and our equity investments in a select group of insurance and insurance-related companies, which are included in Other. Except for Top Layer Re, which is recorded on a current quarter basis, equity in earnings (losses) of other ventures is recorded one quarter in arrears. The carrying value of these investments on our consolidated balance sheets, individually or in the aggregate, may differ from the realized value we may ultimately attain, perhaps significantly so.

Earnings from our investments in other ventures were $7.4 million in the second quarter of 2022, compared to $8.7 million in the second quarter of 2021, a decrease of $1.3 million. The decrease was primarily due to the impact of mark-to-market losses in the investment portfolios of the underlying investments, partially offset by a valuation gain on an investment in an other insurance-related company.

Corporate Expenses

Three months ended June 30 (in thousands)	2022	2021	Change
Corporate expenses	$ 12,352	$ 10,125	$ 2,227

Corporate expenses include certain executive, director, legal and consulting expenses, costs for research and development, impairment charges related to goodwill and other intangible assets, severance costs, and other miscellaneous costs, including those associated with operating as a publicly-traded company.

Corporate expenses increased to $12.4 million in the second quarter of 2022, compared to $10.1 million in the second quarter of 2021. The increase of $2.2 million was primarily due to higher legal fees associated with the launch of Fontana.

Income Tax Benefit (Expense)

Three months ended June 30 (in thousands)	2022	2021	Change
Income tax benefit (expense)	$ 30,534	$ (13,862)	$ 44,396

We recognized an income tax benefit of $30.5 million in the second quarter of 2022, compared to an income tax expense of $13.9 million in the second quarter of 2021. The income tax benefit was primarily driven by unrealized losses on investments, partially offset by underwriting income, in our U.S.-based operations. In comparison, the income tax expense in the second quarter of 2021 was primarily driven by unrealized gains in our U.S.-based operations.

Net Income (Loss) Attributable to Redeemable Noncontrolling Interests

Three months ended June 30 (in thousands)	2022	2021	Change
Redeemable noncontrolling interest - DaVinciRe	$ 58,822	$ 84,266	$ (25,444)
Redeemable noncontrolling interest - Medici	(26,887)	11,989	(38,876)
Redeemable noncontrolling interest - Vermeer	22,937	17,289	5,648
Redeemable noncontrolling interest - Fontana	(5,541)	—	(5,541)
Net income (loss) attributable to redeemable noncontrolling interests	$ 49,331	$ 113,544	$ (64,213)

Our net income attributable to redeemable noncontrolling interests was $49.3 million in the second quarter of 2022, compared to $113.5 million in the second quarter of 2021, a change of $64.2 million. This change was primarily due to the following:

- DaVinciRe, which had a lower net income in the second quarter of 2022, as compared to the second quarter of 2021, due to realized and unrealized losses on investments, driven by the increase in interest rates;
- Medici, which had a net loss attributable to redeemable noncontrolling interests in the second quarter of 2022 due to foreign exchange losses on hedges related to foreign currency share classes, all of which are held by third-party investors. After taking into account the original currency carrying value of Medici’s foreign currency share classes, foreign currency hedges had no net impact to Medici’s investors; and
- Fontana, which was launched in the second quarter of 2022 and had a net loss due to realized and unrealized losses on investments. This was partially offset by
- Vermeer, which had improved net income in the second quarter of 2022 as compared to the second quarter of 2021, due to the increase in size of its underwriting portfolio.

SUMMARY OF RESULTS OF OPERATIONS

Below is a discussion of the results of operations for the six months ended June 30, 2022, compared to the six months ended June 30, 2021.

Six months ended June 30 (in thousands, except per share amounts and percentages)	2022	2021	Change
Statement of operations highlights			
Gross premiums written	$ 5,407,603	$ 4,746,600	$ 661,003
Net premiums written	$ 4,028,833	$ 3,336,375	$ 692,458
Net premiums earned	$ 2,942,808	$ 2,346,626	$ 596,182
Net claims and claim expenses incurred	1,547,972	1,387,072	160,900
Acquisition expenses	737,745	552,824	184,921
Operational expenses	140,427	113,514	26,913
Underwriting income (loss)	$ 516,664	$ 293,216	$ 223,448
Net investment income	$ 190,902	$ 160,729	$ 30,173
Net realized and unrealized gains (losses) on investments	(1,327,124)	(154,545)	(1,172,579)
Total investment result	$ (1,136,222)	$ 6,184	$ (1,142,406)
Net income (loss)	$ (664,219)	$ 247,156	$ (911,375)
Net income (loss) available (attributable) to RenaissanceRe common shareholders	$ (719,326)	$ 165,884	$ (885,210)
Net income (loss) available (attributable) to RenaissanceRe common shareholders per common share – diluted	$ (16.64)	$ 3.35	$ (19.99)
Dividends per common share	$ 0.74	$ 0.72	$ 0.02
Key ratios			
Net claims and claim expense ratio – current accident year	54.7 %	61.7 %	(7.0)%
Net claims and claim expense ratio – prior accident years	(2.1)%	(2.6)%	0.5 %
Net claims and claim expense ratio – calendar year	52.6 %	59.1 %	(6.5)%
Underwriting expense ratio	29.8 %	28.4 %	1.4 %
Combined ratio	82.4 %	87.5 %	(5.1)%
Return on average common equity - annualized	(26.6)%	4.9 %	(31.5)%
Book value	June 30, 2022	December 31, 2021	Change
Book value per common share	$ 113.69	$ 132.17	$ (18.48)
Accumulated dividends per common share	24.26	23.52	0.74
Book value per common share plus accumulated dividends	$ 137.95	$ 155.69	$ (17.74)
Change in book value per common share plus change in accumulated dividends	(13.4)%		

Net loss attributable to RenaissanceRe common shareholders was $719.3 million in the six months ended June 30, 2022, compared to net income available to RenaissanceRe common shareholders of $165.9 million in the six months ended June 30, 2021. As a result of our net loss attributable to RenaissanceRe common shareholders in the six months ended June 30, 2022, we generated an annualized return on average common equity of negative 26.6% and our book value per common share decreased from $132.17 at December 31, 2021 to $113.69 at June 30, 2022, a 13.4% decrease, after considering the change in accumulated dividends paid to our common shareholders.

The most significant items affecting our financial performance during the six months ended June 30, 2022, on a comparative basis to the six months ended June 30, 2021, include:

- *Impact of Weather-Related Large Losses and the Russia-Ukraine War* - we had a net negative impact on net loss attributable to RenaissanceRe common shareholders of $71.5 million resulting from the 2022 Weather-Related Large Losses (as defined below) and $24.9 million resulting from losses related to the Russia-Ukraine War. This compares to a net negative impact on net loss attributable to RenaissanceRe common shareholders of $181.1 million resulting from Winter Storm Uri in the six months ended June 30, 2021;
- *Underwriting Results* - we generated underwriting income of $516.7 million and had a combined ratio of 82.4% in the six months ended June 30, 2022, compared to $293.2 million and a combined ratio of 87.5% in the six months ended June 30, 2021. Our underwriting income in the six months ended June 30, 2022 was comprised of underwriting income of $449.3 million in our Property segment, and $67.4 million in our Casualty and Specialty segment. In comparison, our underwriting income in the six months ended June 30, 2021 was comprised of our Property segment, which generated underwriting income of $273.3 million, and our Casualty and Specialty segment, which generated underwriting income of $19.9 million.

  Included in our underwriting results in the six months ended June 30, 2022 was the impact of the 2022 Weather-Related Large Losses, which resulted in a net negative impact on the underwriting result of $104.9 million and added 3.6 percentage points to the combined ratio, primarily in the Property segment. In comparison, our underwriting results in the six months ended June 30, 2021 were impacted by Winter Storm Uri, which resulted in a net negative impact on the underwriting result of $291.2 million and added 13.3 percentage points to the combined ratio, primarily in the Property segment.
- *Gross Premiums Written* - our gross premiums written increased by $661.0 million, or 13.9%, to $5.4 billion, in the six months ended June 30, 2022, compared to the six months ended June 30, 2021. This was comprised of an increase of $899.5 million in our Casualty and Specialty segment, offset in part by a decrease of $238.5 million in our Property segment. In our Property segment, we recognized reinstatement premiums of $11.7 million associated with the 2022 Weather-Related Large Losses, as compared to $90.3 million of reinstatement premiums associated with Winter Storm Uri.
- *Investment Results* - our total investment result, which includes the sum of net investment income and net realized and unrealized gains (losses) on investments, was a loss of $1.1 billion in the six months ended June 30, 2022, compared to a gain of $6.2 million in the six months ended June 30, 2021, a decrease of $1.1 billion. The primary driver of the lower total investment result for the six months ended June 30, 2022 was net realized and unrealized losses on our fixed maturity and equity investments trading portfolios. The investment result in the six months ended June 30, 2021 was impacted by net realized and unrealized losses on our fixed maturity and equity investments trading portfolios, partially offset by net realized and unrealized gains on other investments.

Net Negative Impact

Net negative impact on underwriting result includes the sum of (1) net claims and claim expenses incurred, (2) assumed and ceded reinstatement premiums earned and (3) earned and lost profit commissions. Net negative impact on net income (loss) available (attributable) to RenaissanceRe common shareholders is the sum of (1) net negative impact on underwriting result and (2) redeemable noncontrolling interest, both before consideration of any related income tax benefit (expense).

Our estimates of net negative impact are based on a review of our potential exposures, preliminary discussions with certain counterparties and actuarial modeling techniques. Our actual net negative impact, both individually and in the aggregate, may vary from these estimates, perhaps materially. Changes in these estimates will be recorded in the period in which they occur.

Meaningful uncertainty remains regarding the estimates and the nature and extent of the losses from catastrophe events, driven by the magnitude and recent nature of each event, the geographic areas impacted by the events, relatively limited claims data received to date, the contingent nature of business interruption and other exposures, potential uncertainties relating to reinsurance recoveries and other factors inherent in loss estimation, among other things.

The financial data below provides additional information detailing the net negative impact on our consolidated financial statements in the six months ended June 30, 2022 of the 2022 Weather-Related Large Losses.

Six months ended June 30, 2022 (in thousands)		2022 Weather-Related Large Losses (1)
Net claims and claims expenses incurred	$	(116,328)
Assumed reinstatement premiums earned		11,716
Ceded reinstatement premiums earned		(256)
Net negative impact on underwriting result		(104,868)
Redeemable noncontrolling interest		33,413
Net negative impact on net income (loss) available (attributable) to RenaissanceRe common shareholders	$	(71,455)

The financial data below provides additional information detailing the net negative impact of the 2022 Weather-Related Large Losses on our segment underwriting results and consolidated combined ratio in the six months ended June 30, 2022.

Six months ended June 30, 2022 (in thousands, except percentages)		2022 Weather-Related Large Losses (1)
Net negative impact on Property segment underwriting result	$	(104,105)
Net negative impact on Casualty and Specialty segment underwriting result		(763)
Net negative impact on underwriting result	$	(104,868)
Percentage point impact on consolidated combined ratio		3.6

(1) "2022 Weather-Related Large Losses" includes the Australian Floods which impacted Eastern Australia in February and March 2022, and Storm Eunice which impacted several areas in Europe in February 2022.

Russia-Ukraine War Losses

During the six months ended June 30, 2022, losses related to Russia's invasion of Ukraine resulted in a net negative impact on net income (loss) available (attributable) to RenaissanceRe common shareholders of $25.0 million. This reflects net claims and claims expenses incurred and a net negative impact on underwriting result of $27.2 million, which was solely in the Casualty and Specialty segment, partially offset by redeemable noncontrolling interest of $2.2 million. The net negative impact on underwriting result had a 0.9 percentage point impact on the consolidated combined ratio.

The financial data below provides additional information detailing the net negative impact on our consolidated financial statements in the six months ended June 30, 2021 of the major winter storms in February 2021 which caused widespread damage in the U.S., predominantly in Texas, and are referred to herein as "Winter Storm Uri."

Six months ended June 30, 2021 (in thousands)		Winter Storm Uri
Net claims and claims expenses incurred	$	(373,020)
Assumed reinstatement premiums earned		91,412
Ceded reinstatement premiums earned		(10,347)
Earned (lost) profit commissions		773
Net negative impact on underwriting result		(291,182)
Redeemable noncontrolling interest		110,064
Net negative impact on net income (loss) available (attributable) to RenaissanceRe common shareholders	$	(181,118)

The financial data below provides additional information detailing the net negative impact of Winter Storm Uri on our segment underwriting results and consolidated combined ratio in the six months ended June 30, 2021.

Six months ended June 30, 2021 (in thousands, except percentages)		Winter Storm Uri
Net negative impact on Property segment underwriting result	$	(286,125)
Net negative impact on Casualty and Specialty segment underwriting result		(5,057)
Net negative impact on underwriting result	$	(291,182)
Percentage point impact on consolidated combined ratio		13.3

Underwriting Results by Segment

Property Segment

Below is a summary of the underwriting results and ratios for our Property segment:

Six months ended June 30 (in thousands, except percentages)	2022	2021	Change
Gross premiums written	$ 2,561,829	$ 2,800,375	$ (238,546)
Net premiums written	$ 1,778,141	$ 1,811,795	$ (33,654)
Net premiums earned	$ 1,242,172	$ 1,165,563	$ 76,609
Net claims and claim expenses incurred	431,685	595,982	(164,297)
Acquisition expenses	264,663	221,992	42,671
Operational expenses	96,559	74,262	22,297
Underwriting income (loss)	$ 449,265	$ 273,327	$ 175,938
Net claims and claim expenses incurred – current accident year	$ 483,495	$ 652,127	$ (168,632)
Net claims and claim expenses incurred – prior accident years	(51,810)	(56,145)	4,335
Net claims and claim expenses incurred – total	$ 431,685	$ 595,982	$ (164,297)
Net claims and claim expense ratio – current accident year	38.9 %	55.9 %	(17.0)%
Net claims and claim expense ratio – prior accident years	(4.1)%	(4.8)%	0.7 %
Net claims and claim expense ratio – calendar year	34.8 %	51.1 %	(16.3)%
Underwriting expense ratio	29.0 %	25.4 %	3.6 %
Combined ratio	63.8 %	76.5 %	(12.7)%

Property Gross Premiums Written

In the six months ended June 30, 2022, our Property segment gross premiums written decreased by $238.5 million, or 8.5%, to $2.6 billion, compared to $2.8 billion in the six months ended June 30, 2021.

Gross premiums written in the catastrophe class of business were $1.7 billion in the six months ended June 30, 2022, a decrease of $203.0 million, or 10.7% compared to the six months ended June 30, 2021. The decrease in gross premiums written in the catastrophe class of business was primarily driven by a $154.6 million reduction in Upsilon RFO, the majority of which is attributable to third party investors in Upsilon RFO and, accordingly, resulted in a corresponding reduction in ceded premiums written, as discussed below, and a $79.1 million change in assumed reinstatement premiums following a lower level of catastrophe losses in the six months ended June 30, 2022 as compared to the six months ended June 30, 2021. Excluding Upsilon RFO and the impact of the reinstatement premiums in each of the respective periods, gross premiums written in the catastrophe class of business were relatively constant from the comparative period.

Gross premiums written in the other property class of business were $872.4 million in the six months ended June 30, 2022, a decrease of $35.5 million, or 3.9%, compared to the six months ended June 30, 2021. The decrease in gross premiums written in the other property class of business was principally due to the non-renewal of deals that did not meet our return hurdles, partially offset by growth and rate improvement across other areas within this class of business.

Property Ceded Premiums Written

Six months ended June 30 (in thousands)	2022	2021	Change
Ceded premiums written	$ 783,688	$ 988,580	$ (204,892)

Ceded premiums written in our Property segment decreased 20.7%, to $783.7 million, in the six months ended June 30, 2022, compared to $988.6 million in the six months ended June 30, 2021. The decrease in ceded premiums written was driven by the reduction in premiums ceded to Upsilon RFO third-party investors following a reduction in the size of Upsilon Fund, and a corresponding decrease in gross premiums written, as discussed above, in addition to a reduction in retrocessional purchases as part of our gross-to-net strategy, in conjunction with the growth in our managed third-party capital vehicles.

Property Net Premiums Written

Six months ended June 30 (in thousands)	2022	2021	Change
Net premiums written	$ 1,778,141	$ 1,811,795	$ (33,654)

Net premiums written in our Property segment were $1.8 billion in the six months ended June 30, 2022, a decrease of $33.7 million, or 1.9%, compared to the six months ended June 30, 2021. This decrease was driven by the reduction in assumed reinstatement premiums as well as the reduction in gross premiums written in the other property class of business. These were partially offset by the reduction in retrocessional purchases.

Property Underwriting Results

Our Property segment generated underwriting income of $449.3 million in the six months ended June 30, 2022, compared to underwriting income of $273.3 million in the six months ended June 30, 2021, an increase of $175.9 million. In the six months ended June 30, 2022, our Property segment generated a net claims and claim expense ratio of 34.8%, an underwriting expense ratio of 29.0% and a combined ratio of 63.8%, compared to 51.1%, 25.4% and 76.5%, respectively, in the six months ended June 30, 2021.

Principally impacting the Property segment underwriting result and combined ratio in the six months ended June 30, 2022 were the 2022 Weather-Related Large Losses, which resulted in a net negative impact on the Property segment underwriting result of $104.1 million and added 8.8 percentage points to the combined ratio. In comparison, the six months ended June 30, 2021 was impacted by Winter Storm Uri, which resulted in a net negative impact on the Property segment underwriting result of $286.1 million and added 28.1 percentage points to the combined ratio.

The decrease in the net claims and claim expense ratio for prior accident years reflected net favorable development of 10.8% for the catastrophe class of business and net adverse development of 1.3% for the other property class of business, primarily related to the 2017 to 2020 accident years. The underwriting expense ratio increased 3.6 percentage points, principally driven by the continued impact of the other property class of business on the segment, which has a relatively higher expense ratio than the catastrophe class of business, as well as a reduced benefit to the ratio following a reduction in management fees driven by the reduced size of our structured reinsurance products and lower capital managed at Upsilon Fund, combined with lower reinstatement premiums associated with the 2022 Weather-Related Large Losses as compared to Winter Storm Uri.

See “Note 6. Reserve for Claims and Claim Expenses” in our “Notes to the Consolidated Financial Statements” for additional information related to the development of prior accident years net claims and claim expenses.

Casualty and Specialty Segment

Below is a summary of the underwriting results and ratios for our Casualty and Specialty segment:

Six months ended June 30 (in thousands, except percentages)	2022	2021	Change
Gross premiums written	$ 2,845,774	$ 1,946,225	$ 899,549
Net premiums written	$ 2,250,692	$ 1,524,580	$ 726,112
Net premiums earned	$ 1,700,636	$ 1,181,063	$ 519,573
Net claims and claim expenses incurred	1,116,287	791,090	325,197
Acquisition expenses	473,082	330,832	142,250
Operational expenses	43,868	39,252	4,616
Underwriting income (loss)	$ 67,399	$ 19,889	$ 47,510
Net claims and claim expenses incurred – current accident year	$ 1,125,267	$ 796,006	$ 329,261
Net claims and claim expenses incurred – prior accident years	(8,980)	(4,916)	(4,064)
Net claims and claim expenses incurred – total	$ 1,116,287	$ 791,090	$ 325,197
Net claims and claim expense ratio – current accident year	66.2 %	67.4 %	(1.2)%
Net claims and claim expense ratio – prior accident years	(0.6)%	(0.4)%	(0.2)%
Net claims and claim expense ratio – calendar year	65.6 %	67.0 %	(1.4)%
Underwriting expense ratio	30.4 %	31.3 %	(0.9)%
Combined ratio	96.0 %	98.3 %	(2.3)%

Casualty and Specialty Gross Premiums Written

In the six months ended June 30, 2022, our Casualty and Specialty segment gross premiums written increased by $899.5 million, or 46.2%, to $2.8 billion, compared to $1.9 billion in the six months ended June 30, 2021. The increase was due to growth across most lines of business, however primarily in general casualty, professional liability and financial lines of business. This growth reflects increases in new and existing business, combined with rate improvements.

Casualty and Specialty Ceded Premiums Written

Six months ended June 30 (in thousands)	2022	2021	Change
Ceded premiums written	$ 595,082	$ 421,645	$ 173,437

Ceded premiums written in our Casualty and Specialty segment increased by 41.1%, to $595.1 million, in the six months ended June 30, 2022, compared to $421.6 million in the six months ended June 30, 2021, primarily resulting from increased gross premiums written subject to our retrocessional quota share reinsurance programs, partially offset by a decrease in retrocessional purchases.

Casualty and Specialty Underwriting Results

Our Casualty and Specialty segment generated underwriting income of $67.4 million in the six months ended June 30, 2022, compared to underwriting income of $19.9 million in the six months ended June 30, 2021. In the six months ended June 30, 2022, our Casualty and Specialty segment generated a net claims and claim expense ratio of 65.6%, an underwriting expense ratio of 30.4% and a combined ratio of 96.0%, compared to 67.0%, 31.3% and 98.3%, respectively, in the six months ended June 30, 2021.

The decrease in the Casualty and Specialty segment combined ratio in the six months ended June 30, 2022 was principally driven by a decrease of 1.4 percentage points in the net claims and claim expense ratio, primarily as a result of lower current accident year attritional losses. Additionally, our Casualty and Specialty segment experienced net favorable development on prior accident years net claims and claim expenses of $9.0 million, or 0.6 percentage points, during the six months ended June 30, 2022. The net favorable development during the six months ended June 30, 2022 was driven by reported losses generally coming in lower than expected on attritional net claims and claim expenses. See “Note 6. Reserve for Claims and Claim Expenses” in our “Notes to the Consolidated Financial Statements” for additional information related to the development of prior accident years net claims and claim expenses.

The decrease in the underwriting expense ratio in the six months ended June 30, 2022 was mainly driven by continued improvement in operating leverage.

Fee Income

Six months ended June 30 (in thousands)	2022	2021	Change
Management fee income			
Joint ventures	$ 31,098	$ 25,869	$ 5,229
Structured reinsurance products and other	13,873	17,451	(3,578)
Managed funds	12,958	17,174	(4,216)
Total management fee income	57,929	60,494	(2,565)
Performance fee income			
Joint ventures	934	8,903	(7,969)
Structured reinsurance products and other	3,419	1,288	2,131
Managed funds	322	(539)	861
Total performance fee income	4,675	9,652	(4,977)
Total fee income	$ 62,604	$ 70,146	$ (7,542)

In the six months ended June 30, 2022, total fee income earned through our third-party capital management activities decreased $7.5 million, to $62.6 million, as compared to $70.1 million in the six months ended June 30, 2021, primarily driven by lower performance fee income due to the continued impact of the deficit carried forward from weather-related losses in 2021 on our joint ventures, managed funds and structured reinsurance agreements. Management fee income was lower in the six months ended June 30, 2022, primarily due to the reduced size of our structured reinsurance products and lower capital managed at Upsilon Fund, partially offset by increased capital managed at other joint ventures and managed funds, including the impact of Fontana in the second quarter of 2022.

The fees earned through third-party capital management are principally recorded through redeemable noncontrolling interest, or as an increase to underwriting income, (reduction to underwriting loss), through a decrease in operating expenses or acquisition expenses, as detailed in the table below.

Six months ended June 30 (in thousands)	2022	2021	Change
Underwriting income (loss) - fee income on third-party capital management activities (1)	$ 24,912	$ 29,769	$ (4,857)
Equity in earnings of other ventures	50	33	17
Net income (loss) attributable to redeemable noncontrolling interest	37,642	40,344	(2,702)
Total fee income	$ 62,604	$ 70,146	$ (7,542)

(1) Reflects total fee income earned through third-party capital management as well as various joint ventures, managed funds and certain structured retrocession agreements to which we are a party, recorded through underwriting income (loss) as a decrease to

operating expenses or acquisition expenses. The $24.9 million includes $24.2 million of management fee income, recorded as a reduction to operating expenses and $0.7 million of performance fee income recorded as a reduction to acquisition expenses (2021 - $29.8 million, $32.8 million and $(3.0) million, respectively).

In addition to the $24.9 million of fee income earned through our third-party capital management activities that was recorded through underwriting income (loss), as detailed above, we also earn fee income on certain other underwriting-related activities. These fees, in the aggregate, are recorded as a reduction to operating expenses or acquisition expenses, as applicable. The total fees recorded through underwriting income (loss) are detailed in the table below.

Six months ended June 30 (in thousands)		2022		2021		Change
Underwriting income (loss) - fee income on third-party capital management activities	$	24,912	$	29,769	$	(4,857)
Underwriting income (loss) - additional fee income on underwriting-related activities		46,695		38,506		8,189
Total fees recorded through underwriting income (loss)[(1)]	$	71,607	$	68,275	$	3,332
Impact of Total fees recorded through underwriting income (loss) on the combined ratio		2.4 %		2.9 %		(0.5)%

(1) The $71.6 million includes $58.8 million of management fee income, recorded as a reduction to operating expenses and $12.9 million of performance fee income recorded as a reduction to acquisition expenses (2021 - $68.3 million, $64.3 million and $4.0 million, respectively).

Net Investment Income

Six months ended June 30 (in thousands)		2022		2021		Change
Fixed maturity investments trading	$	138,964	$	122,443	$	16,521
Short term investments		5,533		1,355		4,178
Equity investments trading		7,270		3,117		4,153
Other investments						
Catastrophe bonds		37,595		31,149		6,446
Other		12,446		13,140		(694)
Cash and cash equivalents		(136)		261		(397)
		201,672		171,465		30,207
Investment expenses		(10,770)		(10,736)		(34)
Net investment income	$	190,902	$	160,729	$	30,173

Net investment income was $190.9 million in the six months ended June 30, 2022, compared to $160.7 million in the six months ended June 30, 2021, an increase of $30.2 million. The increase was primarily driven by higher investment yields in our fixed maturity trading and short term investments along with higher yields and average invested assets in our catastrophe bond and equity investments trading portfolios.

Net Realized and Unrealized Gains (Losses) on Investments

Six months ended June 30 (in thousands)	2022	2021	Change
Gross realized gains on fixed maturity investments trading	$ 14,894	$ 115,722	$ (100,828)
Gross realized losses on fixed maturity investments trading	(423,200)	(62,163)	(361,037)
Net realized gains (losses) on fixed maturity investments trading	(408,306)	53,559	(461,865)
Net unrealized gains (losses) on fixed maturity investments trading	(613,997)	(233,003)	(380,994)
Net realized and unrealized gains (losses) on investments-related derivatives (1)	(106,366)	5,532	(111,898)
Net realized gains (losses) on equity investments trading	35,572	203,298	(167,726)
Net unrealized gains (losses) on equity investments trading	(175,773)	(205,654)	29,881
Net realized and unrealized gains (losses) on other investments - catastrophe bonds	(32,921)	(19,081)	(13,840)
Net realized and unrealized gains (losses) on other investments - other	(25,333)	40,804	(66,137)
Net realized and unrealized gains (losses) on investments	$ (1,327,124)	$ (154,545)	$ (1,172,579)

(1) Net realized and unrealized gains (losses) on investment-related derivatives includes fixed maturity investments related derivatives (interest rate futures, interest rate swaps, credit default swaps and total return swaps), and equity investments related derivatives (equity futures). See “Note 13. Derivative Instruments” for additional information.

Net realized and unrealized losses on investments were $1.3 billion in the six months ended June 30, 2022, compared to $154.5 million in the six months ended June 30, 2021, an increase in net realized and unrealized losses of $1.2 billion. Principally impacting our net realized and unrealized losses on investments in the six months ended June 30, 2022 were:

- net realized and unrealized losses on our fixed maturity investments trading of $1.0 billion compared to $179.4 million in the six months ended June 30, 2021, an increase in the net realized and unrealized losses of $842.9 million, principally driven by unrealized mark-to-market losses resulting from the significant increase in interest rates during the six months ended June 30, 2022;
- net realized and unrealized losses on equity investments trading of $140.2 million compared to $2.4 million in the six months ended June 30, 2021, an increase in net realized and unrealized losses of $137.8 million. The net realized and unrealized losses in the six months ended June 30, 2022 were principally driven by broad equity market declines;
- net realized and unrealized losses on our other investments of $25.3 million compared to net realized and unrealized gains of $40.8 million in the six months ended June 30, 2021, a decline of $66.1 million, principally driven by unrealized losses from our portfolio of fund investments; and
- net realized and unrealized losses on investments-related derivatives of $106.4 million compared to net realized and unrealized gains of $5.5 million in the six months ended June 30, 2021, a decrease of $111.9 million, principally driven by the increase in interest rates and broad equity market declines, which negatively impacted our long interest rate and equity futures positions, respectively.

Net Foreign Exchange Gains (Losses)

Six months ended June 30 (in thousands)	2022	2021	Change
Net foreign exchange gains (losses)	$ (66,307)	$ (19,554)	$ (46,753)

In the six months ended June 30, 2022, net foreign exchange losses were $66.3 million compared to a $19.6 million in the six months ended June 30, 2021. The net foreign exchange loss was driven by losses attributable to third-party investors in Medici and the impact of certain foreign exchange exposures related to our underwriting activities, which we do not anticipate will recur.

Equity in Earnings of Other Ventures

Six months ended June 30 (in thousands)	2022	2021	Change
Tower Hill Companies	$ (7,083)	$ (4,903)	$ (2,180)
Top Layer Re	2,569	4,584	(2,015)
Other	5,507	3,493	2,014
Total equity in earnings (losses) of other ventures	$ 993	$ 3,174	$ (2,181)

Earnings from our investments in other ventures was $1.0 million in the six months ended June 30, 2022, compared to $3.2 million in the six months ended June 30, 2021, a decrease of $2.2 million. The decrease was primarily due to the impact of mark-to-market losses in the investment portfolios of the underlying investments, partially offset by a valuation gain on an investment in an other insurance-related company.

Corporate Expenses

Six months ended June 30 (in thousands)	2022	2021	Change
Corporate expenses	$ 24,854	$ 20,530	$ 4,324

Corporate expenses increased $4.3 million to $24.9 million, in the six months ended June 30, 2022, compared to $20.5 million in the six months ended June 30, 2021. The increase of $4.3 million was primarily due to management departures in 2022 and higher legal fees associated with the launch of Fontana.

Income Tax Benefit (Expense)

Six months ended June 30 (in thousands)	2022	2021	Change
Income tax benefit (expense)	$ 67,241	$ 5,654	$ 61,587

In the six months ended June 30, 2022, we recognized an income tax benefit of $67.2 million, compared to an income tax benefit of $5.7 million in the six months ended June 30, 2021. The increase in income tax benefit in the six months ended June 30, 2022 was primarily driven by unrealized investment losses in our U.S.-based operations.

Net Income (Loss) Attributable to Redeemable Noncontrolling Interests

Six months ended June 30 (in thousands)	2022	2021	Change
Redeemable noncontrolling interest - DaVinciRe	$ 33,499	$ 44,332	$ (10,833)
Redeemable noncontrolling interest - Medici	(32,174)	(1,454)	(30,720)
Redeemable noncontrolling interest - Vermeer	41,635	23,816	17,819
Redeemable noncontrolling interest - Fontana	(5,541)	—	(5,541)
Net income (loss) attributable to redeemable noncontrolling interests	$ 37,419	$ 66,694	$ (29,275)

Our net income attributable to redeemable noncontrolling interests was $37.4 million compared to $66.7 million in the six months ended June 30, 2021, a decrease of $29.3 million. The decrease was primarily driven by investment losses and a decrease in Medici net income due to foreign exchange losses which were attributable to noncontrolling interests during the six months ended June 30, 2022 as compared to the six months ended June 30, 2021. This was partially offset by higher underwriting income in DaVinci and Vermeer.

FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

Financial Condition

As a Bermuda-domiciled holding company, RenaissanceRe has limited operations of its own. Its assets consist primarily of investments in subsidiaries and cash and securities in amounts which fluctuate over time. We therefore rely on dividends and distributions (and other statutorily permissible payments) from our subsidiaries, investment income and fee income to meet our liquidity requirements, which primarily include making principal and interest payments on our debt and dividend payments to our preference and common shareholders.

The payment of dividends by our subsidiaries is, under certain circumstances, limited by the applicable laws and regulations in the various jurisdictions in which our subsidiaries operate. In addition, insurance laws require our insurance subsidiaries to maintain certain measures of solvency and liquidity. We believe that each of our insurance subsidiaries and branches exceeded the minimum solvency, capital and surplus requirements in their applicable jurisdictions at June 30, 2022. Certain of our subsidiaries and branches are required to file FCRs with their regulators, which provide details on solvency and financial performance. Where required, these FCRs will be posted on our website. The regulations governing our and our principal operating subsidiaries' ability to pay dividends and to maintain certain measures of solvency and liquidity, and requirements to file FCRs are discussed in detail in "Part I, Item 1. Business, Regulation" and "Note 18. Statutory Requirements" in our "Notes to the Consolidated Financial Statements" in our Form 10-K for the year ended December 31, 2021.

Liquidity and Cash Flows

Holding Company Liquidity

RenaissanceRe's principal uses of liquidity are: (1) common share related transactions including dividend payments to our common shareholders and common share repurchases, (2) preference share related transactions including dividend payments to our preference shareholders and preference share redemptions, (3) interest and principal payments on debt, (4) capital investments in our subsidiaries, (5) acquisition of new or existing companies or businesses and (6) certain corporate and operating expenses.

We attempt to structure our organization in a way that facilitates efficient capital movements between RenaissanceRe and our operating subsidiaries and to ensure that adequate liquidity is available when required, giving consideration to applicable laws and regulations, and the domiciliary location of sources of liquidity and related obligations. For example, our internal investment structures and cash pooling arrangements among the Company and certain of our subsidiaries help to efficiently facilitate capital and liquidity movements.

In the aggregate, our principal operating subsidiaries have historically produced sufficient cash flows to meet their expected claims payments and operational expenses and to provide dividend payments to us. In addition, our subsidiaries maintain a concentration of investments in high quality liquid securities, which management believes will provide additional liquidity for extraordinary claims payments should the need arise. However, in some circumstances, RenaissanceRe may determine it is necessary or advisable to contribute capital to our subsidiaries, or may be contractually required to contribute capital to our joint ventures or managed funds. For example, in 2022, RenaissanceRe contributed capital to RenaissanceRe Specialty U.S. to support growth in premiums. In addition, from time to time we invest in new managed joint ventures or managed funds, increase our investments in certain of our managed joint ventures or managed funds and contribute cash to investment subsidiaries. For instance, effective April 1, 2022, RenaissanceRe launched Fontana, an innovative joint venture dedicated to writing Casualty and Specialty risks. In certain instances, we are required to make capital contributions to our subsidiaries, for example, Renaissance Reinsurance is obligated to make a mandatory capital contribution of up to $50.0 million in the event that a loss reduces Top Layer Re's capital below a specified level.

Sources of Liquidity

Historically, cash receipts from operations, consisting primarily of premiums, investment income and fee income, have provided sufficient funds to pay the losses and operating expenses incurred by our subsidiaries and to fund dividends and distributions to RenaissanceRe. Other potential sources of liquidity include borrowings under our credit facilities and issuances of securities.

The premiums received by our operating subsidiaries are generally received months or even years before losses are paid under the policies related to such premiums. Premiums and acquisition expenses generally are received within the first two years of inception of a contract, while operating expenses are generally paid within a year of being incurred. It generally takes much longer for net claims and claims expenses incurred to be reported and ultimately settled, requiring the establishment of reserves for claims and claim expenses and losses recoverable. Therefore, the amount of net claims paid in any one year is not necessarily related to the amount of net claims and claims expenses incurred in that year, as reported in the consolidated statement of operations.

While we expect that our liquidity needs will be met by our cash receipts from operations, as a result a combination of market conditions, low investment yields, and the nature of our business where a large portion of the coverages we provide can produce losses of high severity and low frequency, future cash flows from operating activities cannot be accurately predicted and may fluctuate significantly between individual quarters and years. In addition, due to the magnitude and complexity of certain large loss events, meaningful uncertainty remains regarding losses from these events and our actual ultimate net losses from these events may vary materially from preliminary estimates, which would impact our cash flows from operations.

Our "shelf" registration statement on Form S-3 under the Securities Act allows for the public offering of various types of securities, including common shares, preference shares and debt securities, which provides a source of liquidity. Because we are a "well-known seasoned issuer" as defined by the rules promulgated under the Securities Act, we are also eligible to file additional automatically effective registration statements on Form S-3 in the future for the potential offering and sale of additional debt and equity securities.

Credit Facilities, Trusts and Other Collateral Arrangements

We also maintain various other arrangements that allow us to access liquidity and satisfy collateral requirements, including revolving credit facilities, letter of credit facilities, and regulatory trusts, as well as other types of trust and collateral arrangements. Regulatory and other requirements to post collateral to support our reinsurance obligations could impact our liquidity. For example, many jurisdictions in the U.S. do not permit insurance companies to take credit for reinsurance obtained from unlicensed or non-admitted insurers on their statutory financial statements unless security is posted, so our contracts generally require us to post a letter of credit or provide other security, such as through a multi-beneficiary reinsurance trust. In addition, if we were to fail to comply with certain covenants in our debt agreements, we may have to pledge additional collateral.

Letter of Credit and Revolving Credit Facilities

We and certain of our subsidiaries, joint ventures, and managed funds maintain secured and unsecured revolving credit facilities and letter of credit facilities that provide liquidity and allow us to satisfy certain collateral requirements. The outstanding amounts drawn under each of our significant credit facilities are set forth below

At June 30, 2022 (in thousands)	Issued or Drawn
Revolving Credit Facility (1)	$ —
Medici Revolving Credit Facility (2)	30,000
Bilateral Letter of Credit Facilities	
Secured	384,079
Unsecured	450,289
Funds at Lloyd’s Letter of Credit Facility	275,000
	$ 1,139,368

(1) At June 30, 2022, no amounts were issued or drawn under this facility.

(2) RenaissanceRe owns a noncontrolling economic interest in Medici. Because RenaissanceRe controls all of Medici’s issued voting shares, the financial statements of Medici are included in RenaissanceRe’s consolidated financial statements. The drawn amount of the Medici Revolving Credit Facility is included on the Company’s consolidated balance sheets under debt.

There have been no material changes to our credit facilities as disclosed in our Form 10-K for the year ended December 31, 2021.

Refer to “Note 7. Debt and Credit Facilities” in our “Notes to the Consolidated Financial Statements” for additional information related to our significant debt and credit facilities.

Funds at Lloyd’s

As a member of Lloyd’s, the underwriting capacity, or stamp capacity, of Syndicate 1458 must be supported by providing a deposit, the FAL, in the form of cash, securities or letters of credit. At June 30, 2022, the FAL required to support the underwriting activities at Lloyd’s through Syndicate 1458 was £721.6 million (December 31, 2021 - £756.0 million). Actual FAL posted for Syndicate 1458 at June 30, 2022 by RenaissanceRe Corporate Capital (UK) Limited was $939.2 million (December 31, 2021 - $983.4 million), supported by a $275.0 million letter of credit and a $664.2 million deposit of cash and fixed maturity securities (December 31, 2021 - $275.0 million and $708.4 million, respectively). Refer to “Note 7. Debt and Credit Facilities” in our “Notes to the Consolidated Financial Statements” for additional information related to this letter of credit facility.

Multi-Beneficiary Reinsurance Trusts, Multi-Beneficiary Reduced Collateral Reinsurance Trusts

Certain of our insurance subsidiaries use multi-beneficiary reinsurance trusts and multi-beneficiary reduced collateral reinsurance trusts to collateralize reinsurance liabilities. As described below, as of June 30, 2022, all of these trusts were funded in accordance with the relevant regulatory thresholds. In the second quarter of 2022, the New York State Department of Financial Services approved the release of a substantial portion of the surplus balance previously held in the Renaissance Reinsurance multi-beneficiary reinsurance trust. Refer to “Note 18. Statutory Requirements” in our “Notes to the Consolidated Financial Statements” in our Form 10-K for the year ended December 31, 2021 for additional information on our multi-beneficiary reinsurance trusts and multi-beneficiary reduced collateral reinsurance trusts.

Assets held under trust at June 30, 2022 with respect to our multi-beneficiary reinsurance trusts totaled $643.4 million and $255.0 million for Renaissance Reinsurance and DaVinci, respectively (December 31, 2021 - $1.2 billion and $272.0 million, respectively), compared to the minimum amount required under U.S. state regulations of $522.3 million and $146.7 million, respectively, at June 30, 2022 (December 31, 2021 - $531.8 million and $182.3 million, respectively).

Assets held under trust at June 30, 2022 with respect to our multi-beneficiary reduced collateral reinsurance trusts totaled $163.5 million, $161.6 million, and $94.6 million for Renaissance Reinsurance, DaVinci and RREAG respectively (December 31, 2021 - $136.3 million, $168.1 million and $86.6 million respectively), compared to the minimum amount required under U.S. state regulations of $136.8 million, $154.1 million and $84.6 million respectively (December 31, 2021 - $128.1 million, $164.5 million and $75.8 million respectively).

Contractual Obligations

In assessing our liquidity requirements and cash needs, we also consider contractual obligations to which we are a party. These contractual obligations are summarized in our Form 10-K for the year ended December 31, 2021. As of June 30, 2022, there were no material changes in our contractual obligations as disclosed in the table of contractual obligations and related footnotes included in our Form 10-K for the year ended December 31, 2021.

Cash Flows

Six months ended June 30 (in thousands)	2022	2021
Net cash provided by (used in) operating activities	$ 269,169	$ 335,169
Net cash provided by (used in) investing activities	(955,534)	118,387
Net cash provided by (used in) financing activities	206,353	(399,693)
Effect of exchange rate changes on foreign currency cash	19,088	(920)
Net increase (decrease) in cash and cash equivalents	(460,924)	52,943
Cash and cash equivalents, beginning of period	1,859,019	1,736,813
Cash and cash equivalents, end of period	$ 1,398,095	$ 1,789,756

2022

During the six months ended June 30, 2022, our cash and cash equivalents decreased by $460.9 million, to $1.4 billion at June 30, 2022, compared to $1.9 billion at December 31, 2021.

Cash flows provided by operating activities. Cash flows provided by operating activities during the six months ended June 30, 2022 were $269.2 million, compared to $335.2 million during the six months ended June 30, 2021. Cash flows provided by operating activities during the six months ended June 30, 2022 were primarily the result of certain adjustments to reconcile our net loss of $664.2 million to net cash provided by operating activities, including:

- an increase in unearned premiums of $1.6 billion due to the growth in gross premiums written across both our Property and Casualty and Specialty segments;
- net realized and unrealized losses on investments of $1.2 billion primarily driven by unrealized mark-to-market losses resulting from the significant increase in interest rates;
- an increase in reinsurance balances payable of $524.9 million principally driven by the issuance of non-voting preference shares to investors in Upsilon RFO, which are accounted for as prospective reinsurance and included in reinsurance balances payable on our consolidated balance sheet. See

"Note 9. Variable Interest Entities" in our "Notes to the Consolidated Financial Statements" for additional information related to Upsilon RFO's non-voting preference shares; partially offset by

- an increase in premiums receivable of $1.6 billion due to the timing of receipts and increase in our gross premiums written;
- an increase of $499.8 million in our prepaid reinsurance premiums due to the timing of payments; and
- a decrease in other operating cash flows of $265.4 million primarily reflecting subscriptions received in advance of the issuance of Medici's non-voting preference shares effective April 1, 2022, which were recorded in other liabilities at March 31, 2021, and an increase in the Company's deferred tax asset. See "Note 8. Noncontrolling Interests" in our "Notes to the Consolidated Financial Statements" for additional information related to Medici's non-voting preference shares.

Cash flows used in investing activities. During the six months ended June 30, 2022, our cash flows used in investing activities were $955.5 million, principally reflecting net purchases of fixed maturity investments trading of $1.2 billion, equity investments trading of $286.4 million, and other investments of $397.5 million, partially offset by cash flow from net sales of short term investments of $939.7 million. The net purchases of fixed maturity investments trading was primarily funded by cash flows provided by operating activities, as described above, whereas the net purchase of other investments during the six months ended June 30, 2022, was primarily driven by an increased allocation to catastrophe bonds and fund investments.

Cash flows used in financing activities. Our cash flows used in financing activities in the six months ended June 30, 2022 were $206.4 million, and were principally the result of:

- the repurchase of 874.9 thousand of our common shares in open market transactions at an aggregate cost of $137.5 million and an average price of $157.19 per common share;
- dividends paid on our common and preference shares of $32.4 million and $17.8 million, respectively; and partially offset by
- net inflows of $408.8 million primarily related to net third-party redeemable noncontrolling interest share transactions in Medici, DaVinci and Fontana.

2021

During the six months ended June 30, 2021, our cash and cash equivalents increased by $52.9 million, to $1.8 billion at June 30, 2021, compared to $1.7 billion at December 31, 2020.

Cash flows provided by operating activities. Cash flows provided by operating activities during the six months ended June 30, 2021 were $335.2 million, compared to $857.0 million during the six months ended June 30, 2020. Cash flows provided by operating activities during the six months ended June 30, 2021 were primarily the result of certain adjustments to reconcile our net income of $247.2 million to net cash provided by operating activities, including:

- an increase in unearned premiums of $1.5 billion due to the growth in gross premiums written across both our Property and Casualty and Specialty segments;
- an increase in reinsurance balances payable of $1.0 billion principally driven by the issuance of non-voting preference shares to investors in Upsilon RFO, which are accounted for as prospective reinsurance and included in reinsurance balances payable on our consolidated balance sheet. See "Note 9. Variable Interest Entities" in our "Notes to the Consolidated Financial Statements" for additional information related to Upsilon RFO's non-voting preference shares;
- an increase in reserve for claims and claim expenses of $563.6 million primarily resulting from net claims and claim expenses associated with Winter Storm Uri; partially offset by
- an increase in premiums receivable of $1.6 billion due to the timing of receipts and increase in our gross premiums written;
- an increase of $537.5 million in our prepaid reinsurance premiums due to an increase in ceded premiums written; and

- a decrease in other operating cash flows of $529.4 million primarily reflecting subscriptions received in advance of the issuance of Upsilon RFO's non-voting preference shares effective January 1, 2021, which were recorded in other liabilities at December 31, 2020. During the six months ended June 30, 2021, in connection with the issuance of the non-voting preference shares of Upsilon RFO, other liabilities were reduced by the subscriptions received in advance, and reinsurance balances payable were increased by an offsetting amount, with corresponding impacts to other operating cash flows and the change in reinsurance balances payable, as noted above, on our consolidated statements of cash flows for the six months ended June 30, 2021. See "Note 9. Variable Interest Entities" in our "Notes to the Consolidated Financial Statements" for additional information related to Upsilon RFO's non-voting preference shares.

Cash flows provided by investing activities. During the six months ended June 30, 2021, our cash flows provided by investing activities were $118.4 million, principally reflecting cash flow from net sales of short term investments and equity investments trading of $624.8 million and $123.2 million, respectively, partially offset by net purchases of fixed maturity investments trading and other investments of $330.4 million and $286.5 million, respectively. The net purchase of fixed maturity investments trading was primarily funded by cash flows provided by operating activities, as described above, whereas the net purchase of other investments during the six months ended June 30, 2021, was primarily driven by an increased allocation to catastrophe bonds and fund investments.

Cash flows used in financing activities. Our cash flows used in financing activities in the six months ended June 30, 2021 were $399.7 million, and were principally the result of:

- the repurchase of 3.0 million of our common shares in open market transactions at an aggregate cost of $480.7 million and an average price of $159.18 per common share;
- dividends paid on our common and preference shares of $35.0 million and $14.6 million, respectively; and partially offset by
- net inflows of $140.4 million primarily related to net third-party redeemable noncontrolling interest share transactions in Medici and DaVinci.

Capital Resources

We monitor our capital adequacy on a regular basis and seek to adjust our capital according to the needs of our business. In particular, we require capital sufficient to meet or exceed the capital adequacy ratios established by rating agencies for maintenance of appropriate financial strength ratings, the capital adequacy tests performed by regulatory authorities and the capital requirements under our credit facilities. From time to time, rating agencies may make changes in their capital models and rating methodologies, which could increase the amount of capital required to support our ratings. We may seek to raise additional capital or return capital to our shareholders through common share repurchases and cash dividends (or a combination of such methods). In the normal course of our operations, we may from time to time evaluate additional share or debt issuances given prevailing market conditions and capital management strategies, including for our operating subsidiaries, joint ventures and managed funds. In addition, as noted above, we enter into agreements with financial institutions to obtain letter of credit facilities for the benefit of our operating subsidiaries and certain of our joint ventures and managed funds in their reinsurance and insurance business.

Our total shareholders' equity attributable to RenaissanceRe and total debt was as follows:

(in thousands)	At June 30, 2022	At December 31, 2021	Change
Common shareholders' equity	$ 4,988,659	$ 5,874,281	$ (885,622)
Preference shares	750,000	750,000	—
Total shareholders' equity attributable to RenaissanceRe	5,738,659	6,624,281	(885,622)
3.600% Senior Notes due 2029	393,762	393,305	457
3.450% Senior Notes due 2027	297,527	297,281	246
3.700% Senior Notes due 2025	298,981	298,798	183
4.750% Senior Notes due 2025 (DaVinciRe) (1)	149,123	148,969	154
Total senior notes	$ 1,139,393	$ 1,138,353	$ 1,040
Medici Revolving Credit Facility (2)	$ 30,000	$ 30,000	$ —
Total debt	$ 1,169,393	$ 1,168,353	$ 1,040

(1) RenaissanceRe owns a noncontrolling economic interest in its joint venture DaVinciRe. Because RenaissanceRe controls a majority of DaVinciRe's issued voting shares, the consolidated financial statements of DaVinciRe are included in the consolidated financial statements of RenaissanceRe. However, RenaissanceRe does not guarantee or provide credit support for DaVinciRe and RenaissanceRe's financial exposure to DaVinciRe is limited to its investment in DaVinciRe's shares and counterparty credit risk arising from reinsurance transactions.

(2) RenaissanceRe owns a noncontrolling economic interest in Medici. Because RenaissanceRe controls all of Medici's issued voting shares, the financial statements of Medici are included in RenaissanceRe's consolidated financial statements.

Our shareholders' equity attributable to RenaissanceRe decreased $885.6 million during the six months ended June 30, 2022 principally as a result of:

- our comprehensive loss attributable to RenaissanceRe of $705.9 million;
- the repurchase of 874.9 thousand common shares in open market transactions at an aggregate cost of $137.5 million and an average price of $157.19 per common share;
- $32.4 million and $17.7 million of dividends on our common and preference shares, respectively; and
- $37.4 million of net loss attributable to redeemable noncontrolling interests.

For additional information related to the terms of our debt and significant credit facilities, see "Note 7. Debt and Credit Facilities" in our "Notes to the Consolidated Financial Statements" in this Form 10-Q and "Note 9. Debt and Credit Facilities" in our "Notes to the Consolidated Financial Statements" in our Form 10-K for the year ended December 31, 2021. See "Note 10. Shareholders' Equity" in our "Notes to the Consolidated Financial Statements" in this Form 10-Q and "Note 12. Shareholders' Equity" in our "Notes to the Consolidated Financial Statements" in our Form 10-K for the year ended December 31, 2021 for additional information related to our common and preference shares.

Reserve for Claims and Claim Expenses

We believe the most significant accounting judgment made by management is our estimate of claims and claim expense reserves. Claims and claim expense reserves represent estimates, including actuarial and statistical projections at a given point in time, of the ultimate settlement and administration costs for unpaid claims and claim expenses arising from the insurance and reinsurance contracts we sell. Our actual net claims and claim expenses paid will differ, perhaps materially, from the estimates reflected in our financial statements, which may adversely impact our financial condition, liquidity and capital resources.

Refer to "Note 8. Reserve for Claims and Claim Expenses" in our "Notes to the Consolidated Financial Statements" in our Form 10-K for the year ended December 31, 2021 and "Note 6. Reserve for Claims and Claim Expenses" included herein for more information on the risks we insure and reinsure, the reserving techniques, assumptions and processes we follow to estimate our claims and claim expense reserves, prior year development of the reserve for claims and claim expenses, analysis of our incurred and paid claims development and claims duration information for each of our Property and Casualty and Specialty segments. In addition, refer to “Part II, Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations, Summary of Critical Accounting Estimates, Claims and Claim Expense Reserves” in our Form 10-K for the year ended December 31, 2021 for more information on the reserving techniques, assumptions and processes we follow to estimate our claims and claim expense reserves, our current estimates versus our initial estimates of our claims reserves, and sensitivity analysis for each of our Property and Casualty and Specialty segments.

Investments

The table below shows our invested assets:

(in thousands, except percentages)	June 30, 2022		December 31, 2021		Change
U.S. treasuries	$ 6,012,779	29.2 %	$ 6,247,779	29.1 %	$ (235,000)
Agencies	366,752	1.8 %	361,684	1.7 %	5,068
Non-U.S. government	450,590	2.2 %	549,613	2.6 %	(99,023)
Corporate [(1)]	3,901,805	18.9 %	3,689,286	17.3 %	212,519
Residential mortgage-backed	902,508	4.4 %	955,301	4.5 %	(52,793)
Commercial mortgage-backed	443,070	2.2 %	634,925	3.0 %	(191,855)
Asset-backed	1,007,863	4.9 %	1,068,543	5.0 %	(60,680)
Total fixed maturity investments trading, at fair value	13,085,367	63.6 %	13,507,131	63.1 %	(421,764)
Short term investments, at fair value	4,429,483	21.5 %	5,298,385	24.7 %	(868,902)
Equity investments trading, at fair value	692,747	3.4 %	546,016	2.5 %	146,731
Catastrophe bonds	1,261,145	6.1 %	1,104,034	5.1 %	157,111
Direct private equity investments	81,610	0.4 %	88,373	0.4 %	(6,763)
Fund investments	871,477	4.2 %	725,802	3.4 %	145,675
Term loans	100,000	0.5 %	74,850	0.3 %	25,150
Total other investments, at fair value	2,314,232	11.2 %	1,993,059	9.2 %	321,173
Total investments, at fair value	20,521,829	99.7 %	21,344,591	99.5 %	(822,762)
Investments in other ventures, under equity method	75,979	0.3 %	98,068	0.5 %	(22,089)
Total investments	$ 20,597,808	100.0 %	$ 21,442,659	100.0 %	$ (844,851)

(1) Corporate fixed maturity investments include non-U.S. government-backed corporate fixed maturity investments.

We structure our investment portfolio to emphasize the preservation of capital and the availability of liquidity to meet our claims obligations, to be well diversified across market sectors, and to generate relatively attractive returns on a risk-adjusted basis over time. Notwithstanding the foregoing, our investments are subject to market-wide risks and fluctuations, as well as to risks inherent in particular securities. For additional information regarding our investments and the fair value measurement of our investments refer to “Note 3. Investments” and “Note 4. Fair Value Measurements” in our “Notes to the Consolidated Financial Statements.”

As the reinsurance coverages we sell include substantial protection for damages resulting from natural and man-made catastrophes, as well as for potentially large casualty and specialty exposures, we expect, from time to time, to become liable for substantial claim payments on short notice. Accordingly, our investment portfolio as a whole is structured to seek to preserve capital and provide a high level of liquidity, which means that the large majority of our investments are highly rated fixed income securities, including U.S. treasuries, agencies, highly rated sovereign and supranational securities, high-grade corporate securities and mortgage-backed and asset-backed securities. We also have an allocation to publicly traded equities reflected on our consolidated balance sheet as equity investments trading and an allocation to other investments (including catastrophe bonds, direct private equity investments, fund investments and term loans).

Other Investments

The table below shows our portfolio of other investments:

(in thousands)	June 30, 2022	December 31, 2021	Change
Catastrophe bonds	$ 1,261,145	$ 1,104,034	$ 157,111
Direct private equity investments	81,610	88,373	(6,763)
Fund investments	871,477	725,802	145,675
Term loans	100,000	74,850	25,150
Total other investments	$ 2,314,232	$ 1,993,059	$ 321,173

We account for our other investments at fair value in accordance with FASB ASC Topic *Financial Instruments*. The fair value of our fund investments, which include private equity funds, private credit funds and hedge funds, is recorded on our consolidated balance sheet in other investments, and is generally established on the basis of the net asset value per share (or its equivalent), determined by the managers of these investments in accordance with the applicable governing documents. Many of our fund investments are subject to restrictions on redemptions and sales which limit our ability to liquidate these investments in the short term.

Some of our fund managers and fund administrators are unable to provide final fund valuations as of our current reporting date. We typically experience a reporting lag to receive a final net asset value report of one month for our hedge funds and certain private credit funds and three months for private equity funds and private credit funds, although we have occasionally experienced delays of up to six months at year end. In circumstances where there is a reporting lag, we estimate the fair value of these funds by starting with the prior month or quarter-end fund valuation, adjusting for actual capital calls, redemptions or distributions, and the impact of changes in foreign currency exchange rates, and then estimating the return for the current period using all information available to us. This principally includes using preliminary estimates reported to us by our fund managers, estimating returns based on the performance of broad market indices, or other valuation methods. Actual final fund valuations may differ, perhaps materially, from our estimates and these differences are recorded as a change in estimate in our consolidated statement of operations in the period in which they are reported to us. Included in net investment income and net realized and unrealized gains (losses) on investments for the six months ended June 30, 2022 is income of $27.6 million (2021 - $7.0 million) representing the change in estimate during the period related to the difference between our estimated net investment income and realized and unrealized gains (losses) due to the lag in reporting discussed above and the actual amount as reported in the final net asset values provided by our fund managers.

Our estimate of the fair value of catastrophe bonds is based on quoted market prices, or when such prices are not available, by reference to broker or underwriter bid indications. Refer to “Note 4. Fair Value Measurements” in our “Notes to the Consolidated Financial Statements” for additional information regarding the fair value of measurement of our investments.

We have committed capital to direct private equity investments, fund investments, term loans, and investments in other ventures of $2.7 billion, of which $1.4 billion has been contributed at June 30, 2022 (December 31, 2021 - $2.7 billion and $1.3 billion, respectively). Our remaining commitments to these investments at June 30, 2022 totaled $1.3 billion (December 31, 2021 - $1.4 billion). In the future, we may enter into additional commitments in respect of these investments or individual portfolio company investment opportunities.

Ratings

Financial strength ratings are important to the competitive position of reinsurance and insurance companies. We have received high long-term issuer credit and financial strength ratings and scores from A.M. Best, S&P, Moody's and Fitch as applicable. These ratings represent independent opinions of an insurer's financial strength, operating performance and ability to meet policyholder obligations, and are not an evaluation directed toward the protection of investors or a recommendation to buy, sell or hold any of our securities. Rating organizations continually review the financial positions of our principal operating subsidiaries and joint ventures and ratings may be revised or revoked by the agencies which issue them. Additionally, rating organizations may change their rating methodology, which could have a material impact on our financial strength ratings.

In addition, S&P and A.M. Best assess companies' ERM practices, which is an opinion on the many critical dimensions of risk that determine overall creditworthiness. RenaissanceRe has been assigned an ERM score of "Very Strong" from each of these agencies, which is the highest ERM score assigned.

The ratings of our principal operating subsidiaries and joint ventures and the ERM score of RenaissanceRe as of July 22, 2022 are presented below.

	A.M. Best (1)	S&P (2)	Moody's (3)	Fitch (4)
Renaissance Reinsurance Ltd.	A+	A+	A1	A+
DaVinci Reinsurance Ltd.	A	A+	A3	—
Renaissance Reinsurance of Europe Unlimited Company	A+	A+	—	—
Renaissance Reinsurance U.S. Inc.	A+	A+	—	—
RenaissanceRe Europe AG	A+	A+	—	—
RenaissanceRe Specialty U.S. Ltd.	A+	A+	—	—
Top Layer Reinsurance Ltd.	A+	AA	—	—
Vermeer Reinsurance Ltd.	A	—	—	—
RenaissanceRe Syndicate 1458	—	—	—	—
Lloyd's Overall Market Rating	A	A+	—	AA-
RenaissanceRe ERM Score	Very Strong	Very Strong	—	—

(1) The A.M. Best ratings for our principal operating subsidiaries and joint ventures represent the insurer's financial strength rating. The Lloyd's Overall Market Rating represents RenaissanceRe Syndicate 1458's financial strength rating. RenaissanceRe has been assigned a "very Strong" ERM score by A.M. Best.

(2) The S&P ratings for our principal operating subsidiaries and joint ventures represent the insurer's financial strength rating and the issuer's long-term issuer credit rating. The Lloyd's Overall Market Rating represents RenaissanceRe Syndicate 1458's financial strength rating. RenaissanceRe has been assigned a "Very Strong" ERM score by S&P.

(3) The Moody's ratings represent the insurer's financial strength rating.

(4) The Fitch rating for Renaissance Reinsurance represents the insurer's financial strength rating. The Lloyd's Overall Market Rating represents Syndicate 1458's financial strength rating.

As of July 22, 2022, there were no material changes to our ratings as disclosed in our Form 10-K for the year ended December 31, 2021.

SUPPLEMENTAL GUARANTOR FINANCIAL INFORMATION

RenaissanceRe Finance, a 100% owned subsidiary of RenaissanceRe, is the issuer of certain 3.700% Senior Notes due 2025 and 3.450% Senior Notes due 2027, each of which are fully and unconditionally guaranteed by RenaissanceRe. The guarantees are senior unsecured obligations of RenaissanceRe and rank equally in right of payment with all other existing and future unsecured and unsubordinated indebtedness of RenaissanceRe which may be outstanding from time to time. Each series of notes contain various covenants, including limitations on mergers and consolidations, and restrictions as to the disposition of, and the placing of liens on, stock of designated subsidiaries. For additional information related to the terms of our outstanding debt securities, see “Note 9. Debt and Credit Facilities” in the “Notes to the Consolidated Financial Statements” in our Form 10-K for the year ended December 31, 2021 and “Note 7. Debt and Credit Facilities” included herein.

The following tables present supplemental summarized financial information for RenaissanceRe and RenaissanceRe Finance, collectively the “Obligor Group.” Intercompany transactions among the members of the Obligor Group have been eliminated. The financial information of non-obligor subsidiaries has been excluded from the summarized financial information. Significant intercompany transactions and receivable/payable balances between the Obligor Group and non-obligor subsidiaries are presented separately in the summarized financial information:

Summarized Balance Sheets

(in thousands)	June 30, 2022	December 31, 2021
Assets		
Receivables due from non-obligor subsidiaries	$ 1,060,045	$ 1,860,382
Other current assets	121,419	106,482
Total current assets	$ 1,181,464	$ 1,966,864
Goodwill and other intangibles	$ 106,489	$ 108,261
Loan receivable from non-obligor subsidiaries	861,532	840,298
Other noncurrent assets	7,266	15,227
Total noncurrent assets	$ 975,287	$ 963,786
Liabilities		
Payables due to non-obligor subsidiaries	$ 6,412	$ 160,703
Other current liabilities	24,738	28,680
Total current liabilities	$ 31,150	$ 189,383
Loan payable to non-obligor subsidiaries	$ 201,380	$ 201,380
Other noncurrent liabilities	1,089,173	1,088,288
Total noncurrent liabilities	$ 1,290,553	$ 1,289,668

Summarized Statement of Operations

(in thousands)	Six months ended June 30, 2022
Revenues	
Intercompany revenue with non-obligor subsidiaries	$ 39,380
Other revenue	209
Total revenues	39,589
Expenses	
Intercompany expense with non-obligor subsidiaries	81,855
Other expense	88,013
Total expenses	169,868
Income tax benefit (expense)	(475)
Net income (loss)	(130,754)
Dividends on RenaissanceRe preference shares	(17,688)
Net income (loss) attributable to Obligor Group	$ (148,442)

CURRENT OUTLOOK

Reinsurance Market Trends and Developments

Over the last 10 years, we have made key strategic decisions to build the capabilities and scale that we believe will allow us to generate superior returns in an evolving marketplace. In furtherance of this, in April 2022, we launched Fontana, an innovative casualty and specialty joint venture. We have diversified our sources of capital through various owned and managed balance sheets as well as equity, debt and insurance-linked securities markets. We are unique among our peers in that we have both owned and managed, and rated and fronted, vehicles across the risks that we write. This has afforded us significant flexibility to react when the world changes.

We believe that market conditions have created significant opportunities to source attractive risk in the lines of business that we write, and that such opportunities will result in superior returns for our shareholders. The property catastrophe market in particular has contracted as many participants are unwilling to accept heightened levels of volatility, which continue to grow as a result of the impacts of climate change. We believe that our understanding of volatility places us in a preferred position to accept risk, and we continue to see strong opportunities for growth across our portfolio. We have a strategic commitment to reinsurance that we think enhances our value proposition to customers because our reinsurance participation is consistent and broad, and our focus on reinsurance minimizes potential channel conflict with our customers.

We think that we are uniquely positioned to write a variety of risks, leveraging the enhancements we have made over the last several years to our risk and capital management technology and underwriting expertise to cover additional lines of business. In particular, we have invested heavily to understand the influence of climate change on the weather and its impact on the risks that we take. We believe that the RenaissanceRe Risk Sciences team gives us an advantage in properly reflecting the evolving phenomenon of climate change in our models as compared to commercially available models. We plan to continue to seek to take advantage of additional opportunities throughout the year and think that strategic decisions we have made in prior periods have laid the foundation for these initiatives. We believe that our clients value our ability to be a long-term partner who brings access to multiple forms of capital and innovative, large-scale solutions.

General Economic Conditions

We believe the stresses in the global economy will continue and that this may result in increased market volatility. Global events, including the COVID-19 pandemic, the war in Ukraine and global supply chain issues have contributed to a resurgence of economic inflation. We consider the anticipated effects of inflation, including social, economic, and event-driven, in our catastrophe loss models, on our investment portfolio, and generally in the running of our business. We have implemented a robust framework across our underwriting portfolio and reserving process to assess the potential impacts of inflation. More recently, many central banks have begun to raise interest rates, which could act as a countervailing force against some inflationary pressures. Increases in interest rates have driven significant short-term mark-to-market losses in our investment portfolio, however, as interest rates continue to rise, we expect to see an increase in net investment income from our investment portfolio.

The effects of interest rate trends on our reinsurance and insurance business could be magnified for longer-tail business lines that are more inflation-sensitive, particularly in our Casualty and Specialty segment, and in our other property class of business within our Property segment. Notwithstanding the many uncertainties and challenges that lie ahead, we believe that our track record of responding to industry events, differentiated risk management and client service capabilities, and access to diverse sources of both capital and risk position us favorably in the current environment.

The risk of a global recession is a growing concern. However, we believe that our business model is well positioned to be less sensitive to an inflationary or recessionary environment. This type of environment may increase demand for reinsurance by reducing the supply and increasing the cost of capital, and adjusting customers’ risk tolerances. Consequently, reinsurance rates may rise while becoming more competitive as compared to other forms of risk capital. Furthermore, there is limited discretion in purchasing decisions across the insurance value chain, which can also increase demand for reinsurance.

Property. We saw significant mid-year demand and continued favorable pricing trends in the U.S. and internationally. We continue to carefully monitor ongoing, adverse trends in the Florida market with respect to claims practices, litigation risks, and exposure growth. However, while we have moved away from some programs in Florida, Southeast U.S. wind risk remains a primary risk in our portfolio as we have moved towards more regional and nationwide programs and accessed this risk through the other property class of business.

Casualty and Specialty. We continue to see ongoing rate increases across multiple lines of business and geographies within our Casualty and Specialty segment, and we have expanded participation on multiple casualty and specialty lines. We intentionally, but carefully, began building this segment during a more challenging phase of the market, constructing a portfolio with embedded options for growth. Over the past three years, we have accelerated this growth into an improving market. We believe that our book of business is beginning to reflect the rate improvements that we have seen over the past several years. We think that our prior work building strong relationships with key customers allowed us to gain superior access to desirable business.

See the “Risk Factors” section in our Form 10-K for additional information on factors that could cause our actual results to differ materially from those in the forward-looking statements contained in this Form 10-Q and other documents we file with the SEC.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are principally exposed to four types of market risk: interest rate risk; foreign currency risk; credit risk; and equity price risk. Our investment guidelines permit, subject to approval, investments in derivative instruments such as futures, options, foreign currency forward contracts and swap agreements, which may be used to assume risks or for hedging purposes.

There were no material changes to these market risks, as disclosed in “Part II, Item 7A. Quantitative and Qualitative Disclosures about Market Risk” in our Form 10-K for the year ended December 31, 2021, during the six months ended June 30, 2022. See “Part II, Item 7A. Quantitative and Qualitative Disclosures about Market Risk,” in our Form 10-K for the year ended December 31, 2021 for a discussion of our exposure to these risks.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(b) and 15d-15(b) of the Exchange Act, as of the end of the period covered by this report. Based upon that evaluation, our management, including our Chief Executive Officer and Chief Financial Officer, concluded that, at June 30, 2022, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in Company reports filed or submitted under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms and (ii) accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended June 30, 2022, which were identified in connection with our evaluation required pursuant to Rules 13a-15 or 15d-15 under the Exchange Act, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

There have been no material changes to the legal proceedings previously disclosed in our Form 10-K for the year ended December 31, 2021.

ITEM 1A. RISK FACTORS

There have been no material changes to the risk factors previously disclosed in our Form 10-K for the year ended December 31, 2021.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Our share repurchase program may be effected from time to time, depending on market conditions and other factors, through open market purchases and privately negotiated transactions. On May 16, 2022, our Board of Directors approved a renewal of our authorized share repurchase program to an aggregate amount of up to $500.0 million. Unless terminated earlier by our Board of Directors, the program will expire when we have repurchased the full value of the shares authorized. The table below details the repurchases that were made under the program during the second quarter of 2022, and also includes other shares purchased, which represents common shares surrendered by employees in respect of withholding tax obligations on the vesting of restricted stock.

	Total shares purchased		Other shares purchased		Shares purchased under publicly announced repurchase program		Maximum dollar amount still available under repurchase program
	Shares purchased	Average price per share	Shares purchased	Average price per share	Shares purchased	Average price per share	(in thousands)
Beginning dollar amount available to be repurchased							$ 489,138
April 1 - 31, 2022	—	$ —	—	$ —	—	$ —	489,138
May 1 - 16, 2022	132,600	$ 145.58	—	$ —	132,600	$ 145.58	469,834
May 16 - renewal of authorized share repurchase program of $500.0 million							500,000
May 17 - 31, 2022	62,588	$ 149.59	458	$ 145.94	62,130	$ 149.62	490,705
June 1 - 30, 2022	103,519	$ 149.71	—	$ —	103,519	$ 149.71	475,207
Total	298,707	$ 147.85	458	$ 145.94	298,249	$ 147.85	$ 475,207

During the six months ended June 30, 2022, pursuant to our publicly announced share repurchase program, we repurchased 874.9 thousand common shares at an aggregate cost of $137.5 million and an average price of $157.19 per common share. At June 30, 2022, $475.2 million remained available for repurchase under the share repurchase program. Subsequent to June 30, 2022 and through the period ended July 22, 2022, we repurchased 175.7 thousand common shares at an aggregate cost of $25.3 million and an average price of $144.07 per common share. We are not currently planning additional share repurchases in the third quarter of 2022 as we intend to prioritize capital for deployment into the business; however, we may resume repurchases at any time when we believe it is prudent to do so and without further notice. In the future, we may authorize additional purchase activities under the currently authorized share repurchase program, increase the amount authorized under the share repurchase program, or adopt additional trading plans. Our decision to repurchase common shares will depend on, among other matters, the market price of the common shares and our capital requirements.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

10.1*	RenaissanceRe Holdings Ltd. First Amended and Restated 2016 Long-Term Incentive Plan, incorporated by reference to Appendix B to RenaissanceRe Holdings Ltd.'s Definitive Proxy Statement on Schedule 14A, filed with the SEC on March 28, 2022.
31.1	Certification of Kevin J. O'Donnell, Chief Executive Officer of RenaissanceRe Holdings Ltd., pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Robert Qutub, Chief Financial Officer of RenaissanceRe Holdings Ltd., pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1	Certification of Kevin J. O'Donnell, Chief Executive Officer of RenaissanceRe Holdings Ltd., pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Robert Qutub, Chief Financial Officer of RenaissanceRe Holdings Ltd., pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document and included in Exhibit 101).

* Represents management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

RENAISSANCERE HOLDINGS LTD.

Date: July 26, 2022 /s/ Robert Qutub

Robert Qutub
Executive Vice President and Chief Financial Officer
(Principal Financial Officer and Duly Authorized Officer)

Date: July 26, 2022 /s/ James C. Fraser

James C. Fraser
Senior Vice President and Chief Accounting Officer
(Principal Accounting Officer)

Exhibit 31.1

CERTIFICATION

I, Kevin J. O'Donnell, certify that:

1. I have reviewed this Form 10-Q of RenaissanceRe Holdings Ltd.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: July 26, 2022

/s/ Kevin J. O'Donnell

Kevin J. O'Donnell
Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Robert Qutub, certify that:

1. I have reviewed this Form 10-Q of RenaissanceRe Holdings Ltd.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 26, 2022

/s/ Robert Qutub

Robert Qutub
Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Form 10-Q of RenaissanceRe Holdings Ltd. (the “Company”) for the quarter ended June 30, 2022, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Kevin J. O'Donnell, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Kevin J. O'Donnell
Kevin J. O'Donnell
Chief Executive Officer
July 26, 2022

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Form 10-Q of RenaissanceRe Holdings Ltd. (the “Company”) for the quarter ended June 30, 2022, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Robert Qutub, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Robert Qutub
Robert Qutub
Chief Financial Officer
July 26, 2022