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, 2021

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 No. 1-11778

CHUBB LIMITED

(Exact name of registrant as specified in its charter)

Switzerland	**98-0091805**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

Baerengasse 32
Zurich, Switzerland CH-8001
(Address of principal executive offices) (Zip Code)
+41 (0)43 456 76 00
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, par value CHF 24.15 per share	CB	New York Stock Exchange
Guarantee of Chubb INA Holdings Inc. 0.30% Senior Notes due 2024	CB/24A	New York Stock Exchange
Guarantee of Chubb INA Holdings Inc. 0.875% Senior Notes due 2027	CB/27	New York Stock Exchange
Guarantee of Chubb INA Holdings Inc. 1.55% Senior Notes due 2028	CB/28	New York Stock Exchange
Guarantee of Chubb INA Holdings Inc. 0.875% Senior Notes due 2029	CB/29A	New York Stock Exchange
Guarantee of Chubb INA Holdings Inc. 1.40% Senior Notes due 2031	CB/31	New York Stock Exchange
Guarantee of Chubb INA Holdings Inc. 2.50% Senior Notes due 2038	CB/38A	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, 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 registrant's Common Shares (CHF 24.15 par value) outstanding as of July 16, 2021 was 438,740,033.

CHUBB LIMITED
INDEX TO FORM 10-Q

Part I.	**FINANCIAL INFORMATION**	**Page**
Item 1.	Financial Statements:	
	Consolidated Balance Sheets (Unaudited) June 30, 2021 and December 31, 2020	3
	Consolidated Statements of Operations and Comprehensive Income (Unaudited) Three and Six Months Ended June 30, 2021 and 2020	4
	Consolidated Statements of Shareholders' Equity (Unaudited) Three and Six Months Ended June 30, 2021 and 2020	5
	Consolidated Statements of Cash Flows (Unaudited) Six Months Ended June 30, 2021 and 2020	6
	Notes to Consolidated Financial Statements (Unaudited)	
	Note 1. General	7
	Note 2. Acquisitions	8
	Note 3. Investments	8
	Note 4. Fair value measurements	14
	Note 5. Reinsurance	21
	Note 6. Unpaid losses and loss expenses	22
	Note 7. Commitments, contingencies, and guarantees	27
	Note 8. Shareholders' equity	32
	Note 9. Share-based compensation	33
	Note 10. Postretirement benefits	34
	Note 11. Other income and expense	36
	Note 12. Segment information	36
	Note 13. Earnings per share	39
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	40
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	76
Item 4.	Controls and Procedures	78
Part II.	**OTHER INFORMATION**	
Item 1.	Legal Proceedings	79
Item 1A.	Risk Factors	79
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds and Issuer Repurchases of Equity Securities	79
Item 6.	Exhibits	80

PART I FINANCIAL INFORMATION

ITEM 1. Financial Statements

CONSOLIDATED BALANCE SHEETS (Unaudited)
Chubb Limited and Subsidiaries

(in millions of U.S. dollars, except share and per share data)	June 30 2021	December 31 2020
Assets		
Investments		
Fixed maturities available for sale, at fair value, net of valuation allowance - $11 and $20 (amortized cost – $88,265 and $85,188)	**$ 92,163**	$ 90,699
Fixed maturities held to maturity, at amortized cost, net of valuation allowance - $37 and $44 (fair value – $11,343 and $12,510)	**10,673**	11,653
Equity securities, at fair value	**4,607**	4,027
Short-term investments, at fair value (amortized cost – $4,471 and $4,349)	**4,470**	4,345
Other investments, at fair value	**9,457**	7,945
Total investments	**121,370**	118,669
Cash	**1,843**	1,747
Restricted cash	**155**	89
Securities lending collateral	**2,369**	1,844
Accrued investment income	**837**	867
Insurance and reinsurance balances receivable, net of valuation allowance - $42 and $44	**11,720**	10,480
Reinsurance recoverable on losses and loss expenses, net of valuation allowance - $322 and $314	**15,725**	15,592
Reinsurance recoverable on policy benefits	**203**	206
Deferred policy acquisition costs	**5,605**	5,402
Value of business acquired	**255**	263
Goodwill	**15,506**	15,400
Other intangible assets	**5,694**	5,811
Prepaid reinsurance premiums	**3,141**	2,769
Investments in partially-owned insurance companies	**2,983**	2,813
Other assets	**9,768**	8,822
Total assets	**$ 197,174**	$ 190,774
Liabilities		
Unpaid losses and loss expenses	**$ 70,289**	$ 67,811
Unearned premiums	**19,167**	17,652
Future policy benefits	**5,930**	5,713
Insurance and reinsurance balances payable	**7,525**	6,708
Securities lending payable	**2,369**	1,844
Accounts payable, accrued expenses, and other liabilities	**14,584**	14,052
Deferred tax liabilities	**581**	892
Repurchase agreements	**1,405**	1,405
Long-term debt	**14,954**	14,948
Trust preferred securities	**308**	308
Total liabilities	**137,112**	131,333
Commitments and contingencies (refer to Note 7)		
Shareholders' equity		
Common Shares (CHF 24.15 par value; 477,605,264 shares issued; 438,717,213 and 450,732,625 shares outstanding)	**11,064**	11,064
Common Shares in treasury (38,888,051 and 26,872,639 shares)	**(5,772)**	(3,644)
Additional paid-in capital	**9,046**	9,815
Retained earnings	**43,902**	39,337
Accumulated other comprehensive income (AOCI)	**1,822**	2,869
Total shareholders' equity	**60,062**	59,441
Total liabilities and shareholders' equity	**$ 197,174**	$ 190,774

See accompanying notes to the consolidated financial statements

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (Unaudited)

Chubb Limited and Subsidiaries

(in millions of U.S. dollars, except per share data)	Three Months Ended June 30		Six Months Ended June 30	
	2021	2020	**2021**	2020
Revenues				
Net premiums written	**$ 9,546**	$ 8,355	**$ 18,208**	$ 16,332
Increase in unearned premiums	**(733)**	(227)	**(1,174)**	(410)
Net premiums earned	**8,813**	8,128	**17,034**	15,922
Net investment income	**884**	827	**1,747**	1,688
Net realized gains (losses) (includes $12, $(33), $36, and $(352) reclassified from AOCI)	**(33)**	30	**854**	(928)
Total revenues	**9,664**	8,985	**19,635**	16,682
Expenses				
Losses and loss expenses	**5,006**	6,577	**10,059**	11,062
Policy benefits	**185**	223	**352**	352
Policy acquisition costs	**1,698**	1,593	**3,363**	3,208
Administrative expenses	**775**	727	**1,519**	1,468
Interest expense	**122**	128	**244**	260
Other (income) expense	**(777)**	58	**(1,267)**	113
Amortization of purchased intangibles	**73**	72	**145**	145
Total expenses	**7,082**	9,378	**14,415**	16,608
Income (loss) before income tax	**2,582**	(393)	**5,220**	74
Income tax expense (benefit) (includes $(6), $(2), $(2), and $(42) on unrealized gains and losses reclassified from AOCI)	**317**	(62)	**655**	153
Net income (loss)	**$ 2,265**	$ (331)	**$ 4,565**	$ (79)
Other comprehensive income (loss)				
Unrealized appreciation (depreciation)	**$ 706**	$ 3,248	**$ (1,587)**	$ 769
Reclassification adjustment for net realized (gains) losses included in net income (loss)	**(12)**	33	**(36)**	352
	694	3,281	**(1,623)**	1,121
Change in:				
Cumulative foreign currency translation adjustment	**308**	445	**330**	(414)
Postretirement benefit liability adjustment	**(9)**	(22)	**(37)**	(36)
Other comprehensive income (loss), before income tax	**993**	3,704	**(1,330)**	671
Income tax (expense) benefit related to OCI items	**(129)**	(513)	**283**	(192)
Other comprehensive income (loss)	**864**	3,191	**(1,047)**	479
Comprehensive income	**$ 3,129**	$ 2,860	**$ 3,518**	$ 400
Earnings per share				
Basic earnings (loss) per share	**$ 5.09**	$ (0.73)	**$ 10.20**	$ (0.17)
Diluted earnings (loss) per share	**$ 5.06**	$ (0.73)	**$ 10.13**	$ (0.17)

See accompanying notes to the consolidated financial statements

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (Unaudited)

Chubb Limited and Subsidiaries

(in millions of U.S. dollars)	Three Months Ended June 30		Six Months Ended June 30	
	2021	2020	**2021**	2020
Common Shares				
Balance – beginning and end of period	**$ 11,064**	$ 11,121	**$ 11,064**	$ 11,121
Common Shares in treasury				
Balance – beginning of period	**(3,901)**	(3,872)	**(3,644)**	(3,754)
Common Shares repurchased	**(1,921)**	—	**(2,440)**	(326)
Net shares issued under employee share-based compensation plans	**50**	6	**312**	214
Balance – end of period	**(5,772)**	(3,866)	**(5,772)**	(3,866)
Additional paid-in capital				
Balance – beginning of period	**9,318**	10,710	**9,815**	11,203
Net shares issued under employee share-based compensation plans	**5**	7	**(182)**	(189)
Exercise of stock options	**(6)**	(3)	**(30)**	(29)
Share-based compensation expense	**81**	55	**147**	124
Funding of dividends declared to Retained earnings	**(352)**	(353)	**(704)**	(693)
Balance – end of period	**9,046**	10,416	**9,046**	10,416
Retained earnings				
Balance – beginning of period	**41,637**	36,322	**39,337**	36,142
Cumulative effect of adoption of accounting guidance	**—**	—	**—**	(72)
Balance – beginning of period, as adjusted	**41,637**	36,322	**39,337**	36,070
Net income (loss)	**2,265**	(331)	**4,565**	(79)
Funding of dividends declared from Additional paid-in capital	**352**	353	**704**	693
Dividends declared on Common Shares	**(352)**	(353)	**(704)**	(693)
Balance – end of period	**43,902**	35,991	**43,902**	35,991
Accumulated other comprehensive income				
Net unrealized appreciation (depreciation) on investments				
Balance – beginning of period	**2,761**	667	**4,673**	2,543
Change in period, before reclassification from AOCI, net of income tax (expense) benefit of $(107), $(522), $294 and $(198)	**599**	2,726	**(1,293)**	571
Amounts reclassified from AOCI, net of income tax expense of $(6), $(2), $(2), $(42)	**(18)**	31	**(38)**	310
Change in period, net of income tax (expense) benefit of $(113), $(524), $292 and $(240)	**581**	2,757	**(1,331)**	881
Balance – end of period	**3,342**	3,424	**3,342**	3,424
Cumulative foreign currency translation adjustment				
Balance – beginning of period	**(1,613)**	(2,764)	**(1,637)**	(1,939)
Change in period, net of income tax (expense) benefit of $(18), $6, $(16) and $40	**290**	451	**314**	(374)
Balance – end of period	**(1,323)**	(2,313)	**(1,323)**	(2,313)
Postretirement benefit liability adjustment				
Balance – beginning of period	**(190)**	4	**(167)**	15
Change in period, net of income tax benefit of $2, $5, $7 and $8	**(7)**	(17)	**(30)**	(28)
Balance – end of period	**(197)**	(13)	**(197)**	(13)
Accumulated other comprehensive income	**1,822**	1,098	**1,822**	1,098
Total shareholders' equity	**$ 60,062**	$ 54,760	**$ 60,062**	$ 54,760

See accompanying notes to the consolidated financial statements

CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

Chubb Limited and Subsidiaries

(in millions of U.S. dollars)	Six Months Ended June 30 2021	2020
Cash flows from operating activities		
Net income (loss)	**$ 4,565**	$ (79)
Adjustments to reconcile net income to net cash flows from operating activities		
Net realized (gains) losses	**(854)**	928
Amortization of premiums/discounts on fixed maturities	**147**	192
Amortization of purchased intangibles	**145**	145
Deferred income taxes	**(28)**	(302)
Unpaid losses and loss expenses	**2,165**	3,172
Unearned premiums	**1,533**	538
Future policy benefits	**110**	87
Insurance and reinsurance balances payable	**796**	118
Accounts payable, accrued expenses, and other liabilities	**(630)**	(304)
Income taxes payable	**50**	2
Insurance and reinsurance balances receivable	**(1,180)**	(645)
Reinsurance recoverable	**(47)**	(71)
Deferred policy acquisition costs	**(198)**	(62)
Other	**(1,347)**	(22)
Net cash flows from operating activities	**5,227**	3,697
Cash flows from investing activities		
Purchases of fixed maturities available for sale	**(15,217)**	(13,058)
Purchases of fixed maturities held to maturity	**(211)**	(42)
Purchases of equity securities	**(642)**	(2,824)
Sales of fixed maturities available for sale	**3,469**	7,734
Sales of equity securities	**614**	1,353
Maturities and redemptions of fixed maturities available for sale	**9,410**	5,220
Maturities and redemptions of fixed maturities held to maturity	**1,163**	642
Net change in short-term investments	**(120)**	173
Net derivative instruments settlements	**(87)**	(18)
Private equity contributions	**(873)**	(546)
Private equity distributions	**640**	443
Payment, including deposit, for Huatai Group interest	**(65)**	(1,550)
Other	**(106)**	(221)
Net cash flows used for investing activities	**(2,025)**	(2,694)
Cash flows from financing activities		
Dividends paid on Common Shares	**(703)**	(678)
Common Shares repurchased	**(2,440)**	(333)
Proceeds from issuance of repurchase agreements	**550**	1,402
Repayment of repurchase agreements	**(550)**	(1,402)
Proceeds from share-based compensation plans	**178**	74
Policyholder contract deposits and other	**268**	215
Policyholder contract withdrawals and other	**(245)**	(173)
Other	**(80)**	(3)
Net cash flows used for financing activities	**(3,022)**	(898)
Effect of foreign currency rate changes on cash and restricted cash	**(18)**	(42)
Net increase in cash and restricted cash	**162**	63
Cash and restricted cash – beginning of period	**1,836**	1,646
Cash and restricted cash – end of period	**$ 1,998**	$ 1,709
Supplemental cash flow information		
Taxes paid	**$ 631**	$ 442
Interest paid	**$ 271**	$ 286

See accompanying notes to the consolidated financial statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)
Chubb Limited and Subsidiaries

1. General

a) Basis of presentation

Chubb Limited is a holding company incorporated in Zurich, Switzerland. Chubb Limited, through its subsidiaries, provides a broad range of insurance and reinsurance products to insureds worldwide. Our results are reported through the following business segments: North America Commercial P&C Insurance, North America Personal P&C Insurance, North America Agricultural Insurance, Overseas General Insurance, Global Reinsurance, and Life Insurance. Refer to Note 12 for additional information.

The interim unaudited consolidated financial statements, which include the accounts of Chubb Limited and its subsidiaries (collectively, Chubb, we, us, or our), have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) and, in the opinion of management, reflect all adjustments necessary for a fair statement of the results and financial position for such periods. All significant intercompany accounts and transactions, including internal reinsurance transactions, have been eliminated.

The results of operations and cash flows for any interim period are not necessarily indicative of the results for the full year. These consolidated financial statements should be read in conjunction with the consolidated financial statements and related notes included in our 2020 Form 10-K.

b) Restricted cash

Restricted cash in the Consolidated balance sheets represents amounts held for the benefit of third parties and is legally or contractually restricted as to withdrawal or usage. Amounts include deposits with U.S. and non-U.S. regulatory authorities, trust funds set up for the benefit of ceding companies, and amounts pledged as collateral to meet financing arrangements.

The following table provides a reconciliation of cash and restricted cash reported within the Consolidated balance sheets that total to the amounts shown in the Consolidated statements of cash flows:

(in millions of U.S. dollars)		**June 30 2021**		December 31 2020
Cash	**$**	**1,843**	$	1,747
Restricted cash		**155**		89
Total cash and restricted cash shown in the Consolidated statements of cash flows	**$**	**1,998**	$	1,836

c) Goodwill

During the six months ended June 30, 2021, Goodwill increased $106 million, reflecting the impact of foreign exchange.

d) Accounting guidance not yet adopted

Targeted Improvements to the Accounting for Long-Duration Contracts

In August 2018, the FASB issued guidance to improve the existing recognition, measurement, presentation, and disclosure requirements for long-duration contracts issued by an insurance entity. The amendments in this update require more frequent updating of assumptions and a standardized discount rate for the future policy benefit liability, a requirement to use the fair value measurement model for policies with market risk benefits, simplified amortization of deferred acquisition costs, and enhanced disclosures. This standard will be effective in the first quarter of 2023 with early adoption permitted. We are currently assessing the effect of adopting this guidance on our financial condition and results of operations. We will be better able to quantify the effect of adopting this standard as we progress in our implementation process and draw nearer to the date of adoption.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

2. Acquisitions

Huatai Group

Chubb maintains a direct investment in Huatai Insurance Group Co., Ltd. (Huatai Group). Huatai Group is the parent company of, and owns 100 percent of, Huatai Property & Casualty Insurance Co., Ltd. (Huatai P&C), approximately 80 percent of Huatai Life Insurance Co., Ltd. (Huatai Life), and approximately 82 percent of Huatai Asset Management Co., Ltd. (collectively, Huatai). Huatai Group's insurance operations have more than 600 branches and 17 million customers in China. In November 2020, we completed the purchase of an incremental 0.9 percent ownership interest in Huatai Group for approximately $65 million, which was paid in January 2021.

As of June 30, 2021, Chubb's aggregate ownership interest in Huatai Group was approximately 47.1 percent. Chubb applies the equity method of accounting to its investment in Huatai Group by recording its share of net income or loss in Other (income) expense in the Consolidated statements of operations. In 2019, Chubb entered into an agreement to acquire an additional 7.1 percent ownership interest in Huatai Group. The purchase of the additional 7.1 percent ownership interest is contingent upon important conditions. Upon completion of the 7.1 percent purchase, Chubb is expected to obtain majority ownership of Huatai Group and control of Huatai. At that time, Chubb is expected to apply consolidation accounting and discontinue the application of the equity method of accounting.

3. Investments

a) Fixed maturities

June 30, 2021 (in millions of U.S. dollars)	Amortized Cost	Valuation Allowance	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value
Available for sale					
U.S. Treasury / Agency	$ 2,349	$ —	$ 134	$ (5)	$ 2,478
Non-U.S.	25,269	(5)	1,296	(148)	26,412
Corporate and asset-backed securities	35,916	(6)	1,779	(114)	37,575
Mortgage-backed securities	18,851	—	752	(50)	19,553
Municipal	5,880	—	267	(2)	6,145
	$ 88,265	$ (11)	$ 4,228	$ (319)	$ 92,163

	Amortized Cost	Valuation Allowance	Net Carrying Value	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value
Held to maturity						
U.S. Treasury / Agency	$ 1,041	$ —	$ 1,041	$ 41	$ —	$ 1,082
Non-U.S.	1,285	(5)	1,280	86	—	1,366
Corporate and asset-backed securities	2,117	(30)	2,087	227	—	2,314
Mortgage-backed securities	1,782	(1)	1,781	111	—	1,892
Municipal	4,485	(1)	4,484	205	—	4,689
	$ 10,710	$ (37)	$ 10,673	$ 670	$ —	$ 11,343

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

December 31, 2020 (in millions of U.S. dollars)	Amortized Cost	Valuation Allowance	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value
Available for sale					
U.S. Treasury / Agency	$ 2,471	$ —	$ 199	$ —	$ 2,670
Non-U.S.	24,594	(6)	1,808	(42)	26,354
Corporate and asset-backed securities	34,095	(14)	2,322	(72)	36,331
Mortgage-backed securities	17,456	—	1,022	(8)	18,470
Municipal	6,572	—	304	(2)	6,874
	$ 85,188	$ (20)	$ 5,655	$ (124)	$ 90,699

	Amortized Cost	Valuation Allowance	Net Carrying Value	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value
Held to maturity						
U.S. Treasury / Agency	$ 1,392	$ —	$ 1,392	$ 60	$ —	$ 1,452
Non-U.S.	1,295	(7)	1,288	118	(1)	1,405
Corporate and asset-backed securities	2,185	(35)	2,150	288	—	2,438
Mortgage-backed securities	2,000	(1)	1,999	148	(1)	2,146
Municipal	4,825	(1)	4,824	245	—	5,069
	$ 11,697	$ (44)	$ 11,653	$ 859	$ (2)	$ 12,510

The following table presents the amortized cost of our Held to Maturity (HTM) securities according to S&P rating:

	June 30, 2021		December 31, 2020	
(in millions of U.S. dollars, except for percentages)	**Amortized cost**	**% of Total**	Amortized cost	% of Total
AAA	**$ 2,268**	**21 %**	$ 2,511	22 %
AA	**5,544**	**52 %**	6,193	53 %
A	**2,027**	**19 %**	2,138	18 %
BBB	**842**	**8 %**	826	7 %
BB	**28**	**— %**	28	— %
Other	**1**	**— %**	1	— %
Total	**$ 10,710**	**100 %**	$ 11,697	100 %

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)
Chubb Limited and Subsidiaries

The following table presents fixed maturities by contractual maturity:

(in millions of U.S. dollars)	June 30 2021 Net Carrying Value	June 30 2021 Fair Value	December 31 2020 Net Carrying Value	December 31 2020 Fair Value
Available for sale				
Due in 1 year or less	**$ 4,536**	**$ 4,536**	$ 4,760	$ 4,760
Due after 1 year through 5 years	**26,142**	**26,142**	26,227	26,227
Due after 5 years through 10 years	**27,953**	**27,953**	27,232	27,232
Due after 10 years	**13,979**	**13,979**	14,010	14,010
	72,610	**72,610**	72,229	72,229
Mortgage-backed securities	**19,553**	**19,553**	18,470	18,470
	$ 92,163	**$ 92,163**	$ 90,699	$ 90,699
Held to maturity				
Due in 1 year or less	**$ 880**	**$ 887**	$ 1,231	$ 1,240
Due after 1 year through 5 years	**3,579**	**3,716**	3,592	3,760
Due after 5 years through 10 years	**2,734**	**2,887**	3,029	3,228
Due after 10 years	**1,699**	**1,961**	1,802	2,136
	8,892	**9,451**	9,654	10,364
Mortgage-backed securities	**1,781**	**1,892**	1,999	2,146
	$ 10,673	**$ 11,343**	$ 11,653	$ 12,510

Expected maturities could differ from contractual maturities because borrowers may have the right to call or prepay obligations, with or without call or prepayment penalties.

b) Gross unrealized loss
Fixed maturities in an unrealized loss position at June 30, 2021 comprised both investment grade and below investment grade securities for which fair value declined primarily due to widening credit spreads since the date of purchase.

The following tables present, for Available for Sale (AFS) fixed maturities in an unrealized loss position (including securities on loan) that are not deemed to have expected credit losses, the aggregate fair value and gross unrealized loss by length of time the security has continuously been in an unrealized loss position:

June 30, 2021 (in millions of U.S. dollars)	0 – 12 Months Fair Value	0 – 12 Months Gross Unrealized Loss	Over 12 Months Fair Value	Over 12 Months Gross Unrealized Loss	Total Fair Value	Total Gross Unrealized Loss
U.S. Treasury / Agency	**$ 203**	**$ (5)**	**$ —**	**$ —**	**$ 203**	**$ (5)**
Non-U.S.	**4,325**	**(122)**	**610**	**(21)**	**4,935**	**(143)**
Corporate and asset-backed securities	**4,940**	**(87)**	**589**	**(14)**	**5,529**	**(101)**
Mortgage-backed securities	**5,127**	**(49)**	**36**	**(1)**	**5,163**	**(50)**
Municipal	**90**	**(1)**	**8**	**(1)**	**98**	**(2)**
Total AFS fixed maturities	**$ 14,685**	**$ (264)**	**$ 1,243**	**$ (37)**	**$ 15,928**	**$ (301)**

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

December 31, 2020 (in millions of U.S. dollars)	0 – 12 Months Fair Value	0 – 12 Months Gross Unrealized Loss	Over 12 Months Fair Value	Over 12 Months Gross Unrealized Loss	Total Fair Value	Total Gross Unrealized Loss
Non-U.S.	$ 1,628	$ (35)	$ 114	$ (5)	$ 1,742	$ (40)
Corporate and asset-backed securities	2,212	(33)	593	(14)	2,805	(47)
Mortgage-backed securities	875	(6)	35	(2)	910	(8)
Municipal	40	(1)	16	(1)	56	(2)
Total AFS fixed maturities	$ 4,755	$ (75)	$ 758	$ (22)	$ 5,513	$ (97)

c) Net realized gains (losses)

The following table presents the components of Net realized gains (losses):

(in millions of U.S. dollars)	Three Months Ended June 30 2021	Three Months Ended June 30 2020	Six Months Ended June 30 2021	Six Months Ended June 30 2020
Fixed maturities:				
Gross realized gains	**$ 56**	$ 68	**$ 93**	$ 145
Gross realized losses	**(53)**	(174)	**(72)**	(299)
Net (provision for) recovery of expected credit losses	**10**	104	**16**	(46)
Impairment [1]	**(1)**	(31)	**(1)**	(152)
Total fixed maturities	**$ 12**	$ (33)	**$ 36**	$ (352)
Equity securities	**150**	148	**517**	119
Other investments	**62**	(107)	**100**	(102)
Foreign exchange losses	**(97)**	(61)	**(21)**	(129)
Investment and embedded derivative instruments	**(91)**	14	**18**	29
Fair value adjustments on insurance derivative	**(8)**	213	**311**	(472)
S&P futures	**(64)**	(103)	**(108)**	22
Other derivative instruments	**3**	(1)	**2**	(3)
Other	**—**	(40)	**(1)**	(40)
Net realized gains (losses) (pre-tax)	**$ (33)**	$ 30	**$ 854**	$ (928)

[1] Relates to certain securities we intended to sell and securities written to market entering default.

Realized gains and losses from Equity securities and Other investments from the table above include sales of securities and unrealized gains and losses from fair value changes as follows:

(in millions of U.S. dollars)	Three Months Ended June 30 2021 Equity Securities	2021 Other Investments	2021 Total	2020 Equity Securities	2020 Other Investments	2020 Total
Net gains (losses) recognized during the period	**$ 150**	**$ 62**	**$ 212**	$ 148	$ (107)	$ 41
Less: Net gains recognized from sales of securities	**45**	**—**	**45**	187	—	187
Unrealized gains (losses) recognized for securities still held at reporting date	**$ 105**	**$ 62**	**$ 167**	$ (39)	$ (107)	$ (146)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

	Six Months Ended June 30					
	2021			2020		
(in millions of U.S. dollars)	**Equity Securities**	**Other Investments**	**Total**	Equity Securities	Other Investments	Total
Net gains (losses) recognized during the period	**$ 517**	**$ 100**	**$ 617**	$ 119	$ (102)	$ 17
Less: Net gains recognized from sales of securities	**90**	**—**	**90**	163	—	163
Unrealized gains (losses) recognized for securities still held at reporting date	**$ 427**	**$ 100**	**$ 527**	$ (44)	$ (102)	$ (146)

The following table presents a roll-forward of valuation allowance for expected credit losses on fixed maturities:

	Three Months Ended June 30		Six Months Ended June 30	
(in millions of U.S. dollars)	**2021**	2020	**2021**	2020
Available for sale				
Valuation allowance for expected credit losses - beginning of period	**$ 15**	$ 176	**$ 20**	$ —
Impact of adoption of new accounting guidance	**—**	—	**—**	25
Provision for expected credit loss	**1**	29	**5**	178
Initial allowance for purchased securities with credit deterioration	**—**	3	**—**	5
Write-offs charged against the expected credit loss	**—**	(5)	**—**	(5)
Recovery of expected credit loss	**(5)**	(134)	**(14)**	(134)
Valuation allowance for expected credit losses - end of period	**$ 11**	$ 69	**$ 11**	$ 69
Held to maturity				
Valuation allowance for expected credit losses - beginning of period	**$ 43**	$ 45	**$ 44**	$ —
Impact of adoption of new accounting guidance	**—**	—	**—**	44
Provision for expected credit loss	**—**	6	**—**	7
Recovery of expected credit loss	**(6)**	—	**(7)**	—
Valuation allowance for expected credit losses - end of period	**$ 37**	$ 51	**$ 37**	$ 51

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

d) Alternative investments

Alternative investments include partially-owned investment companies, investment funds, and limited partnerships measured at fair value using net asset value (NAV) as a practical expedient. The following table presents, by investment category, the expected liquidation period, fair value, and maximum future funding commitments of alternative investments:

		June 30 2021		December 31 2020	
(in millions of U.S. dollars)	Expected Liquidation Period of Underlying Assets	Fair Value	Maximum Future Funding Commitments	Fair Value	Maximum Future Funding Commitments
Financial	**2 to 10 Years**	**$ 957**	**$ 350**	$ 673	$ 237
Real Assets	**2 to 11 Years**	**1,014**	**781**	805	598
Distressed	**2 to 8 Years**	**486**	**875**	358	970
Private Credit	**3 to 8 Years**	**87**	**276**	88	270
Traditional	**2 to 14 Years**	**5,365**	**5,679**	4,519	1,125
Vintage	**1 to 2 Years**	**70**	**—**	73	—
Investment funds	**Not Applicable**	**274**	**—**	254	—
		$ 8,253	**$ 7,961**	$ 6,770	$ 3,200

Included in all categories in the above table, except for Investment funds, are investments for which Chubb will never have the contractual option to redeem but receives distributions based on the liquidation of the underlying assets. Further, for all categories except for Investment funds, Chubb does not have the ability to sell or transfer the investments without the consent from the general partner of individual funds.

Investment Category:	Consists of investments in private equity funds:
Financial	targeting financial services companies, such as financial institutions and insurance services worldwide
Real Assets	targeting investments related to hard, physical assets, such as real estate, infrastructure and natural resources
Distressed	targeting distressed corporate debt/credit and equity opportunities in the U.S.
Private Credit	targeting privately originated corporate debt investments, including senior secured loans and subordinated bonds
Traditional	employing traditional private equity investment strategies, such as buyout and growth equity globally
Vintage	funds where the initial fund term has expired

Investment funds employ various investment strategies, such as long/short equity and arbitrage/distressed. Included in this category are investments for which Chubb has the option to redeem at agreed upon value as described in each investment fund's subscription agreement. Depending on the terms of the various subscription agreements, investment fund investments may be redeemed monthly, quarterly, semi-annually, or annually. If Chubb wishes to redeem an investment fund investment, it must first determine if the investment fund is still in a lock-up period (a time when Chubb cannot redeem its investment so that the investment fund manager has time to build the portfolio). If the investment fund is no longer in its lock-up period, Chubb must then notify the investment fund manager of its intention to redeem by the notification date prescribed by the subscription agreement. Subsequent to notification, the investment fund can redeem Chubb's investment within several months of the notification. Notice periods for redemption of the investment funds are up to 270 days. Chubb can redeem its investment funds without consent from the investment fund managers.

e) Restricted assets

Chubb is required to maintain assets on deposit with various regulatory authorities to support its insurance and reinsurance operations. These requirements are generally promulgated in the statutory regulations of the individual jurisdictions. The assets on deposit are available to settle insurance and reinsurance liabilities. Chubb is also required to restrict assets pledged under repurchase agreements, which represent Chubb's agreement to sell securities and repurchase them at a future date for a predetermined price. We use trust funds in certain large reinsurance transactions where the trust funds are set up for the benefit of the ceding companies and generally take the place of letter of credit (LOC) requirements. We have investments in segregated portfolios primarily to provide collateral or guarantees for LOC and derivative transactions. Included in restricted assets at

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)
Chubb Limited and Subsidiaries

June 30, 2021 and December 31, 2020 are investments, primarily fixed maturities, totaling $18.7 billion and $19.6 billion, respectively, and cash of $155 million and $89 million, respectively.

The following table presents the components of restricted assets:

(in millions of U.S. dollars)		June 30 2021		December 31 2020
Trust funds	**$**	**11,545**	$	12,305
Deposits with U.S. regulatory authorities		**2,431**		2,438
Deposits with non-U.S. regulatory authorities		**2,801**		2,905
Assets pledged under repurchase agreements		**1,465**		1,462
Other pledged assets		**605**		584
Total	**$**	**18,847**	$	19,694

4. Fair value measurements

a) Fair value hierarchy

Fair value of financial assets and financial liabilities is estimated based on the framework established in the fair value accounting guidance. The guidance defines fair value as the price to sell an asset or transfer a liability (an exit price) in an orderly transaction between market participants and establishes a three-level valuation hierarchy based on the reliability of the inputs. The fair value hierarchy gives the highest priority to quoted prices in active markets and the lowest priority to unobservable data.

The three levels of the hierarchy are as follows:

- Level 1 – Unadjusted quoted prices for identical assets or liabilities in active markets;
- Level 2 – Includes, among other items, inputs other than quoted prices that are observable for the asset or liability such as interest rates and yield curves, quoted prices for similar assets and liabilities in active markets, and quoted prices for identical or similar assets and liabilities in markets that are not active; and
- Level 3 – Inputs that are unobservable and reflect management's judgments about assumptions that market participants would use in pricing an asset or liability.

We categorize financial instruments within the valuation hierarchy at the balance sheet date based upon the lowest level of inputs that are significant to the fair value measurement.

We use pricing services to obtain fair value measurements for the majority of our investment securities. Based on management's understanding of the methodologies used, these pricing services only produce an estimate of fair value if there is observable market information that would allow them to make a fair value estimate. Based on our understanding of the market inputs used by the pricing services, all applicable investments have been valued in accordance with GAAP. We do not adjust prices obtained from pricing services. The following is a description of the valuation techniques and inputs used to determine fair values for financial instruments carried at fair value, as well as the general classification of such financial instruments pursuant to the valuation hierarchy.

Fixed maturities

We use pricing services to estimate fair value measurements for the majority of our fixed maturities. The pricing services use market quotations for fixed maturities that have quoted prices in active markets; such securities are classified within Level 1. For fixed maturities other than U.S. Treasury securities that generally do not trade on a daily basis, the pricing services prepare estimates of fair value measurements using their pricing applications or pricing models, which include available relevant market information, benchmark curves, benchmarking of like securities, sector groupings, and matrix pricing. Additional valuation factors that can be taken into account are nominal spreads, dollar basis, and liquidity adjustments. The pricing services evaluate each asset class based on relevant market and credit information, perceived market movements, and sector news. The market inputs used in the pricing evaluation, listed in the approximate order of priority include: benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, reference data, and industry and economic events. The extent of the use of each input is dependent on the asset class and the market conditions. Given the asset class, the priority of the use of inputs may change, or some market inputs may not be relevant. Additionally, fixed maturities valuation is more subjective when markets are less liquid due to the lack of market based inputs (i.e., stale pricing) and may require the use of models to be priced. The lack of market based inputs may increase the potential that an investment's

estimated fair value is not reflective of the price at which an actual transaction would occur. The overwhelming majority of fixed maturities are classified within Level 2 because the most significant inputs used in the pricing techniques are observable. For a small number of fixed maturities, we obtain a single broker quote (typically from a market maker). Due to the disclaimers on the quotes that indicate that the price is indicative only, we include these fair value estimates in Level 3.

Equity securities
Equity securities with active markets are classified within Level 1 as fair values are based on quoted market prices. For equity securities in markets which are less active, fair values are based on market valuations and are classified within Level 2. Equity securities for which pricing is unobservable are classified within Level 3.

Short-term investments
Short-term investments, which comprise securities due to mature within one year of the date of purchase that are traded in active markets, are classified within Level 1 as fair values are based on quoted market prices. Securities such as commercial paper and discount notes are classified within Level 2 because these securities are typically not actively traded due to their approaching maturity, and as such, their cost approximates fair value. Short-term investments for which pricing is unobservable are classified within Level 3.

Other investments
Fair values for the majority of Other investments including investments in partially-owned investment companies, investment funds, and limited partnerships are based on their respective net asset values or equivalent (NAV) and are excluded from the fair value hierarchy table below. Certain of our long-duration contracts are supported by assets that do not qualify for separate account reporting under GAAP. These assets comprise mutual funds, classified within Level 1 in the valuation hierarchy on the same basis as other equity securities traded in active markets. Other investments also include equity securities, classified within Level 1 and fixed maturities, classified within Level 2, held in rabbi trusts maintained by Chubb for deferred compensation plans and supplemental retirement plans and are classified within the valuation hierarchy on the same basis as other equity securities and fixed maturities. Other investments for which pricing is unobservable are classified within Level 3.

Securities lending collateral
The underlying assets included in Securities lending collateral in the Consolidated balance sheets are fixed maturities which are classified in the valuation hierarchy on the same basis as other fixed maturities. Excluded from the valuation hierarchy is the corresponding liability related to Chubb's obligation to return the collateral plus interest as it is reported at contract value and not fair value in the Consolidated balance sheets.

Investment derivative instruments
Actively traded investment derivative instruments, including futures, options, and forward contracts are classified within Level 1 as fair values are based on quoted market prices. The fair value of cross-currency swaps and interest rate swaps is based on market valuations and is classified within Level 2. Investment derivative instruments are recorded in either Other assets or Accounts payable, accrued expenses, and other liabilities in the Consolidated balance sheets.

Other derivative instruments
We maintain positions in exchange-traded equity futures contracts designed to limit exposure to a severe equity market decline, which would cause an increase in expected claims and, therefore, an increase in future policy benefit reserves for our guaranteed minimum death benefits (GMDB) and an increase in the fair value liability for our guaranteed living benefits (GLB) reinsurance business. Our positions in exchange-traded equity futures contracts are classified within Level 1. The fair value of the majority of the remaining positions in other derivative instruments is based on significant observable inputs including equity security and interest rate indices. Accordingly, these are classified within Level 2. Other derivative instruments based on unobservable inputs are classified within Level 3. Other derivative instruments are recorded in either Other assets or Accounts payable, accrued expenses, and other liabilities in the Consolidated balance sheets.

Separate account assets
Separate account assets represent segregated funds where investment risks are borne by the customers, except to the extent of certain guarantees made by Chubb. Separate account assets comprise mutual funds classified within Level 1 in the valuation hierarchy on the same basis as other equity securities traded in active markets. Separate account assets also include fixed maturities classified within Level 2 because the most significant inputs used in the pricing techniques are observable. Excluded from the valuation hierarchy are the corresponding liabilities as they are reported at contract value and not fair value in the Consolidated balance sheets. Separate account assets are recorded in Other assets in the Consolidated balance sheets.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

Guaranteed living benefits

The GLB arises from life reinsurance programs covering living benefit guarantees whereby we assume the risk of guaranteed minimum income benefits (GMIB) associated with variable annuity contracts. GLB's are recorded in Accounts payable, accrued expenses, and other liabilities in the Consolidated balance sheets. For GLB reinsurance, Chubb estimates fair value using an internal valuation model which includes current market information and estimates of policyholder behavior. All of the treaties contain claim limits, which are factored into the valuation model. The fair value depends on a number of factors, including interest rates, equity markets, credit risk, current account value, market volatility, expected annuitization rates and other policyholder behavior, and changes in policyholder mortality. Because of the significant use of unobservable inputs including policyholder behavior, GLB reinsurance is classified within Level 3.

Financial instruments measured at fair value on a recurring basis, by valuation hierarchy

June 30, 2021 (in millions of U.S. dollars)	Level 1	Level 2	Level 3	Total
Assets:				
Fixed maturities available for sale				
U.S. Treasury / Agency	$ 1,975	$ 503	$ —	$ 2,478
Non-U.S.	—	25,770	642	26,412
Corporate and asset-backed securities	—	35,887	1,688	37,575
Mortgage-backed securities	—	19,506	47	19,553
Municipal	—	6,145	—	6,145
	1,975	87,811	2,377	92,163
Equity securities	4,529	—	78	4,607
Short-term investments	3,132	1,335	3	4,470
Other investments [1]	417	470	10	897
Securities lending collateral	—	2,369	—	2,369
Investment derivative instruments	55	—	—	55
Other derivative instruments	10	—	—	10
Separate account assets	5,014	113	—	5,127
Total assets measured at fair value [1]	$ 15,132	$ 92,098	$ 2,468	$ 109,698
Liabilities:				
Investment derivative instruments	$ 94	$ —	$ —	$ 94
Other derivative instruments	12	—	—	12
GLB [2]	—	—	760	760
Total liabilities measured at fair value	$ 106	$ —	$ 760	$ 866

(1) Excluded from the table above are partially-owned investments, investment funds, and limited partnerships of $8,253 million, policy loans of $237 million and other investments of $70 million at June 30, 2021 measured using NAV as a practical expedient.

(2) Our GLB reinsurance product meets the definition of a derivative instrument for accounting purposes and is accordingly carried at fair value.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)
Chubb Limited and Subsidiaries

December 31, 2020 (in millions of U.S. dollars)	Level 1	Level 2	Level 3	Total
Assets:				
Fixed maturities available for sale				
U.S. Treasury / Agency	$ 2,148	$ 522	$ —	$ 2,670
Non-U.S.	—	25,808	546	26,354
Corporate and asset-backed securities	—	34,758	1,573	36,331
Mortgage-backed securities	—	18,410	60	18,470
Municipal	—	6,874	—	6,874
	2,148	86,372	2,179	90,699
Equity securities	3,954	—	73	4,027
Short-term investments	2,866	1,474	5	4,345
Other investments [1]	434	438	10	882
Securities lending collateral	—	1,844	—	1,844
Investment derivative instruments	35	—	—	35
Separate account assets	4,264	124	—	4,388
Total assets measured at fair value [1]	$ 13,701	$ 90,252	$ 2,267	$ 106,220
Liabilities:				
Investment derivative instruments	$ 52	$ —	$ —	$ 52
Other derivative instruments	17	—	—	17
GLB [2]	—	—	1,089	1,089
Total liabilities measured at fair value	$ 69	$ —	$ 1,089	$ 1,158

(1) Excluded from the table above are partially-owned investments, investment funds, and limited partnerships of $6,770 million, policy loans of $233 million and other investments of $60 million at December 31, 2020 measured using NAV as a practical expedient.

(2) Our GLB reinsurance product meets the definition of a derivative instrument for accounting purposes and is accordingly carried at fair value.

Level 3 financial instruments
The following table presents the significant unobservable inputs used in the Level 3 liability valuations. Excluded from the table below are inputs used to determine the fair value of Level 3 assets which are based on single broker quotes and contain no quantitative unobservable inputs developed by management. The majority of our fixed maturities classified as Level 3 used external pricing when markets are less liquid due to the lack of market inputs (i.e., stale pricing, broker quotes).

(in millions of U.S. dollars, except for percentages)	Fair Value		Valuation Technique	Significant Unobservable Inputs	Ranges	Weighted Average [1]
	June 30, 2021	December 31, 2020				
GLB [1]	**$ 760**	$ 1,089	**Actuarial model**	**Lapse rate**	**3% – 34%**	**4.7%**
				Annuitization rate	**0% – 100%**	**3.3%**

(1) The weighted average lapse and annuitization rates are determined by weighting each treaty's rates by the GLB contracts fair value.

The most significant policyholder behavior assumptions include lapse rates and the GMIB annuitization rates. Assumptions regarding lapse rates and GMIB annuitization rates differ by treaty, but the underlying methodologies to determine rates applied to each treaty are comparable.

A lapse rate is the percentage of in-force policies surrendered in a given calendar year. All else equal, as lapse rates increase, ultimate claim payments will decrease.

The GMIB annuitization rate is the percentage of policies for which the policyholder will elect to annuitize using the guaranteed benefit provided under the GMIB. All else equal, as GMIB annuitization rates increase, ultimate claim payments will increase, subject to treaty claim limits.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

The effect of changes in key market factors on assumed lapse and annuitization rates reflect emerging trends using data available from cedants. For treaties with limited experience, rates are established in line with data received from other ceding companies adjusted, as appropriate, with industry estimates. The model and related assumptions are regularly re-evaluated by management and enhanced, as appropriate, based upon additional experience obtained related to policyholder behavior and availability of updated information such as market conditions, market participant assumptions, and demographics of in-force annuities. For the three and six months ended June 30, 2021 and 2020, no material refinements were made to the model. For detailed information on our lapse and annuitization rate assumptions, refer to Note 4 to the Consolidated Financial Statements of our 2020 Form 10-K.

The following tables present a reconciliation of the beginning and ending balances of financial instruments measured at fair value using significant unobservable inputs (Level 3):

												Assets		Liabilities
				Available-for-Sale Debt Securities										
Three Months Ended June 30, 2021 (in millions of U.S. dollars)		Non-U.S.		Corporate and asset-backed securities		Mortgage-backed securities		Equity securities		Short-term investments		Other investments		GLB [1]
Balance, beginning of period	$	650	$	1,612	$	51	$	75	$	1	$	10	$	760
Transfers into Level 3		—		29		—		—		—		—		—
Transfers out of Level 3		(10)		(3)		—		—		—		—		—
Change in Net Unrealized Gains/Losses in OCI		5		6		—		—		—		—		—
Net Realized Gains/Losses		3		6		—		5		—		—		8
Purchases		54		240		1		4		2		—		—
Sales		(9)		(50)		(1)		(6)		—		—		—
Settlements		(51)		(152)		(4)		—		—		—		—
Other		—		—		—		—		—		—		(8)
Balance, end of period	$	642	$	1,688	$	47	$	78	$	3	$	10	$	760
Net Realized Gains/Losses Attributable to Changes in Fair Value at the Balance Sheet Date	$	—	$	6	$	—	$	4	$	—	$	—	$	8
Change in Net Unrealized Gains/Losses included in OCI at the Balance sheet date	$	7	$	6	$	—	$	—	$	—	$	—	$	—

[1] Our GLB reinsurance product meets the definition of a derivative instrument for accounting purposes and is accordingly carried at fair value.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

Three Months Ended June 30, 2020 (in millions of U.S. dollars)	Available-for-Sale Debt Securities			Assets			Liabilities
	Non-U.S.	Corporate and asset-backed securities	Mortgage-backed securities	Equity securities	Short-term investments	Other investments	GLB [1]
Balance, beginning of period	$ 465	$ 1,502	$ 60	$ 67	$ 1	$ 10	$ 1,591
Transfers out of Level 3	(13)	(71)	—	—	—	—	—
Change in Net Unrealized Gains/ Losses in OCI	(6)	1	—	(1)	—	—	—
Net Realized Gains/Losses	(1)	(13)	—	(1)	—	—	(213)
Purchases	67	83	—	8	1	—	—
Sales	(16)	(48)	—	(9)	—	—	—
Settlements	(27)	(85)	—	—	—	—	—
Other	—	—	—	—	—	—	(6)
Balance, end of period	$ 469	$ 1,369	$ 60	$ 64	$ 2	$ 10	$ 1,372
Net Realized Gains/Losses Attributable to Changes in Fair Value at the Balance Sheet Date	$ —	$ 5	$ —	$ 1	$ —	$ —	$ (213)
Change in Net Unrealized Gains/Losses included in OCI at the Balance sheet date	$ (5)	$ 7	$ —	$ —	$ —	$ —	$ —

[1] Our GLB reinsurance product meets the definition of a derivative instrument for accounting purposes and is accordingly carried at fair value.

Six Months Ended June 30, 2021 (in millions of U.S. dollars)	**Available-for-Sale Debt Securities**			**Assets**			**Liabilities**
	Non-U.S.	**Corporate and asset-backed securities**	**Mortgage-backed securities**	**Equity securities**	**Short-term investments**	**Other investments**	**GLB [1]**
Balance, beginning of period	**$ 546**	**$ 1,573**	**$ 60**	**$ 73**	**$ 5**	**$ 10**	**$ 1,089**
Transfers into Level 3	**—**	**46**	**—**	**—**	**—**	**—**	**—**
Transfers out of Level 3	**(10)**	**(3)**	**—**	**—**	**—**	**—**	**—**
Change in Net Unrealized Gains/Losses in OCI	**13**	**12**	**—**	**—**	**—**	**—**	**—**
Net Realized Gains/Losses	**3**	**3**	**—**	**7**	**—**	**—**	**(311)**
Purchases	**175**	**409**	**1**	**7**	**3**	**—**	**—**
Sales	**(16)**	**(75)**	**(1)**	**(9)**	**—**	**—**	**—**
Settlements	**(69)**	**(277)**	**(13)**	**—**	**(5)**	**—**	**—**
Other	**—**	**—**	**—**	**—**	**—**	**—**	**(18)**
Balance, end of period	**$ 642**	**$ 1,688**	**$ 47**	**$ 78**	**$ 3**	**$ 10**	**$ 760**
Net Realized Gains/Losses Attributable to Changes in Fair Value at the Balance Sheet Date	**$ —**	**$ 3**	**$ —**	**$ 6**	**$ —**	**$ —**	**$ (311)**
Change in Net Unrealized Gains/Losses included in OCI at the Balance sheet date	**$ 17**	**$ 17**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**

[1] Our GLB reinsurance product meets the definition of a derivative instrument for accounting purposes and is accordingly carried at fair value.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

	Assets						Liabilities
	Available-for-Sale Debt Securities						
Six Months Ended June 30, 2020 (in millions of U.S. dollars)	Non-U.S.	Corporate and asset-backed securities	Mortgage-backed securities	Equity securities	Short-term investments	Other investments	GLB [1]
Balance, beginning of period	$ 449	$ 1,451	$ 60	$ 69	$ 6	$ 10	$ 897
Transfers into Level 3	—	91	—	—	—	—	—
Transfers out of Level 3	(16)	(72)	—	—	—	—	—
Change in Net Unrealized Gains/Losses in OCI	(20)	(44)	—	—	—	—	—
Net Realized Gains/Losses	(3)	(26)	—	(3)	—	—	472
Purchases	149	222	—	11	2	—	—
Sales	(62)	(67)	—	(13)	—	—	—
Settlements	(28)	(186)	—	—	(6)	—	—
Other	—	—	—	—	—	—	3
Balance, end of period	$ 469	$ 1,369	$ 60	$ 64	$ 2	$ 10	$ 1,372
Net Realized Gains/Losses Attributable to Changes in Fair Value at the Balance Sheet Date	$ —	$ (9)	$ —	$ (1)	$ —	$ —	$ 472
Change in Net Unrealized Gains/Losses included in OCI at the Balance sheet date	$ (20)	$ (37)	$ —	$ —	$ —	$ —	$ —

[1] Our GLB reinsurance product meets the definition of a derivative instrument for accounting purposes and is accordingly carried at fair value.

b) Financial instruments disclosed, but not measured, at fair value

Chubb uses various financial instruments in the normal course of its business. Our insurance contracts are excluded from fair value of financial instruments accounting guidance, and therefore, are not included in the amounts discussed below.

The carrying values of cash, other assets, other liabilities, and other financial instruments not included below approximated their fair values. Refer to the 2020 Form 10-K for information on the fair value methods and assumptions for investments in partially-owned insurance companies, short-term and long-term debt, repurchase agreements, and trust-preferred securities.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

The following tables present fair value, by valuation hierarchy, and carrying value of the financial instruments not measured at fair value:

June 30, 2021 (in millions of U.S. dollars)	Level 1	Level 2	Level 3	Fair Value Total	Net Carrying Value
Assets:					
Fixed maturities held to maturity					
U.S. Treasury / Agency	$ 1,029	$ 53	$ —	$ 1,082	$ 1,041
Non-U.S.	—	1,366	—	1,366	1,280
Corporate and asset-backed securities	—	2,314	—	2,314	2,087
Mortgage-backed securities	—	1,892	—	1,892	1,781
Municipal	—	4,689	—	4,689	4,484
Total assets	$ 1,029	$ 10,314	$ —	$ 11,343	$ 10,673
Liabilities:					
Repurchase agreements	$ —	$ 1,405	$ —	$ 1,405	$ 1,405
Long-term debt	—	16,822	—	16,822	14,954
Trust preferred securities	—	467	—	467	308
Total liabilities	$ —	$ 18,694	$ —	$ 18,694	$ 16,667

December 31, 2020 (in millions of U.S. dollars)	Level 1	Level 2	Level 3	Fair Value Total	Net Carrying Value
Assets:					
Fixed maturities held to maturity					
U.S. Treasury / Agency	$ 1,395	$ 57	$ —	$ 1,452	$ 1,392
Non-U.S.	—	1,405	—	1,405	1,288
Corporate and asset-backed securities	—	2,438	—	2,438	2,150
Mortgage-backed securities	—	2,146	—	2,146	1,999
Municipal	—	5,069	—	5,069	4,824
Total assets	$ 1,395	$ 11,115	$ —	$ 12,510	$ 11,653
Liabilities:					
Repurchase agreements	$ —	$ 1,405	$ —	$ 1,405	$ 1,405
Long-term debt	—	17,487	—	17,487	14,948
Trust preferred securities	—	473	—	473	308
Total liabilities	$ —	$ 19,365	$ —	$ 19,365	$ 16,661

5. Reinsurance

Reinsurance recoverable on ceded reinsurance

(in millions of U.S. dollars)	June 30, 2021 Net Reinsurance Recoverable [1]	June 30, 2021 Valuation allowance	December 31, 2020 Net Reinsurance Recoverable [1]	December 31, 2020 Valuation allowance
Reinsurance recoverable on unpaid losses and loss expenses	$ 14,721	$ 265	$ 14,647	$ 257
Reinsurance recoverable on paid losses and loss expenses	1,004	57	945	57
Reinsurance recoverable on losses and loss expenses	$ 15,725	$ 322	$ 15,592	$ 314
Reinsurance recoverable on policy benefits	$ 203	$ 4	$ 206	$ 5

[1] Net of valuation allowance for uncollectible reinsurance.

The increase in reinsurance recoverable on losses and loss expenses was primarily due to unfavorable prior period development in certain lines.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)
Chubb Limited and Subsidiaries

The following table presents a roll-forward of valuation allowance for uncollectible reinsurance related to Reinsurance recoverable on loss and loss expenses:

	Six Months Ended June 30	
(in millions of U.S. dollars)	**2021**	2020
Valuation allowance for uncollectible reinsurance - beginning of period	**$ 314**	$ 316
Provision for uncollectible reinsurance	**9**	5
Write-offs charged against the valuation allowance	**(1)**	(19)
Foreign exchange revaluation	**—**	1
Valuation allowance for uncollectible reinsurance - end of period	**$ 322**	$ 303

For additional information, refer to Note 1 d) to the Consolidated Financial Statements of our 2020 Form 10-K.

6. Unpaid losses and loss expenses

The following table presents a reconciliation of beginning and ending Unpaid losses and loss expenses:

	Six Months Ended June 30	
(in millions of U.S. dollars)	**2021**	2020
Gross unpaid losses and loss expenses – beginning of period	**$ 67,811**	$ 62,690
Reinsurance recoverable on unpaid losses – beginning of period [1]	**(14,647)**	(14,181)
Net unpaid losses and loss expenses – beginning of period	**53,164**	48,509
Net losses and loss expenses incurred in respect of losses occurring in:		
Current year	**10,546**	11,111
Prior years [2]	**(487)**	(49)
Total	**10,059**	11,062
Net losses and loss expenses paid in respect of losses occurring in:		
Current year	**2,355**	2,263
Prior years	**5,531**	5,842
Total	**7,886**	8,105
Foreign currency revaluation and other	**231**	(128)
Net unpaid losses and loss expenses – end of period	**55,568**	51,338
Reinsurance recoverable on unpaid losses [1]	**14,721**	14,361
Gross unpaid losses and loss expenses – end of period	**$ 70,289**	$ 65,699

(1) Net of valuation allowance for uncollectible reinsurance.

(2) Relates to prior period loss reserve development only and excludes prior period development related to reinstatement premiums, expense adjustments and earned premiums totaling $27 million and $6 million for the six months ended June 30, 2021 and 2020, respectively.

Gross and net unpaid losses and loss expenses increased $2,478 million and $2,404 million, respectively, for the six months ended June 30, 2021, reflecting an increase in underlying exposure due to premium growth partially offset by favorable prior period development.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)
Chubb Limited and Subsidiaries

Prior Period Development
Prior period development (PPD) arises from changes to loss estimates recognized in the current year that relate to loss events that occurred in previous calendar years and excludes the effect of losses from the development of earned premium from previous accident years. Long-tail lines include lines such as workers' compensation, general liability, and professional liability; while short-tail lines include lines such as most property lines, energy, personal accident, and agriculture.

The following table summarizes (favorable) and adverse PPD by segment.

	Three Months Ended June 30			Six Months Ended June 30		
(in millions of U.S. dollars)	**Long-tail**	**Short-tail**	**Total**	**Long-tail**	**Short-tail**	**Total**
2021						
North America Commercial P&C Insurance	**$ (96)**	**$ (60)**	**$ (156)**	**$ (142)**	**$ (141)**	**$ (283)**
North America Personal P&C Insurance	**—**	**(44)**	**(44)**	**—**	**(84)**	**(84)**
North America Agricultural Insurance	**—**	**—**	**—**	**—**	**(2)**	**(2)**
Overseas General Insurance	**5**	**(161)**	**(156)**	**5**	**(186)**	**(181)**
Global Reinsurance	**(22)**	**22**	**—**	**(22)**	**15**	**(7)**
Corporate	**88**	**—**	**88**	**97**	**—**	**97**
Total	**$ (25)**	**$ (243)**	**$ (268)**	**$ (62)**	**$ (398)**	**$ (460)**
2020						
North America Commercial P&C Insurance	$ (141)	$ (5)	$ (146)	$ (184)	$ (67)	$ (251)
North America Personal P&C Insurance	—	(1)	(1)	—	—	—
North America Agricultural Insurance	—	—	—	—	(14)	(14)
Overseas General Insurance	(1)	(35)	(36)	(1)	(39)	(40)
Global Reinsurance	(19)	3	(16)	(19)	(4)	(23)
Corporate	274	—	274	285	—	285
Total	$ 113	$ (38)	$ 75	$ 81	$ (124)	$ (43)

Significant prior period movements by segment, principally driven by reserve reviews completed during each respective period, are discussed in more detail below. The remaining net development for long-tail lines and short-tail business for each segment and Corporate comprises numerous favorable and adverse movements across a number of lines and accident years, none of which is significant individually or in the aggregate.

North America Commercial P&C Insurance
2021
For the three months ended June 30, 2021, net favorable PPD was $156 million, which was the net result of several underlying favorable and adverse movements, and was driven by the following principal changes:

- Net favorable development of $96 million in long-tail business, primarily from:
  - Net favorable development of $137 million in our workers' compensation lines. This included favorable development of $36 million related to our annual assessment of multi-claimant events including industrial accidents, in the 2020 accident year. Consistent with prior years, we reviewed these potential exposures after the close of the accident year to allow for late reporting or identification of significant losses. The remaining overall favorable development was mainly in accident years 2016 and prior, driven by lower than expected loss experience and related updates to loss development factors;
  - Net favorable development of $45 million in general liability portfolios, driven by lower than expected paid and reported case incurred activity in accident years 2017 and prior, partly offset by higher than expected reported case incurred activity in accident years 2018 and 2019;

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)
Chubb Limited and Subsidiaries

  - Net adverse development of $76 million in commercial automobile liability, driven by adverse reported loss experience, mainly impacting accident years 2017 and 2019; and
  - Net adverse development of $27 million in high deductible general liability coverages, driven by higher than expected loss severities, mainly impacting accident years 2016 through 2020, partly offset by favorable loss development in older accident years.

- Net favorable development of $60 million in short-tail business, primarily from:
  - Net favorable development of $41 million in surety, $35 million of which was due to lower than expected COVID-19 claim activity in accident year 2020; and
  - The remaining favorable development is predominantly driven by automobile, which experienced lower than expected claim development related to physical damage coverages in the 2020 accident year.

For the six months ended June 30, 2021, net favorable PPD was $283 million, which was the net result of several underlying favorable and adverse movements, and was driven by the following principal changes:

- Net favorable development of $142 million in long-tail business, primarily from:
  - Net favorable development of $158 million in workers' compensation lines, mainly due to the same factors experienced for the three months ended June 30, 2021, as described above;
  - Net favorable development of $51 million in professional liability (errors & omissions and cyber), driven by accident years 2016 and 2017, from lower than expected emergence, partly offset by higher than expected development in accident year 2019;
  - Net favorable development of $40 million in voluntary environmental lines, driven by accident years 2017 and prior, from lower than expected emergence, partly offset by higher than expected development in accident year 2019;
  - Net favorable development of $37 million in general liability portfolios, driven by lower than expected paid and reported case incurred activity in accident years 2017 and prior, partly offset by higher than expected reported case incurred activity in accident years 2018 and 2019;
  - Net adverse development of $26 million in high deductible general liability coverages, as described above;
  - Net adverse development of $43 million in excess and umbrella portfolios, with accident years 2016 through 2019 experiencing higher than expected reported development, partly offset by lower than expected emergence in accident years 2015 and prior; and
  - Net adverse development of $74 million in commercial automobile liability, due to the same factors experienced for the three months ended June 30, 2021.

- Net favorable development of $141 million in short-tail business, primarily from:
  - Net favorable development of $89 million in surety, mainly in accident years 2018 through 2020, driven by lower than expected loss emergence;
  - Net favorable development of $46 million in accident & health, driven by accident years 2019 and 2020, where loss emergence was lower than expected;
  - Net favorable development of $29 million in property and marine coverages in accident year 2020, driven by lower than expected loss development; and
  - Net adverse development of $41 million in first-party cyber risk, driven by accident years 2019 and 2020, which experienced higher than expected loss development as well as heightened frequency and severity.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

2020

For the three months ended June 30, 2020, net favorable PPD was $146 million, which was the net result of several underlying favorable and adverse movements, and was driven by the following principal changes:

- Net favorable development of $141 million in long-tail business, primarily from:
  - Net favorable development of $152 million in our workers' compensation lines. This included favorable development of $62 million related to our annual assessment of multi-claimant events including industrial accidents, in the 2019 accident year. Consistent with prior years, we reviewed these potential exposures after the close of the accident year to allow for late reporting or identification of significant losses. This development in accident year 2019 was partially offset by some higher than expected activity from other claims. The remaining overall favorable development was mainly in accident years 2015 and prior, driven by lower than expected loss experience and related updates to loss development factors;
  - Net favorable development of $59 million in general liability portfolios, mainly driven by lower than expected paid and reported loss experience in accident years 2016 and prior, partly offset by some adverse emergence in accident years 2017 through 2019;
  - Net adverse development of $75 million in commercial automobile liability, mainly in high deductible and excess portfolios, driven by adverse paid and reported loss experience and related updates to loss development factors, mainly in accident years 2015 through 2019; and
  - Net adverse development of $5 million for U.S. child molestation claims, predominantly reviver statute-related.

For the six months ended June 30, 2020, net favorable PPD was $251 million, which was the net result of several underlying favorable and adverse movements, and was driven by the following principal changes:

- Net favorable development of $184 million in long-tail business, primarily from:
  - Net favorable development of $182 million in workers' compensation lines, mainly due to the same factors experienced for the three months ended June 30, 2020, as described above;
  - Net favorable development of $66 million in professional liability (errors & omissions and cyber), in accident years 2016 and prior, due to lower than expected emergence;
  - Net favorable development of $43 million in voluntary environmental lines, in accident years 2016 and prior, due to lower than expected emergence and a favorable revision to loss development patterns;
  - Net favorable development of $36 million in general liability coverages, mainly due to the same factors experienced for the three months ended June 30, 2020, as described above, as well as adverse wholesale general liability results, driven by higher than expected reported loss emergence in accident years 2014 through 2019;
  - Net adverse development of $75 million in commercial automobile liability, due to the same factors experienced for the three months ended June 30, 2020, as described above;
  - Net adverse development of $40 million in excess and umbrella portfolios, with accident years 2015 through 2019 experiencing higher than expected reported development, partially offset by lower than expected emergence in accident years 2014 and prior; and
  - Net adverse development of $5 million for U.S. child molestation claims, predominantly reviver statute-related.
- Net favorable development of $67 million in short-tail business, primarily from:
  - Net favorable development of $37 million, in accident & health, mainly in accident years 2018 and 2019, driven by lower than expected paid loss emergence; and

- Net favorable development of $31 million in surety, driven by accident year 2018, where loss emergence was lower than expected.

North America Personal P&C Insurance
2021
For the three months ended June 30, 2021, net favorable PPD was $44 million, driven by favorable development of $43 million in automobile, predominantly from better than expected frequency results in accident year 2020 for physical damage coverages. For the six months ended June 30, 2021 net favorable PPD was $84 million, driven by the $43 million in automobile described above along with better than expected non-catastrophe loss development in accident year 2020 for homeowners and valuables.

North America Agricultural Insurance
2020
Prior period development in this segment mainly relates to our Multiple Peril Crop Insurance (MPCI) business and was favorable due to better than expected crop yield results in certain states at the prior year-end period (i.e., 2020 results based on 2019 crop year).

Overseas General Insurance
2021
For the three months ended June 30, 2021, net favorable PPD was $156 million, which was the net result of several underlying favorable and adverse movements, and was driven by the following principal changes:

- Net favorable development of $161 million in short-tail business, primarily from:
  - Net favorable development of $50 million, in property lines in accident years 2019 and 2020, including a $21 million favorable reduction in COVID-19 estimates in accident year 2020. The remaining favorable development was across most regions in accident years 2019 and 2020;
  - Net favorable development of $49 million, in accident and health lines, mainly due to favorable loss development across all regions in accident years 2019 and 2020; and
  - Net favorable development of $31 million in marine lines in accident years 2018 through 2020, driven by favorable loss development, specific claim reductions, and salvage and subrogation recoveries in Continental Europe and Asia Pacific.

For the six months ended June 30, 2021, net favorable PPD was $181 million, primarily from:

- Net favorable development of $186 million in short-tail business, primarily from:
  - Net favorable development of $58 million in property lines, net favorable development of $55 million in accident and health lines, and net favorable development of $35 million in marine, due to the same factors experienced for the three months ended June 30, 2021.

2020
For the three and six months ended June 30, 2020, net favorable PPD was $36 million and $40 million, respectively, which was the net result of several underlying favorable and adverse movements, including $19 million and $22 million, respectively, in marine lines across all regions mainly in accident years 2017 and 2018, and favorable case-specific settlements in accident years 2014 and prior.

Global Reinsurance
2020
For the three and six months ended June 30, 2020, net favorable PPD was $16 million and $23 million, respectively, which was the net result of several underlying favorable and adverse movements, none of which is significant individually or in the aggregate.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)
Chubb Limited and Subsidiaries

Corporate
2021
For the three and six months ended June 30, 2021, net adverse development was $88 million and $97 million, respectively, driven by adverse development of $68 million for molestation claims.The remainder of the adverse development was driven by increased claim costs on non-A&E runoff workers' compensation exposures, and charges relating to run-off operating expenses incurred.

2020
For the three and six months ended June 30, 2020, net adverse development was $274 million and $285 million, respectively, driven by adverse development of $254 million for U.S. child molestation claims, predominantly reviver statute-related. The remainder of the adverse development ($20 million and $31 million, respectively) was driven by increased claim costs on a limited number of non-A&E run-off casualty and workers' compensation exposures, and charges relating to unallocated loss adjustment expenses due to run-off operating expenses.

7. Commitments, contingencies, and guarantees

a) Derivative instruments
Foreign currency management
As a global company, Chubb entities transact business in multiple currencies. Our policy is to generally match assets, liabilities, and required capital for each individual jurisdiction in local currency, which would include the use of derivatives discussed below. We do not hedge our net asset non-U.S. dollar capital positions; however, we do consider economic hedging for planned cross border transactions.

Derivative instruments employed
Chubb maintains positions in derivative instruments such as futures, options, swaps, and foreign currency forward contracts for which the primary purposes are to manage duration and foreign currency exposure, yield enhancement, or to obtain an exposure to a particular financial market. Chubb also maintains positions in convertible securities that contain embedded derivatives. Investment derivative instruments are recorded in either Other assets (OA) or Accounts payable, accrued expenses, and other liabilities (AP), convertible bonds are recorded in Fixed maturities available for sale (FM AFS), and convertible equity securities are recorded in Equity securities (ES) in the Consolidated balance sheets. These are the most numerous and frequent derivative transactions. In addition, Chubb purchases to be announced mortgage-backed securities (TBAs) as part of its investing activities.

Under reinsurance programs covering GLBs, Chubb assumes the risk of GLBs, principally GMIB, associated with variable annuity contracts. The GMIB risk is triggered if, at the time the contract holder elects to convert the accumulated account value to a periodic payment stream (annuitize), the accumulated account value is not sufficient to provide a guaranteed minimum level of monthly income. The GLB reinsurance product meets the definition of a derivative instrument and is classified within AP. Chubb also generally maintains positions in exchange-traded equity futures contracts on equity market indices to limit equity exposure in the GMDB and GLB book of business.

All derivative instruments are carried at fair value with changes in fair value recorded in Net realized gains (losses) in the Consolidated statements of operations. None of the derivative instruments are designated as hedges for accounting purposes.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

The following table presents the balance sheet locations, fair values of derivative instruments in an asset or (liability) position, and notional values/payment provisions of our derivative instruments:

		June 30, 2021			December 31, 2020		
		Fair Value			Fair Value		
(in millions of U.S. dollars)	Consolidated Balance Sheet Location	Derivative Asset	Derivative (Liability)	Notional Value/ Payment Provision	Derivative Asset	Derivative (Liability)	Notional Value/ Payment Provision
Investment and embedded derivative instruments:							
Foreign currency forward contracts	OA / (AP)	$ 19	$ (57)	$ 4,384	$ 22	$ (49)	$ 2,807
Options/Futures contracts on notes, bonds, and equities	OA / (AP)	36	(37)	12,543	13	(3)	1,749
Convertible securities [1]	FM AFS / ES	12	—	13	9	—	11
		$ 67	$ (94)	$ 16,940	$ 44	$ (52)	$ 4,567
Other derivative instruments:							
Futures contracts on equities [2]	OA / (AP)	$ —	$ (12)	$ 818	$ —	$ (17)	$ 709
Other	OA / (AP)	10	—	175	—	—	16
		$ 10	$ (12)	$ 993	$ —	$ (17)	$ 725
GLB [3]	(AP)	$ —	$ (760)	$ 1,423	$ —	$ (1,089)	$ 1,658

(1) Includes fair value of embedded derivatives.
(2) Related to GMDB and GLB book of business.
(3) Note that the payment provision related to GLB is the net amount at risk. The concept of a notional value does not apply to the GLB reinsurance contracts.

At June 30, 2021 and December 31, 2020, net derivative liabilities of $37 million and $30 million, respectively, included in the table above were subject to a master netting agreement. The remaining derivatives included in the table above were not subject to a master netting agreement.

The following table presents net realized gains (losses) related to derivative instrument activity in the Consolidated statements of operations:

	Three Months Ended June 30		Six Months Ended June 30	
(in millions of U.S. dollars)	2021	2020	2021	2020
Investment and embedded derivative instruments:				
Foreign currency forward contracts	$ (6)	$ 10	$ (22)	$ 53
All other futures contracts, options, and equities	(86)	3	39	(24)
Convertible securities [1]	1	1	1	—
Total investment and embedded derivative instruments	$ (91)	$ 14	$ 18	$ 29
GLB and other derivative instruments:				
GLB	$ (8)	$ 213	$ 311	$ (472)
Futures contracts on equities [2]	(64)	(103)	(108)	22
Other	3	(1)	2	(3)
Total GLB and other derivative instruments	$ (69)	$ 109	$ 205	$ (453)
	$ (160)	$ 123	$ 223	$ (424)

(1) Includes embedded derivatives.
(2) Related to GMDB and GLB book of business.

b) Derivative instrument objectives

(i) Foreign currency exposure management

A foreign currency forward contract (forward) is an agreement between participants to exchange specific currencies at a future date. Chubb uses forwards to minimize the effect of fluctuating foreign currencies as discussed above.

(ii) Duration management and market exposure

Futures

Futures contracts give the holder the right and obligation to participate in market movements, determined by the index or underlying security on which the futures contract is based. Settlement is made daily in cash by an amount equal to the change in value of the futures contract times a multiplier that scales the size of the contract. Exchange-traded futures contracts on money market instruments, notes, and bonds are used in fixed maturity portfolios to more efficiently manage duration, as substitutes for ownership of the money market instruments, bonds, and notes without significantly increasing the risk in the portfolio. Investments in futures contracts may be made only to the extent that there are assets under management not otherwise committed.

Exchange-traded equity futures contracts are used to limit exposure to a severe equity market decline, which would cause an increase in expected claims and therefore, an increase in future policy benefit reserves for GMDB and an increase in the fair value liability for GLB reinsurance business.

Options

An option contract conveys to the holder the right, but not the obligation, to purchase or sell a specified amount or value of an underlying security at a fixed price. Option contracts are used in our investment portfolio as protection against unexpected shifts in interest rates, which would affect the duration of the fixed maturity portfolio. By using options in the portfolio, the overall interest rate sensitivity of the portfolio can be reduced. Option contracts may also be used as an alternative to futures contracts in the synthetic strategy as described above.

The price of an option is influenced by the underlying security, expected volatility, time to expiration, and supply and demand.

The credit risk associated with the above derivative financial instruments relates to the potential for non-performance by counterparties. Although non-performance is not anticipated, in order to minimize the risk of loss, management monitors the creditworthiness of its counterparties and obtains collateral. The performance of exchange-traded instruments is guaranteed by the exchange on which they trade. For non-exchange-traded instruments, the counterparties are principally banks which must meet certain criteria according to our investment guidelines.

Interest rate swaps

An interest rate swap is a contract between two counterparties in which interest payments are made based on a notional principal amount, which itself is never paid or received. Under the terms of an interest rate swap, one counterparty makes interest payments based on a fixed interest rate and the other counterparty's payments are based on a floating rate. Interest rate swap contracts are used occasionally in our investment portfolio as protection against unexpected shifts in interest rates, which would affect the fair value of the fixed maturity portfolio. By using interest rate swaps in the portfolio, the overall duration or interest rate sensitivity of the portfolio can be impacted.

Cross-currency swaps

Cross-currency swaps are agreements under which two counterparties exchange interest payments and principal denominated in different currencies at a future date. We use cross-currency swaps to reduce the foreign currency and interest rate risk by converting cash flows back into local currency. We invest in foreign currency denominated investments to improve credit diversification and also to obtain better duration matching to our liabilities that is limited in the local currency market.

Other

Included within Other are derivatives intended to reduce potential losses which may arise from certain exposures in our insurance business. The economic benefit provided by these derivatives is similar to purchased reinsurance. For example, Chubb may enter into crop derivative contracts to protect underwriting results in the event of a significant decline in commodity prices.

(iii) Convertible security investments

A convertible security is a debt instrument or preferred stock that can be converted into a predetermined amount of the issuer's equity. The convertible option is an embedded derivative within the host instruments which are classified in the investment portfolio as either available for sale or as an equity security. Chubb purchases convertible securities for their total return and not specifically for the conversion feature.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)
Chubb Limited and Subsidiaries

(iv) TBA
By acquiring TBAs, we make a commitment to purchase a future issuance of mortgage-backed securities. For the period between purchase of the TBAs and issuance of the underlying security, we account for our position as a derivative in the Consolidated Financial Statements. Chubb purchases TBAs both for their total return and for the flexibility they provide related to our mortgage-backed security strategy.

(v) GLB
Under the GLB program, as the assuming entity, Chubb is obligated to provide coverage until the expiration or maturity of the underlying deferred annuity contracts or the expiry of the reinsurance treaty. The GLB is accounted for as a derivative and is recorded at fair value. Fair value represents management's estimate of an exit price and thus, includes a risk margin. We may recognize a realized loss for other changes in fair value due to adverse changes in the capital markets (e.g., declining interest rates and/or declining U.S. and/or international equity markets) and changes in actual or estimated future policyholder behavior (e.g., increased annuitization or decreased lapse rates) although we expect the business to be profitable.

To mitigate adverse changes in the capital markets, we maintain positions in exchange-traded equity futures contracts, as noted under section "(ii) Futures" above. These futures increase in fair value when the S&P 500 index decreases (and decrease in fair value when the S&P 500 index increases). The net impact of gains or losses related to changes in fair value of the GLB liability and the exchange-traded equity futures are included in Net realized gains (losses).

c) Securities lending and secured borrowings
Chubb participates in a securities lending program operated by a third-party banking institution whereby certain assets are loaned to qualified borrowers and from which we earn an incremental return. The securities lending collateral can only be drawn down by Chubb in the event that the institution borrowing the securities is in default under the lending agreement. An indemnification agreement with the lending agent protects us in the event a borrower becomes insolvent or fails to return any of the securities on loan. The collateral is recorded in Securities lending collateral and the liability is recorded in Securities lending payable in the Consolidated balance sheets.

The following table presents the carrying value of collateral held under securities lending agreements by investment category and remaining contractual maturity of the underlying agreements:

	Remaining contractual maturity	
	June 30, 2021	December 31, 2020
(in millions of U.S. dollars)	Overnight and Continuous	
Collateral held under securities lending agreements:		
Cash	**$ 1,179**	$ 551
U.S. Treasury / Agency	**147**	148
Non-U.S.	**885**	1,032
Corporate and asset-backed securities	**9**	30
Mortgage-backed securities	**1**	4
Equity securities	**148**	79
	$ 2,369	$ 1,844
Gross amount of recognized liability for securities lending payable	**$ 2,369**	$ 1,844

At June 30, 2021 and December 31, 2020, our repurchase agreement obligations of $1,405 million were fully collateralized. In contrast to securities lending programs, the use of cash received is not restricted for the repurchase obligations. The fair value of the underlying securities sold remains in Fixed maturities available for sale, and the repurchase agreement obligation is recorded in Repurchase agreements in the Consolidated balance sheets.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)
Chubb Limited and Subsidiaries

The following table presents the carrying value of collateral pledged under repurchase agreements by investment category and remaining contractual maturity of the underlying agreements:

	Remaining contractual maturity						
	June 30, 2021				December 31, 2020		
(in millions of U.S. dollars)	Up to 30 Days	30-90 Days	Greater than 90 Days	Total	30-90 Days	Greater than 90 Days	Total
Collateral pledged under repurchase agreements:							
Cash	$ 16	$ —	$ —	$ 16	$ —	$ 4	$ 4
U.S. Treasury / Agency	4	—	104	108	—	106	106
Mortgage-backed securities	367	488	486	1,341	481	871	1,352
	$ 387	$ 488	$ 590	$ 1,465	$ 481	$ 981	$ 1,462
Gross amount of recognized liabilities for repurchase agreements				$ 1,405			$ 1,405
Difference [1]				$ 60			$ 57

[1] Per the repurchase agreements, the amount of collateral posted is required to exceed the amount of gross liability.

Potential risks exist in our secured borrowing transactions due to market conditions and counterparty exposure. With collateral that we pledge, there is a risk that the collateral may not be returned at the expiration of the agreement. If the counterparty fails to return the collateral, Chubb will have free use of the borrowed funds until our collateral is returned. In addition, we may encounter the risk that Chubb may not be able to renew outstanding borrowings with a new term or with an existing counterparty due to market conditions including a decrease in demand as well as more restrictive terms from banks due to increased regulatory and capital constraints. Should this condition occur, Chubb may seek alternative borrowing sources or reduce borrowings. Additionally, increased margins and collateral requirements due to market conditions would increase our restricted assets as we are required to provide additional collateral to support the transaction.

d) Fixed maturities
At June 30, 2021, we have commitments to purchase fixed income securities of $877 million over the next several years.

e) Other investments
At June 30, 2021, included in Other investments in the Consolidated balance sheet are investments in limited partnerships and partially-owned investment companies with a carrying value of $8.0 billion. In connection with these investments, we have commitments that may require funding of up to $8.0 billion over the next several years. At December 31, 2020, these investments had a carrying value of $6.5 billion with a commitment that may require funding of up to $3.2 billion.

f) Income taxes
At June 30, 2021, $60 million of unrecognized tax benefits remain outstanding. It is reasonably possible that over the next twelve months, that the amount of unrecognized tax benefits may change resulting from the re-evaluation of unrecognized tax benefits arising from examinations by taxing authorities, settlements and the lapses of statutes of limitations. With few exceptions, Chubb is no longer subject to income tax examinations for years before 2012.

g) Legal proceedings
Our insurance subsidiaries are subject to claims litigation involving disputed interpretations of policy coverages and, in some jurisdictions, direct actions by allegedly-injured persons seeking damages from policyholders. These lawsuits, involving claims on policies issued by our subsidiaries which are typical to the insurance industry in general and in the normal course of business, are considered in our loss and loss expense reserves. In addition to claims litigation, we are subject to lawsuits and regulatory actions in the normal course of business that do not arise from or directly relate to claims on insurance policies. This category of business litigation typically involves, among other things, allegations of underwriting errors or misconduct, employment claims, regulatory activity, or disputes arising from our business ventures. In the opinion of management, our ultimate liability for these matters could be, but we believe is not likely to be, material to our consolidated financial condition and results of operations.

h) Leases
At June 30, 2021 and December 31, 2020, the right-of-use asset was $429 million and $473 million, respectively, recorded within Other assets on the Consolidated balance sheets and the lease liability was $468 million and $517 million, respectively, which was recorded within Accounts payable, accrued expenses, and other liabilities on the Consolidated balance sheets. These leases consist principally of real estate operating leases that are amortized on a straight-line basis over the term of the lease, which expire at various dates.

8. Shareholders' equity

All of Chubb's Common Shares are authorized under Swiss corporate law. Though the par value of Common Shares is stated in Swiss francs, Chubb continues to use U.S. dollars as its reporting currency for preparing the Consolidated Financial statements. Under Swiss corporate law, dividends, including distributions from legal reserves or through a reduction in par value (par value reduction), must be stated in Swiss francs though dividend payments are made by Chubb in U.S. dollars. At June 30, 2021, our Common Shares had a par value of CHF 24.15 per share.

At our May 2021 annual general meeting, our shareholders approved an annual dividend for the following year of up to $3.20 per share, expected to be paid in four quarterly installments of $0.80 per share after the general meeting by way of distribution from capital contribution reserves, transferred to free reserves for payment. The Board of Directors (Board) will determine the record and payment dates at which the annual dividend may be paid until the date of the 2022 annual general meeting, and is authorized to abstain from distributing a dividend at its discretion.

At our May 2020 and 2019 annual general meetings, our shareholders approved annual dividends for the following year of up to $3.12 per share and $3.00 per share, respectively, which were paid in four quarterly installments of $0.78 per share and $0.75 per share, respectively, at dates determined by the Board after the annual general meetings by way of a distribution from capital contribution reserves, transferred to free reserves for payment.

The following table presents dividend distributions per Common Share in Swiss francs (CHF) and U.S. dollars (USD):

	Three Months Ended June 30				Six Months Ended June 30			
	2021		2020		**2021**		2020	
	CHF	USD	CHF	USD	CHF	USD	CHF	USD
Total dividend distributions per common share	**0.71**	**$ 0.80**	0.75	$ 0.78	**1.41**	**$ 1.58**	1.47	$ 1.53

Increases in Common Shares in treasury are due to open market repurchases of Common Shares and the surrender of Common Shares to satisfy tax withholding obligations in connection with the vesting of restricted stock and the forfeiture of unvested restricted stock. Decreases in Common Shares in treasury are principally due to grants of restricted stock, exercises of stock options, purchases under the Employee Stock Purchase Plan (ESPP), and share cancellations. During the six months ended June 30, 2021, 14,465,400 shares were repurchased and 2,449,988 net shares were issued under employee share-based compensation plans. At June 30, 2021, 38,888,051 Common Shares remain in treasury.

Chubb Limited securities repurchase authorizations
The Board has authorized share repurchase programs as follows:

- $1.5 billion of Chubb Common Shares from November 21, 2019 through December 31, 2020
- $1.5 billion of Chubb Common Shares from November 19, 2020 through December 31, 2021

In February 2021, the Board approved an increase to the November 2020 share repurchase program of $1.0 billion to a total of $2.5 billion, effective through December 31, 2021. Subsequently, on July 19, 2021, the Board authorized a one-time incremental share repurchase program of up to $5.0 billion through June 30, 2022. The $2.5 billion share repurchase authorization will be used prior to the $5.0 billion share repurchase authorization.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

The following table presents repurchases of Chubb's Common Shares conducted in a series of open market transactions under the Board authorizations:

(in millions of U.S. dollars, except share data)	Three Months Ended June 30		Six Months Ended June 30		July 1, 2021 through July 28, 2021
	2021	2020	**2021**	2020	
Number of shares repurchased	**11,355,400**	—	**14,465,400**	2,266,150	—
Cost of shares repurchased	**$ 1,921**	$ —	**$ 2,440**	$ 326	**$** —
Repurchase authorization remaining at end of period	**$ 65**	$ 1,124	**$ 65**	$ 1,124	**$ 5,065**

9. Share-based compensation

The Chubb Limited 2016 Long-Term Incentive Plan (the 2016 LTIP) permits grants of both incentive and non-qualified stock options principally at an option price per share equal to the grant date fair value of Chubb's Common Shares. Stock options are generally granted with a 3-year vesting period and a 10-year term. Stock options typically vest in equal annual installments over the respective vesting period, which is also the requisite service period. On February 25, 2021, Chubb granted 1,790,057 stock options with a weighted-average grant date fair value of $33.05 each. The fair value of the options issued is estimated on the grant date using the Black-Scholes option pricing model.

The 2016 LTIP also permits grants of service-based restricted stock and restricted stock units as well as performance-based restricted stock awards. Chubb generally grants service-based restricted stock and restricted stock units with a 4-year vesting period, based on a graded vesting schedule. Beginning in 2017, the performance-based restricted stock awards granted comprise target awards and premium awards that cliff vest at the end of a 3-year performance period based on both tangible book value (shareholders' equity less goodwill and intangible assets, net of tax) per share growth and P&C combined ratio compared to a defined group of peer companies. Premium awards are subject to an additional vesting provision based on total shareholder return compared to our peer group. The restricted stock is granted at market close price on the grant date. On February 25, 2021, Chubb granted 848,762 service-based restricted stock awards, 324,142 service-based restricted stock units, and 284,766 performance-based stock awards to employees and officers with a grant date fair value of $164.94 each. Each restricted stock unit represents our obligation to deliver to the holder one Common Share upon vesting.

In May 2021, our shareholders approved the Chubb Limited 2016 Long-Term Incentive Plan, as amended and restated (the Amended 2016 LTIP). Under the Amended 2016 LTIP, the number of Common Shares available for delivery increased by 13.4 million. This is in addition to any shares that remain available for delivery since the initial establishment of the 2016 LTIP, plus any shares covered by outstanding awards granted under the ACE Limited 2004 Long-Term Incentive Plan that are forfeited, expired or canceled after the effective date of the Amended 2016 LTIP.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

10. Postretirement benefits

The components of net pension and other postretirement benefit costs (benefits) reflected in Net income (loss) in the Consolidated statements of operations were as follows:

	Pension Benefit Plans				Other Postretirement Benefit Plans	
	2021		2020		**2021**	2020
Three Months Ended June 30 (in millions of U.S. dollars)	**U.S. Plans**	**Non-U.S. Plans**	U.S. Plans	Non-U.S. Plans		
Service cost	**$ —**	**$ 1**	$ —	$ 1	**$ —**	$ —
Non-service cost (benefit):						
Interest cost	**17**	**4**	25	5	**—**	—
Expected return on plan assets	**(63)**	**(11)**	(56)	(11)	**—**	(1)
Amortization of net actuarial loss	**—**	**1**	—	1	**—**	—
Amortization of prior service cost	**—**	**—**	—	—	**(6)**	(20)
Settlements	**—**	**—**	1	—	**—**	—
Total non-service cost (benefit)	**(46)**	**(6)**	(30)	(5)	**(6)**	(21)
Net periodic benefit cost (benefit)	**$ (46)**	**$ (5)**	$ (30)	$ (4)	**$ (6)**	$ (21)

	Pension Benefit Plans				Other Postretirement Benefit Plans	
	2021		2020		**2021**	2020
Six Months Ended June 30 (in millions of U.S. dollars)	**U.S. Plans**	**Non-U.S. Plans**	U.S. Plans	Non-U.S. Plans		
Service cost	**$ —**	**$ 2**	$ —	$ 2	**$ —**	$ —
Non-service cost (benefit):						
Interest cost	**35**	**9**	50	11	**—**	1
Expected return on plan assets	**(127)**	**(22)**	(112)	(21)	**—**	(2)
Amortization of net actuarial loss	**—**	**2**	—	1	**—**	—
Amortization of prior service cost	**—**	**—**	—	—	**(26)**	(40)
Settlements	**—**	**—**	2	—	**—**	—
Total non-service cost (benefit)	**(92)**	**(11)**	(60)	(9)	**(26)**	(41)
Net periodic benefit cost (benefit)	**$ (92)**	**$ (9)**	$ (60)	$ (7)	**$ (26)**	$ (41)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

The line items in which the service cost and non-service cost (benefit) components of net periodic benefit cost (benefit) are included in the Consolidated statements of operations were as follows:

Three Months Ended June 30 (in millions of U.S. dollars)	Pension Benefit Plans		Other Postretirement Benefit Plans	
	2021	2020	**2021**	2020
Service cost:				
Losses and loss expenses	**$ —**	$ —	**$ —**	$ —
Administrative expenses	**1**	1	**—**	—
Total service cost	**1**	1	**—**	—
Non-service cost (benefit):				
Losses and loss expenses	**(4)**	(3)	**(1)**	(2)
Administrative expenses	**(48)**	(32)	**(5)**	(19)
Total non-service cost (benefit)	**(52)**	(35)	**(6)**	(21)
Net periodic benefit cost (benefit)	**$ (51)**	$ (34)	**$ (6)**	$ (21)

Six Months Ended June 30 (in millions of U.S. dollars)	Pension Benefit Plans		Other Postretirement Benefit Plans	
	2021	2020	**2021**	2020
Service cost:				
Losses and loss expenses	**$ —**	$ —	**$ —**	$ —
Administrative expenses	**2**	2	**—**	—
Total service cost	**2**	2	**—**	—
Non-service cost (benefit):				
Losses and loss expenses	**(9)**	(6)	**(3)**	(4)
Administrative expenses	**(94)**	(63)	**(23)**	(37)
Total non-service cost (benefit)	**(103)**	(69)	**(26)**	(41)
Net periodic benefit cost (benefit)	**$ (101)**	$ (67)	**$ (26)**	$ (41)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

11. Other income and expense

	Three Months Ended June 30		Six Months Ended June 30	
(in millions of U.S. dollars)	**2021**	2020	**2021**	2020
Equity in net income (loss) of partially-owned entities [1]	**$ 774**	$ (73)	**$ 1,271**	$ (44)
Gains (losses) from fair value changes in separate account assets [2]	**15**	40	**19**	(16)
Federal excise and capital taxes	**(5)**	(6)	**(10)**	(12)
Other	**(7)**	(19)	**(13)**	(41)
Total	**$ 777**	$ (58)	**$ 1,267**	$ (113)

[1] Principally comprises our share of operating income and mark-to-market gains on private equities where we hold more than three percent. Also includes net income from our investment in Huatai of $49 million and $98 million for the three and six months ended June 30, 2021, respectively, compared to $31 million and $49 million, respectively, for the prior year periods.

[2] Related to gains (losses) from fair value changes in separate account assets that do not qualify for separate account reporting under GAAP.

Other income and expense includes equity in net income of partially-owned entities, which includes our share of net income or loss, both underlying operating income and mark-to-market movement, related to partially-owned investment companies (private equity) and partially-owned insurance companies. Also included in Other income and expense are gains (losses) from fair value changes in separate account assets that do not qualify for separate account reporting under GAAP. The offsetting movement in the separate account liabilities is included in Policy benefits in the Consolidated statements of operations. Certain federal excise and capital taxes incurred as a result of capital management initiatives are included in Other income and expense as these are considered capital transactions and are excluded from underwriting results. Bad debt expense for uncollectible premiums is also included in Other income and expense.

12. Segment information

Chubb operates through six business segments: North America Commercial P&C Insurance, North America Personal P&C Insurance, North America Agricultural Insurance, Overseas General Insurance, Global Reinsurance, and Life Insurance. Corporate results primarily include income and expenses not attributable to reportable segments and losses and loss expenses of asbestos and environmental (A&E) liabilities and certain other non-A&E run-off exposures.

Management uses underwriting income (loss) as the basis for segment performance. Chubb calculates underwriting income (loss) by subtracting Losses and loss expenses, Policy benefits, Policy acquisition costs, and Administrative expenses from Net premiums earned. Our main measure of segment performance is Segment income (loss), which also includes Net investment income (loss), Other (income) expense, and Amortization of purchased intangibles acquired by the segment. We determined that this definition of segment income (loss) is appropriate and aligns with how the business is managed. We continue to evaluate our segments as our business continues to evolve and may further refine our segments and segment income (loss) measures. Certain items are presented in a different manner for segment reporting purposes than in the Consolidated Financial Statements. These items are reconciled to the consolidated presentation in the Segment measure reclass column below and include:

- Losses and loss expenses include realized gains and losses on crop derivatives. These derivatives were purchased to provide economic benefit, in a manner similar to reinsurance protection, in the event that a significant decline in commodity pricing impacts underwriting results. We view gains and losses on these derivatives as part of the results of our underwriting operations, and therefore realized gains (losses) from these derivatives are reclassified to losses and loss expenses.

- Policy benefits include gains and losses from fair value changes in separate account assets, as well as the offsetting movement in separate account liabilities. The gains and losses from fair value changes in separate account assets that do not qualify for separate account reporting under GAAP have been reclassified from Other (income) expense. We view gains and losses from fair value changes in both separate account assets and liabilities as part of the results of our underwriting operations, and therefore these gains and losses are reclassified to policy benefits.

- Net investment income includes investment income reclassified from Other (income) expense related to partially-owned investment companies (private equity partnerships) where our ownership interest is in excess of three percent. We view investment income from these equity-method private equity partnerships as net investment income.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

The following tables present the Statement of Operations by segment:

For the Three Months Ended June 30, 2021 (in millions of U.S. dollars)	North America Commercial P&C Insurance	North America Personal P&C Insurance	North America Agricultural Insurance	Overseas General Insurance	Global Reinsurance	Life Insurance	Corporate	Segment Measure Reclass	Chubb Consolidated
Net premiums written	$ 4,285	$ 1,363	$ 512	$ 2,497	$ 274	$ 615	$ —	$ —	$ 9,546
Net premiums earned	3,803	1,224	410	2,579	192	605	—	—	8,813
Losses and loss expenses	2,426	676	331	1,186	110	185	89	3	5,006
Policy benefits	—	—	—	—	—	170	—	15	185
Policy acquisition costs	489	245	27	699	47	191	—	—	1,698
Administrative expenses	245	67	3	279	10	83	88	—	775
Underwriting income (loss)	643	236	49	415	25	(24)	(177)	(18)	1,149
Net investment income (loss)	535	64	8	149	81	101	(15)	(39)	884
Other (income) expense[1]	14	(5)	—	2	—	(26)	(708)	(54)	(777)
Amortization expense of purchased intangibles	—	3	6	13	—	1	50	—	73
Segment income	$ 1,164	$ 302	$ 51	$ 549	$ 106	$ 102	$ 466	$ (3)	$ 2,737
Net realized gains (losses)							(36)	3	(33)
Interest expense							122	—	122
Income tax expense							317	—	317
Net income (loss)							$ (9)	$ —	$ 2,265

[1] Principally includes our share of operating income and market-to-market gains on private equities where we hold more than three percent. Refer to Note 11 for additional information.

For the Three Months Ended June 30, 2020 (in millions of U.S. dollars)	North America Commercial P&C Insurance	North America Personal P&C Insurance	North America Agricultural Insurance	Overseas General Insurance	Global Reinsurance	Life Insurance	Corporate	Segment Measure Reclass	Chubb Consolidated
Net premiums written	$ 3,720	$ 1,327	$ 461	$ 2,021	$ 207	$ 619	$ —	$ —	$ 8,355
Net premiums earned	3,595	1,192	376	2,194	163	608	—	—	8,128
Losses and loss expenses	3,498	762	313	1,485	73	171	276	(1)	6,577
Policy benefits	—	—	—	—	—	183	—	40	223
Policy acquisition costs	471	231	29	624	42	196	—	—	1,593
Administrative expenses	249	66	3	241	9	82	77	—	727
Underwriting income (loss)	(623)	133	31	(156)	39	(24)	(353)	(39)	(992)
Net investment income (loss)	509	65	7	121	60	95	(22)	(8)	827
Other (income) expense	6	1	1	5	1	(17)	109	(48)	58
Amortization expense of purchased intangibles	—	3	6	11	—	1	51	—	72
Segment income (loss)	$ (120)	$ 194	$ 31	$ (51)	$ 98	$ 87	$ (535)	$ 1	$ (295)
Net realized gains (losses)							31	(1)	30
Interest expense							128	—	128
Income tax benefit							(62)	—	(62)
Net loss							$ (570)	$ —	$ (331)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

For the Six Months Ended June 30, 2021 (in millions of U.S. dollars)	North America Commercial P&C Insurance	North America Personal P&C Insurance	North America Agricultural Insurance	Overseas General Insurance	Global Reinsurance	Life Insurance	Corporate	Segment Measure Reclass	Chubb Consolidated
Net premiums written	$ 7,949	$ 2,461	$ 695	$ 5,387	$ 481	$ 1,235	$ —	$ —	$ 18,208
Net premiums earned	7,477	2,408	520	5,057	372	1,200	—	—	17,034
Losses and loss expenses	4,986	1,495	416	2,449	230	383	98	2	10,059
Policy benefits	—	—	—	—	—	333	—	19	352
Policy acquisition costs	1,003	492	39	1,367	92	370	—	—	3,363
Administrative expenses	499	127	6	545	18	165	159	—	1,519
Underwriting income (loss)	989	294	59	696	32	(51)	(257)	(21)	1,741
Net investment income (loss)	1,075	129	15	290	151	199	(32)	(80)	1,747
Other (income) expense	16	(4)	—	3	—	(60)	(1,123)	(99)	(1,267)
Amortization expense of purchased intangibles	—	6	13	25	—	2	99	—	145
Segment income	$ 2,048	$ 421	$ 61	$ 958	$ 183	$ 206	$ 735	$ (2)	$ 4,610
Net realized gains (losses)							852	2	854
Interest expense							244	—	244
Income tax expense							655	—	655
Net income							$ 688	$ —	$ 4,565

For the Six Months Ended June 30, 2020 (in millions of U.S. dollars)	North America Commercial P&C Insurance	North America Personal P&C Insurance	North America Agricultural Insurance	Overseas General Insurance	Global Reinsurance	Life Insurance	Corporate	Segment Measure Reclass	Chubb Consolidated
Net premiums written	$ 6,972	$ 2,434	$ 618	$ 4,619	$ 425	$ 1,264	$ —	$ —	$ 16,332
Net premiums earned	6,971	2,392	470	4,501	349	1,239	—	—	15,922
Losses and loss expenses	5,679	1,445	378	2,743	160	373	287	(3)	11,062
Policy benefits	—	—	—	—	—	368	—	(16)	352
Policy acquisition costs	963	476	40	1,266	87	376	—	—	3,208
Administrative expenses	508	134	7	499	19	158	143	—	1,468
Underwriting income (loss)	(179)	337	45	(7)	83	(36)	(430)	19	(168)
Net investment income (loss)	1,034	131	16	266	129	190	(46)	(32)	1,688
Other (income) expense	12	3	1	9	1	(29)	132	(16)	113
Amortization expense of purchased intangibles	—	6	13	23	—	2	101	—	145
Segment income (loss)	$ 843	$ 459	$ 47	$ 227	$ 211	$ 181	$ (709)	$ 3	$ 1,262
Net realized gains (losses)							(925)	(3)	(928)
Interest expense							260	—	260
Income tax expense							153	—	153
Net loss							$ (2,047)	$ —	$ (79)

Underwriting assets are reviewed in total by management for purposes of decision-making. Other than Unpaid losses and loss expenses, Future policy benefits, Reinsurance recoverables, Goodwill and Other intangible assets, Chubb does not allocate assets to its segments.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

13. Earnings per share

	Three Months Ended June 30		Six Months Ended June 30	
(in millions of U.S. dollars, except share and per share data)	**2021**	2020	**2021**	2020
Numerator:				
Net income (loss)	**$ 2,265**	$ (331)	**$ 4,565**	$ (79)
Denominator:				
Denominator for basic earnings per share:				
Weighted-average shares outstanding	**445,094,678**	451,402,807	**447,802,079**	451,635,733
Denominator for diluted earnings per share:				
Share-based compensation plans [1]	**2,857,242**	—	**2,900,440**	—
Weighted-average shares outstanding and assumed conversions	**447,951,920**	451,402,807	**450,702,519**	451,635,733
Basic earnings (loss) per share	**$ 5.09**	$ (0.73)	**$ 10.20**	$ (0.17)
Diluted earnings (loss) per share	**$ 5.06**	$ (0.73)	**$ 10.13**	$ (0.17)
Potential anti-dilutive share conversions	**1,777,555**	8,378,447	**1,879,882**	6,583,319

[1] For the three and six months ended June 30, 2020, weighted-average shares outstanding used in calculating diluted loss per share excludes the effect of dilutive securities of 1,395,951 and 2,044,144 shares, respectively. In periods where a net loss is recognized, inclusion of incremental dilution is anti-dilutive.

Excluded from weighted-average shares outstanding and assumed conversions is the impact of securities that would have been anti-dilutive during the respective periods.

ITEM 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following is a discussion of our results of operations, financial condition, and liquidity and capital resources as of and for the three and six months ended June 30, 2021.

All comparisons in this discussion are to the corresponding prior year period unless otherwise indicated. All dollar amounts are rounded. However, percent changes and ratios are calculated using whole dollars. Accordingly, calculations using rounded dollars may differ.

Our results of operations and cash flows for any interim period are not necessarily indicative of our results for the full year. This discussion should be read in conjunction with our consolidated financial statements and related notes and our Management's Discussion and Analysis of Financial Condition and Results of Operations included in our Annual Report on Form 10-K for the year ended December 31, 2020 (2020 Form 10-K).

Other Information
We routinely post important information for investors on our website (investors.chubb.com). We use this website as a means of disclosing material, non-public information and for complying with our disclosure obligations under Securities and Exchange Commission (SEC) Regulation FD (Fair Disclosure). Accordingly, investors should monitor the Investor Information portion of our website, in addition to following our press releases, SEC filings, public conference calls, and webcasts. The information contained on, or that may be accessed through, our website is not incorporated by reference into, and is not a part of, this report.

MD&A Index	Page
Forward-Looking Statements	41
Overview	42
Consolidated Operating Results	42
Segment Operating Results	47
Net Realized and Unrealized Gains (Losses)	57
Effective Income Tax Rate	58
Non-GAAP Reconciliation	59
Amortization of Purchased Intangibles and Other Amortization	64
Net Investment Income	65
Investments	66
Critical Accounting Estimates	70
Unpaid Losses and Loss Expenses	70
Asbestos and Environmental (A&E)	70
Fair Value Measurements	70
Catastrophe Management	71
Natural Catastrophe Property Reinsurance Program	72
Liquidity	73
Capital Resources	74
Information Provided In Connection With Outstanding Debt of Subsidiaries	75

Forward-Looking Statements

The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for forward-looking statements. Any written or oral statements made by us or on our behalf may include forward-looking statements that reflect our current views with respect to future events and financial performance. The words "believe," "anticipate," "estimate," "project," "should," "plan," "expect," "intend," "hope," "feel," "foresee," "will likely result," "will continue," and variations thereof and similar expressions, identify forward-looking statements. These forward-looking statements are subject to certain risks, uncertainties, and other factors that could, should potential events occur, cause actual results to differ materially from such statements. These risks, uncertainties, and other factors, which are described in more detail elsewhere herein and in other documents we file with the U.S. Securities and Exchange Commission (SEC), include but are not limited to:

- actual amount of new and renewal business, premium rates, underwriting margins, market acceptance of our products, and risks associated with the introduction of new products and services and entering new markets; the competitive environment in which we operate, including trends in pricing or in policy terms and conditions, which may differ from our projections and changes in market conditions that could render our business strategies ineffective or obsolete;
- losses arising out of natural or man-made catastrophes; actual loss experience from insured or reinsured events and the timing of claim payments; the uncertainties of the loss-reserving and claims-settlement processes, including the difficulties associated with assessing environmental damage and asbestos-related latent injuries, the impact of aggregate-policy-coverage limits, the impact of bankruptcy protection sought by various asbestos producers and other related businesses, and the timing of loss payments;
- infection rates and severity of COVID-19 and related risks, and their effects on our business operations and claims activity, and any adverse impact to our insureds, brokers, agents, and employees; actual claims may exceed our best estimate of ultimate insurance losses incurred through June 30, 2021 which could change including as a result of, among other things, the impact of legislative or regulatory actions taken in response to COVID-19;
- changes in the distribution or placement of risks due to increased consolidation of insurance and reinsurance brokers; material differences between actual and expected assessments for guaranty funds and mandatory pooling arrangements; the ability to collect reinsurance recoverable, credit developments of reinsurers, and any delays with respect thereto and changes in the cost, quality, or availability of reinsurance;
- uncertainties relating to governmental, legislative and regulatory policies, developments, actions, investigations, and treaties; judicial decisions and rulings, new theories of liability, legal tactics, and settlement terms; the effects of data privacy or cyber laws or regulation; global political conditions and possible business disruption or economic contraction that may result from such events;
- developments in global financial markets, including changes in interest rates, stock markets, and other financial markets; increased government involvement or intervention in the financial services industry; the cost and availability of financing, and foreign currency exchange rate fluctuations; changing rates of inflation; and other general economic and business conditions, including the depth and duration of potential recession;
- the availability of borrowings and letters of credit under our credit facilities; the adequacy of collateral supporting funded high deductible programs; the amount of dividends received from subsidiaries;
- changes to our assessment as to whether it is more likely than not that we will be required to sell, or have the intent to sell, available for sale fixed maturity investments before their anticipated recovery;
- actions that rating agencies may take from time to time, such as financial strength or credit ratings downgrades or placing these ratings on credit watch negative or the equivalent;
- the effects of public company bankruptcies and accounting restatements, as well as disclosures by and investigations of public companies relating to possible accounting irregularities, and other corporate governance issues;
- acquisitions made performing differently than expected, our failure to realize anticipated expense-related efficiencies or growth from acquisitions, the impact of acquisitions on our pre-existing organization, or announced acquisitions not closing; risks and uncertainties relating to our planned purchases of additional interests in Huatai Insurance Group Co., Ltd. (Huatai Group), including our ability to receive Chinese insurance regulatory approval and complete the purchases;
- risks associated with being a Swiss corporation, including reduced flexibility with respect to certain aspects of capital management and the potential for additional regulatory burdens; share repurchase plans and share cancellations;
- loss of the services of any of our executive officers without suitable replacements being recruited in a reasonable time frame;

- the ability of our technology resources, including information systems and security, to perform as anticipated such as with respect to preventing material information technology failures or third-party infiltrations or hacking resulting in consequences adverse to Chubb or its customers or partners; the ability of our company to increase use of data analytics and technology as part of our business strategy and adapt to new technologies; and
- management's response to these factors and actual events (including, but not limited to, those described above).

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates. We undertake no obligation to publicly update or review any forward-looking statements, whether as a result of new information, future events or otherwise.

Overview

Chubb Limited is the Swiss-incorporated holding company of the Chubb Group of Companies. Chubb Limited, which is headquartered in Zurich, Switzerland, and its direct and indirect subsidiaries (collectively, the Chubb Group of Companies, Chubb, we, us, or our) are a global insurance and reinsurance organization, serving the needs of a diverse group of clients worldwide. At June 30, 2021, we had total assets of $197 billion and shareholders' equity of $60 billion. Chubb was incorporated in 1985 at which time it opened its first business office in Bermuda and continues to maintain operations in Bermuda. We operate through six business segments: North America Commercial P&C Insurance, North America Personal P&C Insurance, North America Agricultural Insurance, Overseas General Insurance, Global Reinsurance, and Life Insurance. For more information on our segments refer to "Segment Information" under Item 1 in our 2020 Form 10-K.

Consolidated Operating Results – Three and Six Months Ended June 30, 2021 and 2020

	Three Months Ended June 30		% Change	Six Months Ended June 30		% Change
(in millions of U.S. dollars, except for percentages)	**2021**	2020	Q-21 vs. Q-20	**2021**	2020	YTD-21 vs. YTD-20
Net premiums written	**$ 9,546**	$ 8,355	14.3 %	**$ 18,208**	$ 16,332	11.5 %
Net premiums written - constant dollars [1]			11.5 %			9.3 %
Net premiums earned	**8,813**	8,128	8.4 %	**17,034**	15,922	7.0 %
Net investment income	**884**	827	7.0 %	**1,747**	1,688	3.5 %
Net realized gains (losses)	**(33)**	30	NM	**854**	(928)	NM
Total revenues	**9,664**	8,985	7.6 %	**19,635**	16,682	17.7 %
Losses and loss expenses	**5,006**	6,577	(23.9)%	**10,059**	11,062	(9.1)%
Policy benefits	**185**	223	(17.2)%	**352**	352	—
Policy acquisition costs	**1,698**	1,593	6.6 %	**3,363**	3,208	4.8 %
Administrative expenses	**775**	727	6.7 %	**1,519**	1,468	3.5 %
Interest expense	**122**	128	(4.9)%	**244**	260	(6.3)%
Other (income) expense	**(777)**	58	NM	**(1,267)**	113	NM
Amortization of purchased intangibles	**73**	72	1.1 %	**145**	145	—
Total expenses	**7,082**	9,378	(24.5)%	**14,415**	16,608	(13.2)%
Income (loss) before income tax	**2,582**	(393)	NM	**5,220**	74	NM
Income tax expense (benefit)	**317**	(62)	NM	**655**	153	NM
Net income (loss)	**$ 2,265**	$ (331)	NM	**$ 4,565**	$ (79)	NM

NM – not meaningful

[1] On a constant-dollar basis. Amounts are calculated by translating prior period results using the same local currency exchange rates as the comparable current period.

Financial Highlights for the Three Months Ended June 30, 2021

- Net income was $2.3 billion compared with a net loss of $331 million in the prior year period. Net income in the current quarter was driven by record underwriting results, record net investment income, and higher income related to our partially-owned companies. Both commercial P&C and consumer lines grew globally, reflecting positive rate increases which exceeded loss cost trend, strong retention and higher new business.

- Total pre-tax and after-tax catastrophe losses were $280 million (3.4 percentage points of the combined ratio) and $226 million, respectively, compared with $1.8 billion (23.9 percentage points of the combined ratio) and $1.5 billion, respectively, in the prior year period, which included $1,365 million of pre-tax losses, or $1,157 million after tax, related to COVID-19.

- Total pre-tax and after-tax favorable prior period development were $268 million (3.3 percentage points of the combined ratio) and $224 million, respectively, compared with unfavorable prior period development of $75 million (1.0 percentage point of the combined ratio) and $52 million, respectively, in the prior year period. The current quarter included a charge of $68 million pre-tax for molestation claims, compared to $259 million in the prior year.

- The P&C combined ratio was 85.5 percent compared with 112.3 percent in the prior year period. P&C current accident year combined ratio excluding catastrophe losses was 85.4 percent compared with 87.4 percent in the prior year period. The 2.0 percentage point decrease was substantially driven by improvement in the loss ratio.

- Consolidated net premiums written were $9.5 billion, up 14.3 percent, or 11.5 percent in constant dollars. P&C net premiums written were $8.9 billion, up 15.5 percent, or 12.7 percent in constant dollars, comprising positive growth in both commercial P&C lines and consumer lines of 19.9 percent and 5.6 percent, respectively. The increase is primarily due to new business and positive rate increases across most lines and regions. There were two items that also impacted growth including a $184 million reduction in premium due to exposure adjustments on in-force policies resulting from the COVID-19 pandemic in the prior year, which was more than offset by a year-over-year decrease in large structured transactions of $241 million. Excluding these items, P&C net premiums written increased 16.4 percent.

- Consolidated net premiums earned were $8.8 billion, up 8.4 percent, or 5.6 percent in constant dollars. P&C net premiums earned increased 9.1 percent, comprising positive growth in both commercial P&C lines and consumer lines of 11.6 percent and 3.8 percent, respectively. Net premiums earned increased due to the same reasons described above for net premiums written, including from the prior year COVID-19 exposure adjustments that depressed prior year growth by $103 million. Partially offsetting the overall growth is the year-over-year decrease in large structured transactions of $241 million, which are fully earned when written.

- Net investment income was $884 million compared with $827 million in the prior year period primarily due to higher income received from our private equity partnerships and increased dividends on public equities.

- Shareholders' equity increased by $986 million in the quarter, primarily reflecting net income of $2.3 billion and net unrealized gains on investments of $581 million after-tax. Partially offsetting the increase was total capital returned to shareholders in the quarter of $2.3 billion, including share repurchases of $1.9 billion, at an average purchase price of $169.19 per share, and dividends of $352 million. In July 2021, our Board of Directors approved a one-time incremental share repurchase program of up to $5.0 billion through June 30, 2022.

Net Premiums Written	Three Months Ended June 30			% Change	Six Months Ended June 30			% Change
(in millions of U.S. dollars, except for percentages)	**2021**	2020	Q-21 vs. Q-20	C$ Q-21 vs. Q-20	**2021**	2020	YTD-21 vs. YTD-20	C$ YTD-21 vs. YTD-20
Commercial casualty	**$ 1,609**	$ 1,478	8.9 %	8.5 %	**$ 3,258**	$ 2,819	15.6 %	14.7 %
Workers' compensation	**546**	467	17.0 %	17.0 %	**1,109**	1,053	5.3 %	5.3 %
Professional liability	**1,263**	997	26.7 %	23.0 %	**2,353**	1,909	23.3 %	20.3 %
Surety	**138**	117	18.5 %	14.3 %	**296**	267	11.2 %	10.7 %
Commercial multiple peril [(1)]	**316**	267	18.0 %	18.0 %	**579**	508	13.9 %	13.9 %
Property and other short-tail lines	**1,740**	1,344	29.5 %	24.0 %	**3,334**	2,678	24.5 %	20.1 %
Total Commercial P&C lines	**5,612**	4,670	20.2 %	17.7 %	**10,929**	9,234	18.4 %	16.3 %
Agriculture	**512**	461	11.0 %	11.0 %	**695**	618	12.4 %	12.4 %
Personal automobile	**364**	353	3.2 %	(1.0)%	**751**	794	(5.5)%	(6.2)%
Personal homeowners	**1,025**	980	4.5 %	3.5 %	**1,800**	1,753	2.6 %	1.9 %
Personal other	**464**	402	15.5 %	9.0 %	**932**	820	13.6 %	8.6 %
Total Personal lines	**1,853**	1,735	6.8 %	3.9 %	**3,483**	3,367	3.4 %	1.7 %
Total Property and Casualty lines	**7,977**	6,866	16.2 %	13.8 %	**15,107**	13,219	14.3 %	12.4 %
Global A&H lines [(2)]	**951**	951	0.1 %	(4.2)%	**1,933**	2,018	(4.2)%	(7.5)%
Reinsurance lines	**274**	207	32.4 %	30.7 %	**481**	425	13.1 %	11.7 %
Life	**344**	331	3.8 %	(0.6)%	**687**	670	2.5 %	(0.3)%
Total consolidated	**$ 9,546**	$ 8,355	14.3 %	11.5 %	**$ 18,208**	$ 16,332	11.5 %	9.3 %

(1) Commercial multiple peril represents retail package business (property and general liability).

(2) For purposes of this schedule only, A&H results from our Combined North America and International businesses, normally included in the Life Insurance and Overseas General Insurance segments, respectively, as well as the A&H results of our North America Commercial P&C segment, are included in Global A&H lines above.

The increase in net premiums written for the three and six months ended June 30, 2021 reflects growth across most lines of business.

- The growth in commercial casualty was due to new business and positive rate increases, primarily across North America and Europe. Additionally, the prior year included a $58 million reduction in premium due to exposure adjustments on in-force policies resulting from the COVID-19 pandemic. Partially offsetting growth is the year-over-year decrease in large structured transactions of $178 million. Excluding these items, commercial casualty increased 18.5 percent and 20.7 percent, for the three and six months ended June 30, 2021, respectively.
- Workers' compensation growth was due to a reduction in the prior year's premium of $121 million related to exposure adjustments on in-force policies resulting from the COVID-19 pandemic, partially offset by the year-over-year decrease in large structured transactions. Excluding these items, workers' compensation increased slightly reflecting new business written in small commercial and large risk accounts.
- The increase in professional liability was due to new business and positive rate increases in North America, Asia and Europe.
- Commercial multiple peril increased due to higher new and renewal business in North America.
- Property and other short-tail lines increased due to positive rate increases in Asia, North America and Europe, as well as higher new business in North America and Europe.
- Personal lines increased globally primarily reflecting new business in homeowners lines in North America and Latin America and growth in specialty lines in Europe. Growth for the six months ended June 30, 2021 was partially offset by declines in automobile lines in North America and Latin America reflecting reduced exposures from the impact of the COVID-19 pandemic.
- Global A&H lines decreased due to declines in Asia and Latin America, principally from less travel volume, and in our North American Combined Insurance supplemental A&H program from the adverse impact of the COVID-19 pandemic on face-to-face and worksite sales.

- Growth in our international life operations, principally from new business written in Taiwan, Vietnam and Thailand was partially offset by declines in our life reinsurance business that has not written new business since 2007.

For additional information on net premiums written, refer to the segment results discussions.

Net Premiums Earned

Net premiums earned for short-duration contracts, typically P&C contracts, generally reflect the portion of net premiums written that was recorded as revenues for the period as the exposure periods expire. Net premiums earned for long-duration contracts, typically traditional life contracts, generally are recognized as earned when due from policyholders. For the three months ended June 30, 2021, net premiums earned increased $685 million, or 8.4 percent, comprising 11.6 percent positive growth in commercial P&C lines and 2.9 percent positive growth in consumer lines. For the six months ended June 30, 2021, net premiums earned increased $1,112 million or 7.0 percent, comprising 11.5 percent positive growth in commercial P&C lines and 0.3 percent negative growth in consumer lines. The growth in net premiums earned was adversely impacted by the year-over-year decrease in large structured transactions, which are fully earned when written, partially offset by the prior year COVID-19 exposure adjustments on in-force policies.

Catastrophe Losses and Prior Period Development

We generally define catastrophe loss events consistent with the definition of the Property Claims Service (PCS) for events in the U.S. and Canada. PCS defines a catastrophe as an event that causes damage of $25 million or more in insured losses and affects a significant number of insureds. For events outside of the U.S. and Canada, we generally use a similar definition. We also define losses from certain pandemics, such as COVID-19, as a catastrophe loss.

Prior period development includes adjustments relating to either profit commission reserves or policyholder dividend reserves based on actual claim experience that develops after the policy period ends. The expense adjustments correlate to the prior period loss development on these same policies. Refer to the Non-GAAP Reconciliation section for further information on reinstatement premiums on catastrophe losses and adjustments to prior period development.

	Three Months Ended June 30		Six Months Ended June 30	
(in millions of U.S. dollars)	**2021**	2020	**2021**	2020
Catastrophe losses	**$ 280**	$ 1,807	**$ 980**	$ 2,044
Favorable (Unfavorable) prior period development	**$ 268**	$ (75)	**$ 460**	$ 43

Catastrophe losses through June 30, 2021 and 2020 were primarily from the following events:

- 2021: Winter storm losses in the U.S. and other severe weather-related events in the U.S. and internationally.
- 2020: COVID-19 pandemic claims of $1,365 million, flooding, hail, tornadoes, and wind events in the U.S., and civil unrest in the U.S.

Prior period development (PPD) arises from changes to loss estimates recognized in the current year that relate to loss events that occurred in previous calendar years and excludes the effect of losses from the development of earned premium from previous accident years.

Pre-tax net favorable PPD for the three months ended June 30, 2021 was $268 million, including adverse development of $68 million for molestation claims. Excluding the adverse development, we had favorable development of $336 million with 28 percent in long-tail lines, principally from accident years 2017 and prior, and 72 percent in short-tail lines, primarily in accident and health, property, and surety lines.

Pre-tax net favorable PPD for the six months ended June 30, 2021 was $460 million, including adverse development of $68 million for molestation claims described above. Excluding the adverse development, we had favorable development of $528 million with 25 percent in long-tail lines, principally from accident years 2017 and prior, and 75 percent in short-tail lines, primarily in accident and health, property, and surety lines.

Pre-tax net adverse PPD for the three months ended June 30, 2020 was $75 million, including adverse development of $259 million for U.S. child molestation claims, predominantly reviver statute-related. Excluding the adverse development, we had

favorable development of $184 million split approximately 79 percent long-tail lines, principally from accident years 2016 and prior, and 21 percent short-tail lines.

Pre-tax net favorable PPD for the six months ended June 30, 2020 was $43 million, including adverse development of $259 million for U.S. child molestation claims as noted above. Excluding the adverse development, we had favorable development of $302 million split approximately 59 percent long-tail lines, principally from accident years 2016 and prior, and 41 percent short-tail lines.

Refer to the prior period development discussion in Footnote 6 to the Consolidated Financial Statements for additional information.

P&C Combined Ratio

In evaluating our segments excluding Life Insurance financial performance, we use the P&C combined ratio. We calculate this ratio by dividing the respective expense amounts by net premiums earned. We do not calculate this ratio for the Life Insurance segment as we do not use this measure to monitor or manage that segment. A P&C combined ratio under 100 percent indicates underwriting income, and a combined ratio exceeding 100 percent indicates underwriting loss.

	Three Months Ended June 30		Six Months Ended June 30	
	2021	2020	**2021**	2020
Loss and loss expense ratio				
CAY loss ratio excluding catastrophe losses	**58.6 %**	60.4 %	**57.9 %**	59.3 %
Catastrophe losses	**3.5 %**	23.9 %	**6.2 %**	13.8 %
Prior period development	**(3.4)%**	0.9 %	**(3.0)%**	(0.3)%
Loss and loss expense ratio	**58.7 %**	85.2 %	**61.1 %**	72.8 %
Policy acquisition cost ratio	**18.4 %**	18.5 %	**18.9 %**	19.3 %
Administrative expense ratio	**8.4 %**	8.6 %	**8.6 %**	8.9 %
P&C Combined ratio	**85.5 %**	112.3 %	**88.6 %**	101.0 %

The loss and loss expense ratio decreased 26.5 percentage points and 11.7 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to lower catastrophe losses compared to the prior year which included significant losses related to the COVID-19 pandemic and higher favorable prior period development. The CAY loss ratio excluding catastrophe losses decreased 1.8 percentage points and 1.4 percentage points for the three and six months ended June 30, 2021, respectively, reflecting in part, underlying loss ratio improvement.

The policy acquisition cost ratio decreased 0.1 percentage points and 0.4 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to a change in the mix of business, including less premiums earned from consumer A&H lines that have a higher acquisition cost ratio and higher premiums earned from commercial P&C lines that have a lower acquisition cost ratio.

The administrative expense ratio decreased 0.2 percentage points and 0.3 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to the favorable impact of higher net premiums earned.

Policy benefits

Policy benefits represent losses on contracts classified as long-duration and generally include accident and supplemental health products, term and whole life products, endowment products, and annuities. Refer to the Life Insurance segment operating results section for further discussion.

For the three months ended June 30, 2021 and 2020, Policy benefits were $185 million and $223 million, respectively, which included separate account liabilities losses of $15 million and $40 million, respectively. The offsetting movements of these liabilities are recorded in Other (income) expense on the Consolidated statements of operations. Excluding the separate account gains and losses, Policy benefits were $170 million and $183 million for the three months ended June 30, 2021 and 2020, respectively, reflecting a decline in our Combined Insurance North America supplemental accident and health business and our life reinsurance business, partially offset by growth in our International Life operations.

For both the six months ended June 30, 2021 and 2020, Policy benefits were $352 million, which included separate account liabilities (gains) losses of $19 million and $(16) million, respectively. Excluding the separate account gains and losses, Policy benefits were $333 million and $368 million for the six months ended June 30, 2021 and 2020, respectively, reflecting a decline in our Combined Insurance North America supplemental accident and health business and our life reinsurance business, partially offset by growth in our International Life operations.

Refer to the respective sections that follow for a discussion of Net investment income, Other (income) expense, Net realized gains (losses), Amortization of purchased intangibles, and Income tax expense.

Segment Operating Results – Three and Six Months Ended June 30, 2021 and 2020

We operate through six business segments: North America Commercial P&C Insurance, North America Personal P&C Insurance, North America Agricultural Insurance, Overseas General Insurance, Global Reinsurance, and Life Insurance. For more information on our segments refer to "Segment Information" under Item 1 in our 2020 Form 10-K.

North America Commercial P&C Insurance

The North America Commercial P&C Insurance segment comprises operations that provide property and casualty (P&C) and accident & health (A&H) insurance and services to large, middle market, and small commercial businesses in the U.S., Canada, and Bermuda. This segment includes our North America Major Accounts and Specialty Insurance division (large corporate accounts and wholesale business), and the North America Commercial Insurance division (principally middle market and small commercial accounts).

	Three Months Ended June 30		% Change	Six Months Ended June 30		% Change
(in millions of U.S. dollars, except for percentages)	**2021**	2020	Q-21 vs. Q-20	**2021**	2020	YTD-21 vs. YTD-20
Net premiums written	**$ 4,285**	$ 3,720	15.2 %	**$ 7,949**	$ 6,972	14.0 %
Net premiums earned	**3,803**	3,595	5.8 %	**7,477**	6,971	7.3 %
Losses and loss expenses	**2,426**	3,498	(30.6)%	**4,986**	5,679	(12.2)%
Policy acquisition costs	**489**	471	3.8 %	**1,003**	963	4.1 %
Administrative expenses	**245**	249	(1.8)%	**499**	508	(1.7)%
Underwriting income (loss)	**643**	(623)	NM	**989**	(179)	NM
Net investment income	**535**	509	5.3 %	**1,075**	1,034	4.1 %
Other (income) expense	**14**	6	124.8 %	**16**	12	39.4 %
Segment income (loss)	**$ 1,164**	$ (120)	NM	**$ 2,048**	$ 843	142.9 %
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	**63.7 %**	66.1 %	(2.4) pts	**63.6 %**	65.2 %	(1.6) pts
Catastrophe losses	**4.3 %**	35.4 %	(31.1) pts	**7.0 %**	20.0 %	(13.0) pts
Prior period development	**(4.2)%**	(4.2)%	— pts	**(3.9)%**	(3.7)%	(0.2) pts
Loss and loss expense ratio	**63.8 %**	97.3 %	(33.5) pts	**66.7 %**	81.5 %	(14.8) pts
Policy acquisition cost ratio	**12.9 %**	13.1 %	(0.2) pts	**13.4 %**	13.8 %	(0.4) pts
Administrative expense ratio	**6.4 %**	6.9 %	(0.5) pts	**6.7 %**	7.3 %	(0.6) pts
Combined ratio	**83.1 %**	117.3 %	(34.2) pts	**86.8 %**	102.6 %	(15.8) pts

NM - not meaningful

Catastrophe Losses and Prior Period Development

(in millions of U.S. dollars)	Three Months Ended June 30		Six Months Ended June 30	
	2021	2020	**2021**	2020
Catastrophe losses	**$ 165**	$ 1,273	**$ 527**	$ 1,391
Favorable prior period development	**$ 156**	$ 146	**$ 283**	$ 251

Catastrophe losses through June 30, 2021 and 2020 were primarily from the following events:

- 2021: Winter storm losses and other severe weather-related events in the U.S.
- 2020: COVID-19 pandemic claims of $973 million, civil unrest in the U.S. of $118 million, and natural catastrophes including Nashville, Tennessee tornado and other severe weather-related events in the U.S.

Refer to the prior period development discussion in Note 6 to the Consolidated Financial Statements for additional information.

Premiums

Net premiums written increased $565 million, or 15.2 percent, and $977 million, or 14.0 percent, for the three and six months ended June 30, 2021, respectively, comprising:

- Commercial P&C lines: Positive growth of 16.3 percent and 15.6 percent, respectively, reflecting strong premium retention, positive rate increases, and growth in new business written across a number of retail and wholesale lines, including financial lines, property, excess casualty, and primary casualty. In addition, the prior year included a $160 million reduction in premium due to exposure adjustments on in-force policies resulting from the COVID-19 pandemic. Partially offsetting growth in premium is the year-over-year decrease in large structured transactions of $241 million. Adjusting for both these items, growth in the segment would have been 18.0 percent and 15.5 percent, for the three and six months ended June 30, 2021, respectively.
- Consumer lines: Negative growth of 8.9 percent and 14.1 percent, respectively, principally from exposure declines in A&H.

Net premiums earned increased $208 million, or 5.8 percent, and $506 million, or 7.3 percent for the three and six months ended June 30, 2021, respectively, reflecting the growth in net premiums written described above. In addition, the percentage growth for the three months ended June 30, 2021 was adversely impacted by the year-over-year decrease in large structured transactions described above, which are fully earned when written, partially offset by $95 million of exposure adjustments on in-force policies from the COVID-19 pandemic in the prior year, as described above. Adjusting for both these items, growth would have been 10.4 percent and 9.6 percent, respectively.

Combined Ratio

The loss and loss expense ratio decreased 33.5 percentage points and 14.8 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to lower catastrophe losses compared to the prior year which included significant losses related to the COVID-19 pandemic. The CAY loss ratio excluding catastrophe losses decreased 2.4 percentage points and 1.6 percentage points for the three and six months ended June 30, 2021, respectively. About half of the margin improvement is coming from underlying loss ratio improvement, with the balance due to the favorable impact of lower year-over-year large structured transactions written and non-recurring unfavorable items in the quarter.

The policy acquisition cost ratio decreased 0.2 percentage points and 0.4 percentage points for the three and six months ended June 30, 2021, respectively, reflecting a change in mix of business towards lines that have a lower acquisition cost ratio and lower commissions, partly offset by the unfavorable impact of large structured transactions noted above.

The administrative expense ratio decreased 0.5 percentage points and 0.6 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to higher net profit from our third-party claims administration business, ESIS, and the favorable impact of higher net premiums earned and continued expense management. The decrease was partially offset by the unfavorable impact of lower year-over-year large structured transactions written.

North America Personal P&C Insurance

The North America Personal P&C Insurance segment comprises operations that provide high net worth personal lines products, including homeowners and complementary products such as valuable articles, excess liability, automobile, and recreational marine insurance and services in the U.S. and Canada.

	Three Months Ended June 30		% Change	Six Months Ended June 30		% Change
(in millions of U.S. dollars, except for percentages)	**2021**	2020	Q-21 vs. Q-20	**2021**	2020	YTD-21 vs. YTD-20
Net premiums written	**$ 1,363**	$ 1,327	2.6 %	**$ 2,461**	$ 2,434	1.1 %
Net premiums earned	**1,224**	1,192	2.7 %	**2,408**	2,392	0.7 %
Losses and loss expenses	**676**	762	(11.2)%	**1,495**	1,445	3.5 %
Policy acquisition costs	**245**	231	6.0 %	**492**	476	3.5 %
Administrative expenses	**67**	66	1.4 %	**127**	134	(5.4)%
Underwriting income	**236**	133	76.6 %	**294**	337	(12.9)%
Net investment income	**64**	65	(0.1)%	**129**	131	(1.1)%
Other (income) expense	**(5)**	1	NM	**(4)**	3	NM
Amortization of purchased intangibles	**3**	3	—	**6**	6	—
Segment income	**$ 302**	$ 194	55.9 %	**$ 421**	$ 459	(8.2)%
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	**53.6 %**	54.7 %	(1.1) pts	**53.4 %**	54.9 %	(1.5) pts
Catastrophe losses	**5.3 %**	9.2 %	(3.9) pts	**12.2 %**	5.5 %	6.7 pts
Prior period development	**(3.7)%**	(0.1)%	(3.6) pts	**(3.5)%**	—	(3.5) pts
Loss and loss expense ratio	**55.2 %**	63.8 %	(8.6) pts	**62.1 %**	60.4 %	1.7 pts
Policy acquisition cost ratio	**20.0 %**	19.4 %	0.6 pts	**20.4 %**	19.9 %	0.5 pts
Administrative expense ratio	**5.5 %**	5.6 %	(0.1) pts	**5.3 %**	5.6 %	(0.3) pts
Combined ratio	**80.7 %**	88.8 %	(8.1) pts	**87.8 %**	85.9 %	1.9 pts

NM - not meaningful

Catastrophe Losses and Prior Period Development

	Three Months Ended June 30		Six Months Ended June 30	
(in millions of U.S. dollars)	**2021**	2020	**2021**	2020
Catastrophe losses	**$ 61**	$ 110	**$ 301**	$ 131
Favorable prior period development	**$ 44**	$ 1	**$ 84**	$ —

Catastrophe losses through June 30, 2021 and 2020 were primarily from the following events:

- 2021: Winter storm losses and other severe weather-related events in the U.S.
- 2020: Severe weather-related events in the U.S.

Refer to the prior period development discussion in Note 6 to the Consolidated Financial Statements for additional information.

Premiums

Net premiums written increased $36 million, or 2.6 percent, for the three months ended June 30, 2021, primarily driven by strong renewal retention, from both rate and exposure increases, and new business in homeowners. Partially offsetting the increase was wildfire exposure-related cancellations in parts of California. Net premiums written increased $27 million, or 1.1 percent, for the six months ended June 30, 2021, primarily driven by the factors described above, partially offset by the unfavorable impact of automobile return premiums and the unfavorable impact of reinstatement premiums related to 2021 winter storm losses.

Net premiums earned increased $32 million, or 2.7 percent, and $16 million, or 0.7 percent for the three and six months ended June 30, 2021, respectively, reflecting the growth in net premiums written described above.

Combined Ratio

The loss and loss expense ratio decreased 8.6 percentage points and increased 1.7 percentage points for the three and six months ended June 30, 2021, respectively, reflecting catastrophe losses and higher favorable prior period development. The CAY loss ratio excluding catastrophe losses decreased 1.1 percentage points and 1.5 percentage points for the three and six months ended June 30, 2021, respectively, due to lower claim frequency in automobile and in homeowners from underlying loss ratio improvement.

The policy acquisition cost ratio increased 0.6 percentage points and 0.5 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to a favorable commission accrual adjustment in the prior year.

The administrative expense ratio decreased 0.1 percentage points and 0.3 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to continued expense management.

North America Agricultural Insurance

The North America Agricultural Insurance segment comprises our North American based businesses that provide a variety of coverages in the U.S. and Canada including crop insurance, primarily Multiple Peril Crop Insurance (MPCI) and crop-hail through Rain and Hail Insurance Service, Inc. (Rain and Hail) as well as farm and ranch and specialty P&C commercial insurance products and services through our Chubb Agribusiness unit.

	Three Months Ended June 30		% Change	Six Months Ended June 30		% Change
(in millions of U.S. dollars, except for percentages)	**2021**	2020	Q-21 vs. Q-20	**2021**	2020	YTD-21 vs. YTD-20
Net premiums written	**$ 512**	$ 461	11.0 %	**$ 695**	$ 618	12.4 %
Net premiums earned	**410**	376	8.9 %	**520**	470	10.5 %
Losses and loss expenses	**331**	313	5.8 %	**416**	378	10.0 %
Policy acquisition costs	**27**	29	(7.1)%	**39**	40	(2.0)%
Administrative expenses	**3**	3	—	**6**	7	(21.3)%
Underwriting income	**49**	31	59.1 %	**59**	45	30.8 %
Net investment income	**8**	7	3.9 %	**15**	16	(8.7)%
Other (income) expense	**—**	1	NM	**—**	1	NM
Amortization of purchased intangibles	**6**	6	—	**13**	13	—
Segment income	**$ 51**	$ 31	61.5 %	**$ 61**	$ 47	27.9 %
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	**79.7 %**	81.5 %	(1.8) pts	**77.9 %**	80.4 %	(2.5) pts
Catastrophe losses	**1.0 %**	1.6 %	(0.6) pts	**2.3 %**	3.0 %	(0.7) pts
Prior period development	**—**	—	— pts	**(0.2)%**	(3.0)%	2.8 pts
Loss and loss expense ratio	**80.7 %**	83.1 %	(2.4) pts	**80.0 %**	80.4 %	(0.4) pts
Policy acquisition cost ratio	**6.7 %**	7.8 %	(1.1) pts	**7.6 %**	8.5 %	(0.9) pts
Administrative expense ratio	**0.7 %**	0.9 %	(0.2) pts	**1.1 %**	1.5 %	(0.4) pts
Combined ratio	**88.1 %**	91.8 %	(3.7) pts	**88.7 %**	90.4 %	(1.7) pts

NM - not meaningful

Catastrophe Losses and Prior Period Development

(in millions of U.S. dollars)	Three Months Ended June 30		Six Months Ended June 30	
	2021	2020	**2021**	2020
Catastrophe losses	**$ 4**	$ 6	**$ 12**	$ 14
Favorable prior period development	**$ —**	$ —	**$ 2**	$ 14

Catastrophe losses through June 30, 2021 and 2020 were primarily from winter storm losses and other severe weather-related events in the U.S. in Chubb Agribusiness.

For the six months ended June 30, 2020, net favorable prior period development was $14 million which included $17 million of favorable incurred losses due to lower than expected MPCI losses for the 2019 crop year, partially offset by a $3 million decrease in net premiums earned related to the MPCI profit and loss calculation formula.

Premiums

Net premiums written increased $51 million, or 11.0 percent, and $77 million, or 12.4 percent for the three and six months ended June 30, 2021, respectively, due to policy count growth and a modest increase in commodity price for winter wheat in our MPCI business. In addition, our Chubb Agribusiness unit contributed to strong new business growth.

Net premiums earned increased $34 million, or 8.9 percent, and $50 million, or 10.5 percent for the three and six months ended June 30, 2021, respectively, reflecting the growth in net premiums written described above.

Combined Ratio

The loss and loss expense ratio decreased 2.4 percentage points and 0.4 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to higher premiums earned from Chubb Agribusiness, which has a lower loss ratio, lower catastrophe losses, the favorable year-over-year impact of our crop derivative, and lower underlying losses in Chubb Agribusiness. The decrease in the loss ratio for the six months ended June 30, 2021 was mostly offset by lower favorable prior period development. The CAY loss ratio excluding catastrophe losses decreased 1.8 percentage points and 2.5 percentage points for the three and six months ended June 30, 2021, respectively, due to the factors noted above.

The policy acquisition cost ratio decreased 1.1 percentage points and 0.9 percentage point for the three and six months ended June 30, 2021, respectively, primarily due to a lower year-over-year amount of supplemental commissions in our Chubb Agribusiness unit.

The administrative expense ratio decreased 0.2 percentage points and 0.4 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to the favorable impact of higher net premiums earned.

Overseas General Insurance

Overseas General Insurance segment comprises Chubb International and Chubb Global Markets (CGM). Chubb International comprises our international commercial P&C traditional and specialty lines serving large corporations, middle market and small customers; A&H and traditional and specialty personal lines business serving local territories outside the U.S., Bermuda, and Canada. CGM, our London-based international commercial P&C excess and surplus lines business, includes Lloyd's of London (Lloyd's) Syndicate 2488. Chubb provides funds at Lloyd's to support underwriting by Syndicate 2488 which is managed by Chubb Underwriting Agencies Limited.

	Three Months Ended			Six Months Ended		
		June 30	% Change		June 30	% Change
(in millions of U.S. dollars, except for percentages)	**2021**	2020	Q-21 vs. Q-20	**2021**	2020	YTD-21 vs. YTD-20
Net premiums written	**$ 2,497**	$ 2,021	23.6 %	**$ 5,387**	$ 4,619	16.6 %
Net premiums written - constant dollars			15.0 %			10.6 %
Net premiums earned	**2,579**	2,194	17.6 %	**5,057**	4,501	12.4 %
Losses and loss expenses	**1,186**	1,485	(20.1)%	**2,449**	2,743	(10.7)%
Policy acquisition costs	**699**	624	12.0 %	**1,367**	1,266	8.0 %
Administrative expenses	**279**	241	16.0 %	**545**	499	9.3 %
Underwriting income (loss)	**415**	(156)	NM	**696**	(7)	NM
Net investment income	**149**	121	22.2 %	**290**	266	8.7 %
Other (income) expense	**2**	5	(66.9)%	**3**	9	(72.0)%
Amortization of purchased intangibles	**13**	11	17.8 %	**25**	23	11.8 %
Segment income (loss)	**$ 549**	$ (51)	NM	**$ 958**	$ 227	NM
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	**50.6 %**	51.6 %	(1.0) pts	**50.3 %**	51.2 %	(0.9) pts
Catastrophe losses	**1.6 %**	17.8 %	(16.2) pts	**1.8 %**	10.7 %	(8.9) pts
Prior period development	**(6.2)%**	(1.7)%	(4.5) pts	**(3.7)%**	(0.9)%	(2.8) pts
Loss and loss expense ratio	**46.0 %**	67.7 %	(21.7) pts	**48.4 %**	61.0 %	(12.6) pts
Policy acquisition cost ratio	**27.1 %**	28.4 %	(1.3) pts	**27.0 %**	28.1 %	(1.1) pts
Administrative expense ratio	**10.8 %**	11.0 %	(0.2) pts	**10.8 %**	11.1 %	(0.3) pts
Combined ratio	**83.9 %**	107.1 %	(23.2) pts	**86.2 %**	100.2 %	(14.0) pts

NM - not meaningful

Catastrophe Losses and Prior Period Development

	Three Months Ended June 30		Six Months Ended June 30	
(in millions of U.S. dollars)	**2021**	2020	**2021**	2020
Catastrophe losses	**$ 40**	$ 399	**$ 90**	$ 489
Favorable prior period development	**$ 156**	$ 36	**$ 181**	$ 40

Catastrophe losses through June 30, 2021 and 2020 were primarily from the following events:

- 2021: Winter storm losses in the U.S. and international weather-related events
- 2020: COVID-19 pandemic claims of $373 million, storms in Australia, Australia wildfires, and other international weather-related events

Refer to the prior period development discussion in Note 6 to the Consolidated Financial Statements for additional information.

Net Premiums Written by Region

Three months ended June 30

(in millions of U.S. dollars, except for percentages) *Region*	2021	2021 % of Total	2020	2020 % of Total	C$ 2020	Q-21 vs. Q-20	C$ Q-21 vs. Q-20
Europe, Middle East and Africa	$ **1,188**	**48 %**	$ 879	43 %	$ 946	35.2 %	25.6 %
Latin America	**451**	**18 %**	389	19 %	418	16.3 %	8.2 %
Asia	**825**	**33 %**	721	36 %	774	14.4 %	6.7 %
Other [1]	**33**	**1 %**	32	2 %	35	1.9 %	(6.5)%
Net premiums written	$ **2,497**	**100 %**	$ 2,021	100 %	$ 2,173	23.6 %	15.0 %

Six months ended June 30

(in millions of U.S. dollars, except for percentages) *Region*	2021	2021 % of Total	2020	2020 % of Total	C$ 2020	Y-21 vs. Y-20	C$ Y-21 vs. Y-20
Europe, Middle East and Africa	$ **2,739**	**51 %**	$ 2,156	47 %	$ 2,307	27.1 %	18.7 %
Latin America	**988**	**18 %**	972	21 %	975	1.7 %	1.4 %
Asia	**1,586**	**30 %**	1,409	30 %	1,501	12.5 %	5.7 %
Other [1]	**74**	**1 %**	82	2 %	87	(10.3)%	(15.5)%
Net premiums written	$ **5,387**	**100 %**	$ 4,619	100 %	$ 4,870	16.6 %	10.6 %

[1] Includes the international supplemental A&H business of Combined Insurance and other international operations.

Premiums

Net premiums written increased $476 million and $768 million, or $324 million and $517 million on a constant-dollar basis, for the three and six months ended June 30, 2021, respectively, comprising:

- Commercial P&C lines: Positive growth of 23.4 percent and 18.8 percent, respectively, across most regions and lines from new business and positive rate increases.
- Consumer lines: Positive growth of 4.6 percent for the three months ended June 30, 2021 across all regions and most lines, principally in specialty personal and homeowners lines. For the six months ended June 30, 2021, net premiums written in our consumer lines was relatively flat as growth in the second quarter noted above, was offset by declines in A&H in all regions, resulting from less travel volume and lower exposures, and in automobile lines in Latin America.

Net premiums earned increased $385 million and $556 million, or $216 million and $305 million on a constant-dollar basis, for the three and six months ended June 30, 2021, respectively, reflecting the increase in net premiums written described above.

Combined Ratio

The loss and loss expense ratio decreased 21.7 percentage points and 12.6 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to lower catastrophe losses and higher favorable prior period development. The CAY loss ratio excluding catastrophe losses decreased 1.0 percentage points and 0.9 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to margin improvements coming from underlying loss ratio improvement and lower losses in automobile lines in Latin America. The decrease was partially offset by lower premiums earned from A&H lines which have a lower loss ratio.

The policy acquisition cost ratio decreased 1.3 percentage points and 1.1 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to a change in the mix of business, including less premiums earned from A&H lines that have a higher acquisition cost ratio and higher premiums earned from commercial P&C lines, that have a lower acquisition cost ratio.

The administrative expense ratio decreased 0.2 percentage points and 0.3 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to the favorable impact of higher net premiums earned.

Global Reinsurance

The Global Reinsurance segment represents our reinsurance operations comprising Chubb Tempest Re Bermuda, Chubb Tempest Re USA, Chubb Tempest Re International, and Chubb Tempest Re Canada. Global Reinsurance markets its reinsurance products worldwide primarily through reinsurance brokers under the Chubb Tempest Re brand name and provides a broad range of traditional and non-traditional reinsurance coverage to a diverse array of primary P&C companies.

	Three Months Ended June 30		% Change	Six Months Ended June 30		% Change
(in millions of U.S. dollars, except for percentages)	**2021**	2020	Q-21 vs. Q-20	**2021**	2020	YTD-21 vs. YTD-20
Net premiums written	**$ 274**	$ 207	32.4 %	**$ 481**	$ 425	13.1 %
Net premiums written - constant dollars			30.7 %			11.7 %
Net premiums earned	**192**	163	17.8 %	**372**	349	6.6 %
Losses and loss expenses	**110**	73	47.3 %	**230**	160	43.0 %
Policy acquisition costs	**47**	42	13.9 %	**92**	87	5.8 %
Administrative expenses	**10**	9	6.1 %	**18**	19	(4.6)%
Underwriting income	**25**	39	(32.3)%	**32**	83	(60.8)%
Net investment income	**81**	60	33.4 %	**151**	129	16.7 %
Other (income) expense	**—**	1	NM	**—**	1	NM
Segment income	**$ 106**	$ 98	8.5 %	**$ 183**	$ 211	(13.2)%
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	**50.9 %**	46.8 %	4.1 pts	**49.6 %**	48.7 %	0.9 pts
Catastrophe losses	**5.2 %**	7.9 %	(2.7) pts	**14.2 %**	3.7 %	10.5 pts
Prior period development	**0.7 %**	(9.2)%	9.9 pts	**(2.1)%**	(6.4)%	4.3 pts
Loss and loss expense ratio	**56.8 %**	45.5 %	11.3 pts	**61.7 %**	46.0 %	15.7 pts
Policy acquisition cost ratio	**24.7 %**	25.5 %	(0.8) pts	**24.8 %**	25.0 %	(0.2) pts
Administrative expense ratio	**5.1 %**	5.6 %	(0.5) pts	**4.8 %**	5.3 %	(0.5) pts
Combined ratio	**86.6 %**	76.6 %	10.0 pts	**91.3 %**	76.3 %	15.0 pts

NM - not meaningful

Catastrophe Losses and Prior Period Development

	Three Months Ended June 30		Six Months Ended June 30	
(in millions of U.S dollars)	**2021**	2020	**2021**	2020
Catastrophe losses	**$ 10**	$ 13	**$ 50**	$ 13
Favorable prior period development	**$ —**	$ 16	**$ 7**	$ 23

Catastrophe losses through June 30, 2021 and 2020 were primarily from the following events:

- 2021: Winter storm losses in the U.S.
- 2020: COVID-19 pandemic claims of $10 million and severe weather-related events in the U.S.

Refer to the prior period development discussion in Note 6 to the Consolidated Financial Statements for additional information.

Premiums

Net premiums written increased $67 million and $56 million for the three and six months ended June 30, 2021, respectively, primarily from new business written, including a large treaty bound in the quarter, and positive rate increases in property, casualty, and financial lines.

Net premiums earned increased $29 million and $23 million, for the three and six months ended June 30, 2021, respectively, reflecting the increase in net premiums written described above.

Combined Ratio

The loss and loss expense ratio increased 11.3 percentage points for the three months ended June 30, 2021, primarily due to lower favorable prior period development. The loss and loss expense ratio increased 15.7 percentage points for the six months ended June 30, 2021, primarily due to higher catastrophe losses and lower favorable prior period development. The CAY loss ratio excluding catastrophe losses increased 4.1 percentage points and 0.9 percentage points for the three and six months ended June 30, 2021, respectively, primarily due to a shift in the mix of business towards lines which have a higher loss ratio.

The policy acquisition cost ratio decreased 0.8 percentage points and 0.2 percentage points for the three and six months ended June 30, 2021, respectively, primarily from a shift in mix of business towards lines that have lower acquisition costs.

The administrative expense ratio decreased 0.5 percentage points for both the three and six months ended June 30, 2021, primarily from the favorable impact of higher net premiums earned.

Life Insurance

The Life Insurance segment comprises Chubb's international life operations, Chubb Tempest Life Re (Chubb Life Re), and the North American supplemental A&H and life business of Combined Insurance. We assess the performance of our life business based on Life Insurance underwriting income, which includes Net investment income and (Gains) losses from fair value changes in separate account assets that do not qualify for separate account reporting under GAAP.

	Three Months Ended			Six Months Ended		
		June 30	% Change		June 30	% Change
(in millions of U.S. dollars, except for percentages)	**2021**	2020	Q-21 vs. Q-20	**2021**	2020	YTD-21 vs. YTD-20
Net premiums written	**$ 615**	$ 619	(0.7)%	**$ 1,235**	$ 1,264	(2.3)%
Net premiums written - constant dollars			(4.0)%			(4.3)%
Net premiums earned	**605**	608	(0.4)%	**1,200**	1,239	(3.1)%
Losses and loss expenses	**185**	171	8.5 %	**383**	373	3.0 %
Policy benefits	**170**	183	(7.2)%	**333**	368	(9.8)%
Policy acquisition costs	**191**	196	(3.0)%	**370**	376	(1.8)%
Administrative expenses	**83**	82	2.3 %	**165**	158	4.9 %
Net investment income	**101**	95	6.5 %	**199**	190	4.9 %
Life Insurance underwriting income	**77**	71	8.6 %	**148**	154	(3.8)%
Other (income) expense	**(26)**	(17)	45.8 %	**(60)**	(29)	102.9 %
Amortization of purchased intangibles	**1**	1	—	**2**	2	—
Segment income	**$ 102**	$ 87	16.1 %	**$ 206**	$ 181	13.6 %

Premiums

Net premiums written decreased $4 million and $29 million, or $25 million and $56 million on a constant-dollar basis for the three and six months ended June 30, 2021, respectively. For our International Life operations, net premiums written increased 11.6 percent and 10.7 percent for the three and six months ended June 30, 2021, respectively, principally in Asia, from new business in Taiwan, Vietnam and Thailand. This growth was more than offset by a decline in our North America Combined Insurance business of 5.9 percent and 7.7 percent for the three and six months ended June 30, 2021, respectively, due to the adverse impact of the COVID-19 pandemic on face-to-face and worksite sales. There was also a decline in our life reinsurance business which continues to decline as no new business is currently being written.

Deposits

The following table presents deposits collected on universal life and investment contracts:

(in millions of U.S. dollars, except for percentages)	Three Months Ended June 30			% Change		Six Months Ended June 30			% Change	
	2021	2020	C$ 2020	Q-21 vs. Q-20	C$ Q-21 vs. Q-20	**2021**	2020	C$ 2020	Y-21 vs. Y-20	C$ Y-21 vs. Y-20
Deposits collected on Universal life and investment contracts	**$ 605**	$ 309	$ 323	95.8 %	86.9 %	**$1,156**	$ 752	$ 794	53.7 %	45.7 %

Deposits collected on universal life and investment contracts (life deposits) are not reflected as revenues in our Consolidated statements of operations in accordance with GAAP. New life deposits are an important component of production, and although they do not significantly affect current period income from operations, they are key to our efforts to grow our business. Life deposits collected increased $296 million and $404 million for the three and six months ended June 30, 2021, respectively, primarily due to successful sales in broker and bank channels in Taiwan.

Life Insurance underwriting income and Segment income

Life Insurance underwriting income increased $6 million for the three months ended June 30, 2021, primarily due to higher net investment income. Life Insurance underwriting income decreased $6 million for the six months ended June 30, 2021, primarily due to a one-time employee related benefit of $7 million in the prior year. Segment income increased $15 million and $25 million for the three and six months ended June 30, 2021, respectively, primarily due to our share of net income from our investment in Huatai, our partially-owned insurance entity in China.

Corporate

Corporate results primarily include the results of our non-insurance companies, income and expenses not attributable to reportable segments and loss and loss expenses of asbestos and environmental (A&E) liabilities and certain other non-A&E run-off exposures.

(in millions of U.S. dollars, except for percentages)	Three Months Ended June 30		% Change	Six Months Ended June 30		% Change
	2021	2020	Q-21 vs. Q-20	**2021**	2020	YTD-21 vs. YTD-20
Losses and loss expenses	**$ 89**	$ 276	(67.6)%	**$ 98**	$ 287	(65.9)%
Administrative expenses	**88**	77	15.8 %	**159**	143	10.9 %
Underwriting loss	**177**	353	(49.6)%	**257**	430	(40.3)%
Net investment income (loss)	**(15)**	(22)	(33.6)%	**(32)**	(46)	(29.7)%
Interest expense	**122**	128	(4.9)%	**244**	260	(6.3)%
Net realized gains (losses)	**(36)**	31	NM	**852**	(925)	NM
Other (income) expense	**(708)**	109	NM	**(1,123)**	132	NM
Amortization of purchased intangibles	**50**	51	(2.4)%	**99**	101	(2.7)%
Income tax expense (benefit)	**317**	(62)	NM	**655**	153	NM
Net income (loss)	**$ (9)**	$ (570)	NM	**$ 688**	$ (2,047)	NM

NM - not meaningful

Losses and loss expenses primarily includes unfavorable prior period development for molestation claims.

Administrative expenses increased $11 million and $16 million for the three and six months ended June 30, 2021, respectively, primarily due to higher employee-related expenses. The increase for six months also includes increased spending to support digital growth initiatives.

Refer to the respective sections that follow for a discussion of Net realized gains (losses), Net investment income (loss), Amortization of purchased intangibles, and Income tax expense (benefit).

Net Realized and Unrealized Gains (Losses)

We take a long-term view with our investment strategy, and our investment managers manage our investment portfolio to maximize total return within certain specific guidelines designed to minimize risk. The majority of our investment portfolio is available for sale and reported at fair value. Our held to maturity investment portfolio is reported at amortized cost, net of valuation allowance.

The effect of market movements on our fixed maturities portfolio impacts Net income (through Net realized gains (losses)) when securities are sold, when we write down an asset, or when we record a change to the valuation allowance for expected credit losses. For a further discussion related to how we assess the valuation allowance for expected credit losses and the related impact on Net income, refer to Note 1 e) to the Consolidated Financial Statements in our 2020 Form 10-K. Additionally, Net income is impacted through the reporting of changes in the fair value of equity securities, private equity funds where we own less than three percent, and derivatives, including financial futures, options, swaps, and GLB reinsurance. Changes in unrealized appreciation and depreciation on available for sale securities, resulting from the revaluation of securities held, changes in cumulative foreign currency translation adjustment, and unrealized postretirement benefit obligations liability adjustment, are reported as separate components of Accumulated other comprehensive income in Shareholders' equity in the Consolidated balance sheets.

The following tables presents our net realized and unrealized gains (losses):

	Three Months Ended June 30					
	2021			2020		
(in millions of U.S. dollars)	**Net Realized Gains (Losses)**	**Net Unrealized Gains (Losses)**	**Net Impact**	Net Realized Gains (Losses)	Net Unrealized Gains (Losses)	Net Impact
Fixed maturities	**$ 12**	**$ 694**	**$ 706**	$ (33)	$ 3,281	$ 3,248
Fixed income and equity derivatives	**(91)**	**—**	**(91)**	14	—	14
Public equity						
Sales	**45**	**—**	**45**	187	—	187
Mark-to-market	**105**	**—**	**105**	(39)	—	(39)
Private equity (less than 3 percent ownership)						
Mark-to-market	**62**	**—**	**62**	(107)	—	(107)
Total investment portfolio	**133**	**694**	**827**	22	3,281	3,303
Variable annuity reinsurance derivative transactions, net of applicable hedges	**(72)**	**—**	**(72)**	110	—	110
Other derivatives	**3**	**—**	**3**	(1)	—	(1)
Foreign exchange	**(97)**	**308**	**211**	(61)	445	384
Other	**—**	**(9)**	**(9)**	(40)	(22)	(62)
Net gains (losses), pre-tax	**$ (33)**	**$ 993**	**$ 960**	$ 30	$ 3,704	$ 3,734

	Six Months Ended June 30					
	2021			2020		
(in millions of U.S. dollars)	**Net Realized Gains (Losses)**	**Net Unrealized Gains (Losses)**	**Net Impact**	Net Realized Gains (Losses)	Net Unrealized Gains (Losses)	Net Impact
Fixed maturities	**$ 36**	**$ (1,623)**	**$ (1,587)**	$ (352)	$ 1,121	$ 769
Fixed income and equity derivatives	**18**	**—**	**18**	29	—	29
Public equity						
Sales	**90**	**—**	**90**	163	—	163
Mark-to-market	**427**	**—**	**427**	(44)	—	(44)
Private equity (less than 3 percent ownership)						
Mark-to-market	**100**	**—**	**100**	(102)	—	(102)
Total investment portfolio	**671**	**(1,623)**	**(952)**	(306)	1,121	815
Variable annuity reinsurance derivative transactions, net of applicable hedges	**203**	**—**	**203**	(450)	—	(450)
Other derivatives	**2**	**—**	**2**	(3)	—	(3)
Foreign exchange	**(21)**	**330**	**309**	(129)	(414)	(543)
Other	**(1)**	**(37)**	**(38)**	(40)	(36)	(76)
Net gains (losses), pre-tax	**$ 854**	**$ (1,330)**	**$ (476)**	$ (928)	$ 671	$ (257)

Pre-tax net gains of $827 million in our investment portfolio for the three months ended June 30, 2021 were principally the result of a decline in interest rates and positive equity returns. Pre-tax net losses of $952 million in our investment portfolio for the six months ended June 30, 2021 were principally the result of an increase in interest rates, partially offset by positive equity returns.

The variable annuity reinsurance derivative transactions consist of changes in the fair value of GLB liabilities and gains or losses on other derivative instruments we maintain that decrease in fair value when the S&P 500 index increases. The variable annuity reinsurance derivative transactions resulted in realized losses of $72 million for the three months ended June 30, 2021, reflecting principally a net realized loss of $64 million related to these other derivatives. The fair value of the GLB liabilities remained relatively flat for the three months ended June 30, 2021, as the impact of higher global equity markets was offset by lower interest rates. For the six months ended June 30, 2021, the variable annuity reinsurance derivative transactions resulted in realized gains of $203 million reflecting a net gain of $311 million principally related to a decrease in the fair value of the GLB liabilities due to higher interest rates and higher global equity markets, partially offset by a net realized loss of $108 million related to these other derivatives.

For the three months ended June 30, 2020, the variable annuity reinsurance derivative transactions resulted in realized gains of $110 million, reflecting a net decrease in the fair value of the GLB liabilities of $213 million due to higher global equity markets, partially offset by a net realized loss of $103 million related to these other derivatives. For the six months ended June 30, 2020, the variable annuity reinsurance derivative transactions resulted in realized losses of $450 million reflecting a net increase in the fair value of the GLB liabilities of $472 million due to lower interest rates and lower global equity markets, partially offset by a net realized gain of $22 million related to these other derivatives.

Effective Income Tax Rate

Our effective tax rate (ETR) reflects a mix of income or losses in jurisdictions with a wide range of tax rates, permanent differences between U.S. GAAP and local tax laws, and the impact of discrete items. A change in the geographic mix of earnings could impact our effective tax rate.

For the three and six months ended June 30, 2021 our ETR was 12.3 percent and 12.5 percent, respectively. The ETRs were impacted by a higher percentage of income generated in lower tax jurisdictions and discrete tax benefits compared to 15.8 percent and 206.8 percent for the three and six months ended June 30, 2020, respectively. In addition, the ETR for the prior period was impacted by the high level of catastrophe losses, principally COVID-19.

Non-GAAP Reconciliation

In presenting our results, we included and discussed certain non-GAAP measures. These non-GAAP measures, which may be defined differently by other companies, are important for an understanding of our overall results of operations and financial condition. However, they should not be viewed as a substitute for measures determined in accordance with generally accepted accounting principles (GAAP).

Book value per common share, is shareholders' equity divided by the shares outstanding. Tangible book value per common share, is shareholders' equity less goodwill and other intangible assets, net of tax, divided by the shares outstanding. We believe that goodwill and other intangible assets are not indicative of our underlying insurance results or trends and make book value comparisons to less acquisitive peer companies less meaningful. The calculation of tangible book value per share does not consider the embedded goodwill attributable to our investments in partially-owned insurance companies until we attain majority ownership and consolidate.

We provide financial measures, including net premiums written, net premiums earned, and underwriting income on a constant-dollar basis. We believe it is useful to evaluate the trends in our results exclusive of the effect of fluctuations in exchange rates between the U.S. dollar and the currencies in which our international business is transacted, as these exchange rates could fluctuate significantly between periods and distort the analysis of trends. The impact is determined by assuming constant foreign exchange rates between periods by translating prior period results using the same local currency exchange rates as the comparable current period.

P&C performance metrics comprise consolidated operating results (including Corporate) and exclude the operating results of the Life Insurance segment. We believe that these measures are useful and meaningful to investors as they are used by management to assess the company's P&C operations which are the most economically similar. We exclude the Life Insurance segment because the results of this business do not always correlate with the results of our P&C operations.

P&C combined ratio is the sum of the loss and loss expense ratio, policy acquisition cost ratio and the administrative expense ratio excluding the life business and including the realized gains and losses on the crop derivatives. These derivatives were purchased to provide economic benefit, in a manner similar to reinsurance protection, in the event that a significant decline in commodity pricing impacts underwriting results. We view gains and losses on these derivatives as part of the results of our underwriting operations.

CAY P&C combined ratio excluding catastrophe losses (CATs) excludes CATs and prior period development (PPD) from the P&C combined ratio. We exclude CATs as they are not predictable as to timing and amount and PPD as these unexpected loss developments on historical reserves are not indicative of our current underwriting performance. The combined ratio numerator is adjusted to exclude CATs, net premiums earned adjustments on PPD, prior period expense adjustments and reinstatement premiums on PPD, and the denominator is adjusted to exclude net premiums earned adjustments on PPD and reinstatement premiums on CATs and PPD. In periods where there are adjustments on loss sensitive policies, these adjustments are excluded from PPD and net premiums earned when calculating the ratios. We believe this measure provides a better evaluation of our underwriting performance and enhances the understanding of the trends in our P&C business that may be obscured by these items. This measure is commonly reported among our peer companies and allows for a better comparison.

Reinstatement premiums are additional premiums paid on certain reinsurance agreements in order to reinstate coverage that had been exhausted by loss occurrences. The reinstatement premium amount is typically a pro rata portion of the original ceded premium paid based on how much of the reinsurance limit had been exhausted.

Net premiums earned adjustments within PPD are adjustments to the initial premium earned on retrospectively rated policies based on actual claim experience that develops after the policy period ends. The premium adjustments correlate to the prior period loss development on these same policies and are fully earned in the period the adjustments are recorded.

Prior period expense adjustments typically relate to adjustable commission reserves or policyholder dividend reserves based on actual claim experience that develops after the policy period ends. The expense adjustments correlate to the prior period loss development on these same policies.

The following tables present the calculation of combined ratio, as reported for each segment to P&C combined ratio, adjusted for catastrophe losses (CATs) and PPD:

Three Months Ended June 30, 2021 (in millions of U.S. dollars except for ratios)		North America Commercial P&C Insurance	North America Personal P&C Insurance	North America Agricultural Insurance	Overseas General Insurance	Global Reinsurance	Corporate	Total P&C
Numerator								
Losses and loss expenses	**A**	**$ 2,426**	**$ 676**	**$ 331**	**$ 1,186**	**$ 110**	**$ 89**	**$ 4,818**
Catastrophe losses and related adjustments								
Catastrophe losses, net of related adjustments		**(165)**	**(61)**	**(4)**	**(40)**	**(10)**	**—**	**(280)**
Reinstatement premiums collected (expensed) on catastrophe losses		**—**	**7**	**—**	**—**	**1**	**—**	**8**
Catastrophe losses, gross of related adjustments		**(165)**	**(68)**	**(4)**	**(40)**	**(11)**	**—**	**(288)**
PPD and related adjustments								
PPD, net of related adjustments - favorable (unfavorable)		**156**	**44**	**—**	**156**	**—**	**(88)**	**268**
Net premiums earned adjustments on PPD - unfavorable (favorable)		**11**	**—**	**—**	**—**	**—**	**—**	**11**
PPD reinstatement premiums - unfavorable (favorable)		**6**	**1**	**—**	**7**	**(2)**	**—**	**12**
PPD, gross of related adjustments - favorable (unfavorable)		**173**	**45**	**—**	**163**	**(2)**	**(88)**	**291**
CAY loss and loss expense ex CATs	**B**	**$ 2,434**	**$ 653**	**$ 327**	**$ 1,309**	**$ 97**	**$ 1**	**$ 4,821**
Policy acquisition costs and administrative expenses								
Policy acquisition costs and administrative expenses	**C**	**$ 734**	**$ 312**	**$ 30**	**$ 978**	**$ 57**	**$ 88**	**$ 2,199**
Expense adjustments - favorable (unfavorable)		**—**	**—**	**—**	**—**	**—**	**—**	**—**
Policy acquisition costs and administrative expenses, adjusted	**D**	**$ 734**	**$ 312**	**$ 30**	**$ 978**	**$ 57**	**$ 88**	**$ 2,199**
Denominator								
Net premiums earned	**E**	**$ 3,803**	**$ 1,224**	**$ 410**	**$ 2,579**	**$ 192**		**$ 8,208**
Reinstatement premiums (collected) expensed on catastrophe losses		**—**	**(7)**	**—**	**—**	**(1)**		**(8)**
Net premiums earned adjustments on PPD - unfavorable (favorable)		**11**	**—**	**—**	**—**	**—**		**11**
PPD reinstatement premiums - unfavorable (favorable)		**6**	**1**	**—**	**7**	**(2)**		**12**
Net premiums earned excluding adjustments	**F**	**$ 3,820**	**$ 1,218**	**$ 410**	**$ 2,586**	**$ 189**		**$ 8,223**
P&C Combined ratio								
Loss and loss expense ratio	**A/E**	**63.8 %**	**55.2 %**	**80.7 %**	**46.0 %**	**56.8 %**		**58.7 %**
Policy acquisition cost and administrative expense ratio	**C/E**	**19.3 %**	**25.5 %**	**7.4 %**	**37.9 %**	**29.8 %**		**26.8 %**
P&C Combined ratio		**83.1 %**	**80.7 %**	**88.1 %**	**83.9 %**	**86.6 %**		**85.5 %**
CAY P&C Combined ratio ex CATs								
Loss and loss expense ratio, adjusted	**B/F**	**63.7 %**	**53.6 %**	**79.7 %**	**50.6 %**	**50.9 %**		**58.6 %**
Policy acquisition cost and administrative expense ratio, adjusted	**D/F**	**19.2 %**	**25.6 %**	**7.4 %**	**37.8 %**	**30.3 %**		**26.8 %**
CAY P&C Combined ratio ex CATs		**82.9 %**	**79.2 %**	**87.1 %**	**88.4 %**	**81.2 %**		**85.4 %**
Combined ratio								
Combined ratio								**85.5 %**
Add: impact of gains and losses on crop derivatives								**—**
P&C Combined ratio								**85.5 %**

Note: The ratios above are calculated using whole U.S. dollars. Accordingly, calculations using rounded amounts may differ. Letters A, B, C, D, E, and F included in the table are references for calculating the ratios above.

Three Months Ended June 30, 2020 (in millions of U.S. dollars except for ratios)		North America Commercial P&C Insurance	North America Personal P&C Insurance	North America Agricultural Insurance	Overseas General Insurance	Global Reinsurance	Corporate	Total P&C
Numerator								
Losses and loss expenses	**A**	$ 3,498	$ 762	$ 313	$ 1,485	$ 73	$ 276	$ 6,407
Catastrophe losses and related adjustments								
Catastrophe losses, net of related adjustments		(1,273)	(110)	(6)	(399)	(13)	—	(1,801)
Reinstatement premiums collected (expensed) on catastrophe losses		(3)	(1)	—	(16)	—	—	(20)
Catastrophe losses, gross of related adjustments		(1,270)	(109)	(6)	(383)	(13)	—	(1,781)
PPD and related adjustments								
PPD, net of related adjustments - favorable (unfavorable)		146	1	—	36	16	(274)	(75)
Net premiums earned adjustments on PPD - unfavorable (favorable)		4	—	—	—	—	—	4
Expense adjustments - unfavorable (favorable)		1	—	—	—	—	—	1
PPD reinstatement premiums - unfavorable (favorable)		—	—	—	—	(1)	—	(1)
PPD, gross of related adjustments - favorable (unfavorable)		151	1	—	36	15	(274)	(71)
CAY loss and loss expense ex CATs	**B**	$ 2,379	$ 654	$ 307	$ 1,138	$ 75	$ 2	$ 4,555
Policy acquisition costs and administrative expenses								
Policy acquisition costs and administrative expenses	**C**	$ 720	$ 297	$ 32	$ 865	$ 51	$ 77	$ 2,042
Expense adjustments - favorable (unfavorable)		(1)	—	—	—	—	—	(1)
Policy acquisition costs and administrative expenses, adjusted	**D**	$ 719	$ 297	$ 32	$ 865	$ 51	$ 77	$ 2,041
Denominator								
Net premiums earned	**E**	$ 3,595	$ 1,192	$ 376	$ 2,194	$ 163		$ 7,520
Reinstatement premiums (collected) expensed on catastrophe losses		3	1	—	16	—		20
Net premiums earned adjustments on PPD - unfavorable (favorable)		4	—	—	—	—		4
PPD reinstatement premiums - unfavorable (favorable)		—	—	—	—	(1)		(1)
Net premiums earned excluding adjustments	**F**	$ 3,602	$ 1,193	$ 376	$ 2,210	$ 162		$ 7,543
P&C Combined ratio								
Loss and loss expense ratio	**A/E**	97.3 %	63.8 %	83.1 %	67.7 %	45.5 %		85.2 %
Policy acquisition cost and administrative expense ratio	**C/E**	20.0 %	25.0 %	8.7 %	39.4 %	31.1 %		27.1 %
P&C Combined ratio		117.3 %	88.8 %	91.8 %	107.1 %	76.6 %		112.3 %
CAY P&C Combined ratio ex CATs								
Loss and loss expense ratio, adjusted	**B/F**	66.1 %	54.7 %	81.5 %	51.6 %	46.8 %		60.4 %
Policy acquisition cost and administrative expense ratio, adjusted	**D/F**	19.9 %	24.9 %	8.7 %	39.1 %	31.4 %		27.0 %
CAY P&C Combined ratio ex CATs		86.0 %	79.6 %	90.2 %	90.7 %	78.2 %		87.4 %
Combined ratio								
Combined ratio								112.3 %
Add: impact of gains and losses on crop derivatives								—
P&C Combined ratio								112.3 %

Note: The ratios above are calculated using whole U.S. dollars. Accordingly, calculations using rounded amounts may differ. Letters A, B, C, D, E, and F included in the table are references for calculating the ratios above.

Six Months Ended June 30, 2021 (in millions of U.S. dollars except for ratios)		North America Commercial P&C Insurance	North America Personal P&C Insurance	North America Agricultural Insurance	Overseas General Insurance	Global Reinsurance	Corporate	Total P&C
Numerator								
Losses and loss expenses	**A**	$ 4,986	$ 1,495	$ 416	$ 2,449	$ 230	$ 98	$ 9,674
Catastrophe losses and related adjustments								
Catastrophe losses, net of related adjustments		(527)	(301)	(12)	(90)	(50)	—	(980)
Reinstatement premiums collected (expensed) on catastrophe losses		—	(16)	—	—	6	—	(10)
Catastrophe losses, gross of related adjustments		(527)	(285)	(12)	(90)	(56)	—	(970)
PPD and related adjustments								
PPD, net of related adjustments - favorable (unfavorable)		283	84	2	181	7	(97)	460
Net premiums earned adjustments on PPD - unfavorable (favorable)		11	—	(2)	—	—	—	9
Expense adjustments - unfavorable (favorable)		3	—	—	—	—	—	3
PPD reinstatement premiums - unfavorable (favorable)		6	1	—	7	1	—	15
PPD, gross of related adjustments - favorable (unfavorable)		303	85	—	188	8	(97)	487
CAY loss and loss expense ex CATs	**B**	$ 4,762	$ 1,295	$ 404	$ 2,547	$ 182	$ 1	$ 9,191
Policy acquisition costs and administrative expenses								
Policy acquisition costs and administrative expenses	**C**	$ 1,502	$ 619	$ 45	$ 1,912	$ 110	$ 159	$ 4,347
Expense adjustments - favorable (unfavorable)		(3)	—	—	—	—	—	(3)
Policy acquisition costs and administrative expenses, adjusted	**D**	$ 1,499	$ 619	$ 45	$ 1,912	$ 110	$ 159	$ 4,344
Denominator								
Net premiums earned	**E**	$ 7,477	$ 2,408	$ 520	$ 5,057	$ 372		$ 15,834
Reinstatement premiums (collected) expensed on catastrophe losses		—	16	—	—	(6)		10
Net premiums earned adjustments on PPD - unfavorable (favorable)		11	—	(2)	—	—		9
PPD reinstatement premiums - unfavorable (favorable)		6	1	—	7	1		15
Net premiums earned excluding adjustments	**F**	$ 7,494	$ 2,425	$ 518	$ 5,064	$ 367		$ 15,868
P&C Combined ratio								
Loss and loss expense ratio	**A/E**	66.7 %	62.1 %	80.0 %	48.4 %	61.7 %		61.1 %
Policy acquisition cost and administrative expense ratio	**C/E**	20.1 %	25.7 %	8.7 %	37.8 %	29.6 %		27.5 %
P&C Combined ratio		86.8 %	87.8 %	88.7 %	86.2 %	91.3 %		88.6 %
CAY P&C Combined ratio ex CATs								
Loss and loss expense ratio, adjusted	**B/F**	63.6 %	53.4 %	77.9 %	50.3 %	49.6 %		57.9 %
Policy acquisition cost and administrative expense ratio, adjusted	**D/F**	20.0 %	25.5 %	8.7 %	37.8 %	30.0 %		27.4 %
CAY P&C Combined ratio ex CATs		83.6 %	78.9 %	86.6 %	88.1 %	79.6 %		85.3 %
Combined ratio								
Combined ratio								88.6 %
Add: impact of gains and losses on crop derivatives								—
P&C Combined ratio								88.6 %

Note: The ratios above are calculated using whole U.S. dollars. Accordingly, calculations using rounded amounts may differ. Letters A, B, C, D, E, and F included in the table are references for calculating the ratios above.

Six Months Ended June 30, 2020 (in millions of U.S. dollars except for ratios)		North America Commercial P&C Insurance	North America Personal P&C Insurance	North America Agricultural Insurance	Overseas General Insurance	Global Reinsurance	Corporate	Total P&C
Numerator								
Losses and loss expenses	**A**	$ 5,679	$ 1,445	$ 378	$ 2,743	$ 160	$ 287	$ 10,692
Catastrophe losses and related adjustments								
Catastrophe losses, net of related adjustments		(1,391)	(131)	(14)	(489)	(13)	—	(2,038)
Reinstatement premiums collected (expensed) on catastrophe losses		(3)	(1)	—	(16)	—	—	(20)
Catastrophe losses, gross of related adjustments		(1,388)	(130)	(14)	(473)	(13)	—	(2,018)
PPD and related adjustments								
PPD, net of related adjustments - favorable (unfavorable)		251	—	14	40	23	(285)	43
Net premiums earned adjustments on PPD - unfavorable (favorable)		4	—	3	—	—	—	7
PPD reinstatement premiums - unfavorable (favorable)		—	—	—	—	(1)	—	(1)
PPD, gross of related adjustments - favorable (unfavorable)		255	—	17	40	22	(285)	49
CAY loss and loss expense ex CATs	**B**	$ 4,546	$ 1,315	$ 381	$ 2,310	$ 169	$ 2	$ 8,723
Policy acquisition costs and administrative expenses								
Policy acquisition costs and administrative expenses	**C**	$ 1,471	$ 610	$ 47	$ 1,765	$ 106	$ 143	$ 4,142
Expense adjustments - favorable (unfavorable)		—	—	—	—	—	—	—
Policy acquisition costs and administrative expenses, adjusted	**D**	$ 1,471	$ 610	$ 47	$ 1,765	$ 106	$ 143	$ 4,142
Denominator								
Net premiums earned	**E**	$ 6,971	$ 2,392	$ 470	$ 4,501	$ 349		$ 14,683
Reinstatement premiums (collected) expensed on catastrophe losses		3	1	—	16	—		20
Net premiums earned adjustments on PPD - unfavorable (favorable)		4	—	3	—	—		7
PPD reinstatement premiums - unfavorable (favorable)		—	—	—	—	(1)		(1)
Net premiums earned excluding adjustments	**F**	$ 6,978	$ 2,393	$ 473	$ 4,517	$ 348		$ 14,709
P&C Combined ratio								
Loss and loss expense ratio	**A/E**	81.5 %	60.4 %	80.4 %	61.0 %	46.0 %		72.8 %
Policy acquisition cost and administrative expense ratio	**C/E**	21.1 %	25.5 %	10.0 %	39.2 %	30.3 %		28.2 %
P&C Combined ratio		102.6 %	85.9 %	90.4 %	100.2 %	76.3 %		101.0 %
CAY P&C Combined ratio ex CATs								
Loss and loss expense ratio, adjusted	**B/F**	65.2 %	54.9 %	80.4 %	51.2 %	48.7 %		59.3 %
Policy acquisition cost and administrative expense ratio, adjusted	**D/F**	21.0 %	25.5 %	10.0 %	39.0 %	30.5 %		28.2 %
CAY P&C Combined ratio ex CATs		86.2 %	80.4 %	90.4 %	90.2 %	79.2 %		87.5 %
Combined ratio								
Combined ratio								101.0 %
Add: impact of gains and losses on crop derivatives								—
P&C Combined ratio								101.0 %

Note: The ratios above are calculated using whole U.S. dollars. Accordingly, calculations using rounded amounts may differ. Letters A, B, C, D, E, and F included in the table are references for calculating the ratios above.

Amortization of purchased intangibles and Other amortization

Amortization expense of purchased intangibles was $73 million and $145 million for the three and six months ended June 30, 2021, respectively, and principally relates to the Chubb Corp acquisition.

The following table presents, as of June 30, 2021, the estimated pre-tax amortization expense (benefit) of purchased intangibles, at current foreign currency exchange rates, for the third and fourth quarters of 2021 and the next five years:

	Associated with the Chubb Corp Acquisition				
For the Years Ending December 31 (in millions of U.S. dollars)	Agency distribution relationships and renewal rights	Fair value adjustment on Unpaid losses and loss expenses	Total [1]	Other intangible assets [2]	Total Amortization of purchased intangibles
Third quarter of 2021	$ 54	$ (5)	$ 49	$ 23	$ 72
Fourth quarter of 2021	54	(5)	49	23	72
2022	198	(15)	183	103	286
2023	179	(7)	172	97	269
2024	161	(6)	155	91	246
2025	145	(6)	139	90	229
2026	131	(5)	126	87	213
Total	$ 922	$ (49)	$ 873	$ 514	$ 1,387

[1] Recorded in Corporate.

[2] Recorded in applicable segment(s) that acquired the intangible assets.

Reduction of deferred tax liability associated with intangible assets related to Other intangible assets (excluding the fair value adjustment on Unpaid losses and loss expense)

At June 30, 2021, the deferred tax liability associated with Other intangible assets (excluding the fair value adjustment on Unpaid losses and loss expense) was $1,270 million.

The following table presents, as of June 30, 2021, the expected reduction of the deferred tax liability associated with Other intangible assets (which reduces as agency distribution relationships and renewal rights, and other intangible assets amortize), at current foreign currency exchange rates, for the third and fourth quarters of 2021 and for the next five years:

For the Years Ending December 31 (in millions of U.S. dollars)	Reduction to deferred tax liability associated with intangible assets
Third quarter of 2021	$ 17
Fourth quarter of 2021	17
2022	67
2023	61
2024	56
2025	52
2026	49
Total	$ 319

Amortization of the fair value adjustment on acquired invested assets and assumed long-term debt

The following table presents at June 30, 2021, the expected amortization expense of the fair value adjustment on acquired invested assets, at current foreign currency exchange rates, and the expected amortization benefit from the fair value adjustment on assumed long-term debt for the third and fourth quarters of 2021 and for the next five years:

	Amortization (expense) benefit of the fair value adjustment on	
For the Years Ending December 31 (in millions of U.S. dollars)	Acquired invested assets [1]	Assumed long-term debt [2]
Third quarter of 2021	$ (25)	$ 5
Fourth quarter of 2021	(22)	6
2022	(117)	21
2023	—	21
2024	—	21
2025	—	21
2026	—	21
Total	$ (164)	$ 116

[1] Recorded as a reduction to Net investment income in the Consolidated statements of operations.

[2] Recorded as a reduction to Interest expense in the Consolidated statements of operations.

The estimate of amortization expense of the fair value adjustment on acquired invested assets could vary materially based on current market conditions, bond calls, overall duration of the acquired investment portfolio, and foreign exchange.

Net Investment Income

	Three Months Ended June 30		Six Months Ended June 30	
(in millions of U.S. dollars)	**2021**	2020	**2021**	2020
Fixed maturities [1]	**$ 836**	$ 810	**$ 1,676**	$ 1,661
Short-term investments	**8**	11	**17**	28
Other interest income	**3**	3	**5**	12
Equity securities	**41**	24	**77**	33
Other investments	**43**	21	**66**	41
Gross investment income [1]	**931**	869	**1,841**	1,775
Investment expenses	**(47)**	(42)	**(94)**	(87)
Net investment income [1]	**$ 884**	$ 827	**$ 1,747**	$ 1,688
[1] Includes amortization expense related to fair value adjustment of acquired invested assets related to the Chubb Corp acquisition	**$ (22)**	$ (30)	**$ (48)**	$ (62)

Net investment income is influenced by a number of factors including the amounts and timing of inward and outward cash flows, the level of interest rates, and changes in overall asset allocation. Net investment income increased 7.0 percent and 3.5 percent for the three and six months ended June 30, 2021, respectively, primarily due to higher income received from our private equity partnerships and increased dividends on public equities. Investment income for the year was tempered by lower reinvestment rates on new and reinvested assets.

For private equities where we own less than three percent, investment income is included within Net investment income in the table above. For private equities where we own more than three percent, investment income is included within Other income (expense) in the Consolidated statements of operations. Excluded from Net investment income is the mark-to-market movement for private equities, which is recorded within either Other income (expense) or Net realized gains (losses) based on our percentage of ownership. The total mark-to-market movement for private equities excluded from Net investment income was as follows:

	Three Months Ended June 30		Six Months Ended June 30	
(in millions of U.S. dollars)	**2021**	2020	**2021**	2020
Total mark-to-market gain (loss) on private equity, pre-tax	**$ 736**	$ (200)	**$ 1,174**	$ (207)

Investments

Our investment portfolio is invested primarily in publicly traded, investment grade, fixed income securities with an average credit quality of A/Aa as rated by the independent investment rating services Standard and Poor's (S&P)/Moody's Investors Service (Moody's). The portfolio is externally managed by independent, professional investment managers and is broadly diversified across geographies, sectors, and issuers. Other investments principally comprise direct investments, investment funds, and limited partnerships. We hold no collateralized debt obligations in our investment portfolio, and we provide no credit default protection. We have long-standing global credit limits for our entire portfolio across the organization. Exposures are aggregated, monitored, and actively managed by our Global Credit Committee, comprising senior executives, including our Chief Financial Officer, our Chief Risk Officer, our Chief Investment Officer, and our Treasurer. We also have well-established, strict contractual investment rules requiring managers to maintain highly diversified exposures to individual issuers and closely monitor investment manager compliance with portfolio guidelines.

The average duration of our fixed income securities, including the effect of options and swaps, was 4.2 years and 4.0 years at June 30, 2021 and December 31, 2020, respectively. We estimate that a 100 basis point (bps) increase in interest rates would reduce the valuation of our fixed income portfolio by approximately $4.5 billion at June 30, 2021.

The following table shows the fair value and cost/amortized cost, net of valuation allowance, of our invested assets:

	June 30, 2021		December 31, 2020	
(in millions of U.S. dollars)	**Fair Value**	**Cost/ Amortized Cost, Net**	Fair Value	Cost/ Amortized Cost, Net
Fixed maturities available for sale	**$ 92,163**	**$ 88,254**	$ 90,699	$ 85,168
Fixed maturities held to maturity	**11,343**	**10,673**	12,510	11,653
Short-term investments	**4,470**	**4,471**	4,345	4,349
Fixed income securities	**107,976**	**103,398**	107,554	101,170
Equity securities	**4,607**	**4,607**	4,027	4,027
Other investments	**9,457**	**9,457**	7,945	7,945
Total investments	**$ 122,040**	**$ 117,462**	$ 119,526	$ 113,142

The fair value of our total investments increased $2.5 billion during the six months ended June 30, 2021 due to strong operating cash flow, positive equity market returns, and favorable foreign currency movement. This increase was partially offset by unrealized losses on fixed maturities, payment of dividends on our Common Shares, and share repurchases.

The following tables present the fair value of our fixed maturities and short-term investments at June 30, 2021 and December 31, 2020. The first table lists investments according to type and second according to S&P credit rating:

	June 30, 2021		December 31, 2020	
(in millions of U.S. dollars, except for percentages)	Fair Value	% of Total	Fair Value	% of Total
U.S. Treasury / Agency	$ 3,560	3 %	$ 4,122	4 %
Corporate and asset-backed securities	39,889	37 %	38,769	36 %
Mortgage-backed securities	21,445	20 %	20,616	19 %
Municipal	10,834	10 %	11,943	11 %
Non-U.S.	27,778	26 %	27,759	26 %
Short-term investments	4,470	4 %	4,345	4 %
Total	$ 107,976	100 %	$ 107,554	100 %
AAA	$ 16,274	15 %	$ 15,622	15 %
AA	35,412	33 %	36,125	33 %
A	19,720	18 %	19,712	18 %
BBB	17,479	16 %	17,542	16 %
BB	9,495	9 %	9,699	9 %
B	9,004	8 %	8,267	8 %
Other	592	1 %	587	1 %
Total	$ 107,976	100 %	$ 107,554	100 %

Corporate and asset-backed securities

The following table presents our 10 largest global exposures to corporate bonds by fair value at June 30, 2021:

(in millions of U.S. dollars)	Fair Value
Wells Fargo & Co	$ 726
Bank of America Corp	657
JP Morgan Chase & Co	615
Comcast Corp	507
Verizon Communications Inc	489
Morgan Stanley	474
AT&T Inc	430
Citigroup Inc	419
HSBC Holdings Plc	393
Goldman Sachs Group Inc	379

Mortgage-backed securities

The following table shows the fair value and amortized cost, net of valuation allowance, of our mortgage-backed securities:

	S&P Credit Rating					Fair Value	Amortized Cost, Net
June 30, 2021 (in millions of U.S. dollars)	AAA	AA	A	BBB	BB and below	Total	Total
Agency residential mortgage-backed securities (RMBS)	$ 99	$ 17,605	$ —	$ —	$ —	$ 17,704	$ 17,033
Non-agency RMBS	236	38	72	26	8	380	379
Commercial mortgage-backed securities	2,915	269	155	16	6	3,361	3,220
Total mortgage-backed securities	$ 3,250	$ 17,912	$ 227	$ 42	$ 14	$ 21,445	$ 20,632

Municipal

As part of our overall investment strategy, we may invest in states, municipalities, and other political subdivisions fixed maturity securities (Municipal). We apply the same investment selection process described previously to our Municipal investments. The portfolio is highly diversified primarily in state general obligation bonds and essential service revenue bonds including education and utilities (water, power, and sewers).

Non-U.S.

Our exposure to the Euro results primarily from Chubb European Group SE which is headquartered in France and offers a broad range of coverages throughout the European Union, Central, and Eastern Europe. Chubb primarily invests in Euro denominated investments to support its local currency insurance obligations and required capital levels. Chubb's local currency investment portfolios have strict contractual investment guidelines requiring managers to maintain a high quality and diversified portfolio to both sector and individual issuers. Investment portfolios are monitored daily to ensure investment manager compliance with portfolio guidelines.

Our non-U.S. investment grade fixed income portfolios are currency-matched with the insurance liabilities of our non-U.S. operations. The average credit quality of our non-U.S. fixed income securities is A and 48 percent of our holdings are rated AAA or guaranteed by governments or quasi-government agencies. Within the context of these investment portfolios, our government and corporate bond holdings are highly diversified across industries and geographies. Issuer limits are based on credit rating (AA—two percent, A—one percent, BBB—0.5 percent of the total portfolio) and are monitored daily via an internal compliance system. We manage our indirect exposure using the same credit rating based investment approach. Accordingly, we do not believe our indirect exposure is material.

The following table summarizes the fair value and amortized cost, net of valuation allowance, of our non-U.S. fixed income portfolio by country/sovereign for non-U.S. government securities at June 30, 2021:

(in millions of U.S. dollars)	Fair Value	Amortized Cost, Net
Republic of Korea	$ 1,050	$ 977
Canada	1,035	1,015
United Kingdom	824	805
Province of Ontario	714	692
Kingdom of Thailand	632	577
United Mexican States	571	571
Federative Republic of Brazil	555	559
Province of Quebec	470	450
Commonwealth of Australia	437	409
Socialist Republic of Vietnam	426	294
Other Non-U.S. Government Securities	5,734	5,503
Total	$ 12,448	$ 11,852

The following table summarizes the fair value and amortized cost, net of valuation allowance, of our non-U.S. fixed income portfolio by country/sovereign for non-U.S. corporate securities at June 30, 2021:

(in millions of U.S. dollars)	Fair Value	Amortized Cost, Net
United Kingdom	$ 2,558	$ 2,446
Canada	1,840	1,767
France	1,242	1,185
United States [1]	1,161	1,111
Australia	907	862
Japan	691	671
Germany	608	582
Switzerland	592	559
Netherlands	539	510
China	481	471
Other Non-U.S. Corporate Securities	4,711	4,528
Total	$ 15,330	$ 14,692

[1] The countries that are listed in the non-U.S. corporate fixed income portfolio above represent the ultimate parent company's country of risk. Non-U.S. corporate securities could be issued by foreign subsidiaries of U.S. corporations.

Below-investment grade corporate fixed income portfolio

Below-investment grade securities have different characteristics than investment grade corporate debt securities. Risk of loss from default by the borrower is greater with below-investment grade securities. Below-investment grade securities are generally unsecured and are often subordinated to other creditors of the issuer. Also, issuers of below-investment grade securities usually have higher levels of debt and are more sensitive to adverse economic conditions, such as recession or increasing interest rates, than investment grade issuers. At June 30, 2021, our corporate fixed income investment portfolio included below-investment grade and non-rated securities which, in total, comprised approximately 15 percent of our fixed income portfolio. Our below-investment grade and non-rated portfolio includes over 1,500 issuers, with the greatest single exposure being $161 million.

We manage high-yield bonds as a distinct and separate asset class from investment grade bonds. The allocation to high-yield bonds is explicitly set by internal management and is targeted to securities in the upper tier of credit quality (BB/B). Our minimum rating for initial purchase is BB/B. Fourteen external investment managers are responsible for high-yield security selection and portfolio construction. Our high-yield managers have a conservative approach to credit selection and very low historical default experience. Holdings are highly diversified across industries and generally subject to a 1.5 percent issuer limit as a percentage of high-yield allocation. We monitor position limits daily through an internal compliance system. Derivative and structured securities (e.g., credit default swaps and collateralized loan obligations) are not permitted in the high-yield portfolio.

Critical Accounting Estimates

As of June 30, 2021, there were no material changes to our critical accounting estimates. For a full discussion of our critical accounting estimates, refer to Item 7 in our 2020 Form 10-K.

Unpaid losses and loss expenses

As an insurance and reinsurance company, we are required by applicable laws and regulations and GAAP to establish loss and loss expense reserves for the estimated unpaid portion of the ultimate liability for losses and loss expenses under the terms of our policies and agreements with our insured and reinsured customers. With the exception of certain structured settlements, for which the timing and amount of future claim payments are reliably determinable, and certain reserves for unsettled claims, our loss reserves are not discounted for the time value of money.

The following table presents a roll-forward of our unpaid losses and loss expenses:

(in millions of U.S. dollars)	Gross Losses	Reinsurance Recoverable [1]	Net Losses
Balance at December 31, 2020	$ 67,811	$ 14,647	$ 53,164
Losses and loss expenses incurred	12,365	2,306	10,059
Losses and loss expenses paid	(10,200)	(2,314)	(7,886)
Other (including foreign exchange translation)	313	82	231
Balance at June 30, 2021	**$ 70,289**	**$ 14,721**	**$ 55,568**

[1] Net of valuation allowance for uncollectible reinsurance.

The estimate of the liabilities includes provisions for claims that have been reported but are unpaid at the balance sheet date (case reserves) and for obligations on claims that have been incurred but not reported (IBNR) at the balance sheet date. IBNR may also include provisions to account for the possibility that reported claims may settle for amounts that differ from the established case reserves. Loss reserves also include an estimate of expenses associated with processing and settling unpaid claims (loss expenses).

Refer to Note 6 to the Consolidated Financial Statements for a discussion on the changes in the loss reserves.

Asbestos and Environmental (A&E)

There was no significant A&E reserve activity during the three and six months ended June 30, 2021. A&E reserves are included in Corporate. Refer to our 2020 Form 10-K for further information on our A&E exposures.

Fair value measurements

Accounting guidance defines fair value as the price to sell an asset or transfer a liability (an exit price) in an orderly transaction between market participants and establishes a three-level valuation hierarchy based on the reliability of the inputs. The fair value hierarchy gives the highest priority to quoted prices in active markets (Level 1 inputs) and the lowest priority to unobservable data (Level 3 inputs). Level 2 includes inputs, other than quoted prices within Level 1, that are observable for assets or liabilities either directly or indirectly. Refer to Note 4 to the Consolidated Financial Statements for information on our fair value measurements.

Catastrophe Management

We actively monitor and manage our catastrophe risk accumulation around the world, including setting risk limits based on probable maximum loss (PML) and purchasing catastrophe reinsurance. The table below presents our modeled pre-tax estimates of natural catastrophe PML, net of reinsurance, at June 30, 2021, for Worldwide, U.S. hurricane and California earthquake events, based on our in-force portfolio at April 1, 2021 and reflecting the April 1, 2021 reinsurance program (see Natural Catastrophe Property Reinsurance Program section) as well as inuring reinsurance protection coverages. According to the model, for the 1-in-100 return period scenario, there is a one percent chance that our pre-tax annual aggregate losses incurred in any year from U.S. hurricane events could be in excess of $2,759 million (or 4.6 percent of our total shareholders' equity at June 30, 2021). These estimates assume that reinsurance recoverable is fully collectible.

	Modeled Net Probable Maximum Loss (PML) Pre-tax					
	Worldwide [1]		U.S. Hurricane [2]		California Earthquake [3]	
	Annual Aggregate		Annual Aggregate		Single Occurrence	
(in millions of U.S. dollars, except for percentages)	**Chubb**	**% of Total Shareholders' Equity**	**Chubb**	**% of Total Shareholders' Equity**	**Chubb**	**% of Total Shareholders' Equity**
1-in-10	$ 1,885	3.1 %	$ 1,110	1.8 %	$ 138	0.2 %
1-in-100	$ 3,995	6.7 %	$ 2,759	4.6 %	$ 1,297	2.2 %
1-in-250	$ 6,587	11.0 %	$ 4,959	8.3 %	$ 1,471	2.4 %

(1) Worldwide losses are comprised of losses arising only from hurricanes, typhoons, convective storms and earthquakes and do not include "non-modeled" perils such as wildfire and flood.

(2) U.S. Hurricane losses include losses from wind and storm-surge and exclude rainfall.

(3) California earthquakes include fire-following perils.

The above estimates of Chubb's loss profile are inherently uncertain for many reasons, including the following:

- While the use of third-party catastrophe modeling packages to simulate potential hurricane and earthquake losses is prevalent within the insurance industry, the models are reliant upon significant meteorology, seismology, and engineering assumptions to estimate catastrophe losses. In particular, modeled catastrophe events are not always a representation of actual events and ensuing additional loss potential;
- There is no universal standard in the preparation of insured data for use in the models, the running of the modeling software and interpretation of loss output. These loss estimates do not represent our potential maximum exposures and it is highly likely that our actual incurred losses would vary materially from the modeled estimates;
- The potential effects of climate change add to modeling complexity; and
- Changing climate conditions could impact our exposure to natural catastrophe risks, including U.S. hurricane. Published studies by leading government, academic and professional organizations predict an increase in the expected annual frequency of Atlantic-basin hurricanes and sea level rise through the end of the century over observed historical averages. These studies contemplate expected multi-decadal impacts of climate change on sea surface temperatures, sea levels and other factors contributing to the frequency and intensity of hurricanes. Based on preliminary stress tests conducted against the Chubb portfolio at January 1, 2021, the impacts of climate change are not expected to materially impact our reported U.S. hurricane PML over the next 12 months. These tests reflect current exposures only and exclude potential mitigating factors, such as changes to building codes, public or private risk mitigation, regulation and public policy.

Natural Catastrophe Property Reinsurance Program

Chubb's core property catastrophe reinsurance program provides protection against natural catastrophes impacting its primary property operations (i.e., excluding our Global Reinsurance and Life Insurance segments).

We regularly review our reinsurance protection and corresponding property catastrophe exposures. This may or may not lead to the purchase of additional reinsurance prior to a program's renewal date. In addition, prior to each renewal date, we consider how much, if any, coverage we intend to buy and we may make material changes to the current structure in light of various factors, including modeled PML assessment at various return periods, reinsurance pricing, our risk tolerance and exposures, and various other structuring considerations.

Chubb renewed its Global Property Catastrophe Reinsurance Program for our North American and International operations effective April 1, 2021 through March 31, 2022, with an additional $100 million of limit for international loss occurrences compared to the expiring program. The program consists of three layers in excess of losses retained by Chubb on a per occurrence basis. In addition, Chubb also renewed its terrorism coverage (excluding nuclear, biological, chemical and radiation coverage, with an inclusion of coverage for biological and chemical coverage for personal lines) for the United States from April 1, 2021 through March 31, 2022 with the same limits and retention and percentage placed except that the majority of terrorism coverage is on an aggregate basis above our retentions without a reinstatement.

Loss Location	Layer of Loss	Comments	Notes
United States (excluding Alaska and Hawaii)	$0 million – $1.0 billion	Losses retained by Chubb	(a)
United States (excluding Alaska and Hawaii)	$1.0 billion – $1.15 billion	All natural perils and terrorism	(b)
United States (excluding Alaska and Hawaii)	$1.15 billion – $2.25 billion	All natural perils and terrorism	(c)
United States (excluding Alaska and Hawaii)	$2.25 billion – $3.5 billion	All natural perils and terrorism	(d)
International (including Alaska and Hawaii)	$0 million – $175 million	Losses retained by Chubb	(a)
International (including Alaska and Hawaii)	$175 million – $1.275 billion	All natural perils and terrorism	(c)
Alaska, Hawaii, and Canada	$1.275 billion – $2.525 billion	All natural perils and terrorism	(d)

(a) Ultimate retention will depend upon the nature of the loss and the interplay between the underlying per risk programs and certain other catastrophe programs purchased by individual business units. These other catastrophe programs have the potential to reduce our effective retention below the stated levels.

(b) These coverages are partially placed with Reinsurers.

(c) These coverages are both part of the same Second layer within the Global Catastrophe Program and are fully placed with Reinsurers.

(d) These coverages are both part of the same Third layer within the Global Catastrophe Program and are fully placed with Reinsurers.

Liquidity

We anticipate that positive cash flows from operations (underwriting activities and investment income) should be sufficient to cover cash outflows under most loss scenarios for the near term. In addition to cash from operations, routine sales of investments, and financing arrangements, we have agreements with a third-party bank provider which implemented two international multi-currency notional cash pooling programs to enhance cash management efficiency during periods of short-term timing mismatches between expected inflows and outflows of cash by currency. The programs allow us to optimize investment income by avoiding portfolio disruption. Should the need arise, we generally have access to capital markets and to credit facilities with letter of credit capacity of $3.7 billion with a sub-limit of $1.9 billion for revolving credit. At June 30, 2021, our usage under these facilities was $1.4 billion in letters of credit. Our access to credit under these facilities is dependent on the ability of the banks that are a party to the facilities to meet their funding commitments. The facilities require that we maintain certain financial covenants, all of which we met at June 30, 2021. Should the existing credit providers on these facilities experience financial difficulty, we may be required to replace credit sources, possibly in a difficult market. If we cannot obtain adequate capital or sources of credit on favorable terms, on a timely basis, or at all, our business, operating results, and financial condition could be adversely affected. To date, we have not experienced difficulty accessing our credit facilities.

The payment of dividends or other statutorily permissible distributions from our operating companies are subject to the laws and regulations applicable to each jurisdiction, as well as the need to maintain capital levels adequate to support the insurance and reinsurance operations, including financial strength ratings issued by independent rating agencies. During the six months ended June 30, 2021, we were able to meet all our obligations, including the payments of dividends on our Common Shares, with our net cash flows.

We assess which subsidiaries to draw dividends from based on a number of factors. Considerations such as regulatory and legal restrictions as well as the subsidiary's financial condition are paramount to the dividend decision. Chubb Limited received dividends of $1.8 billion and nil from its Bermuda subsidiaries during the six months ended June 30, 2021 and 2020, respectively. Chubb Limited received cash dividends of $21 million and $110 million and non-cash dividends of $536 million and $734 million from a Swiss subsidiary during the six months ended June 30, 2021 and 2020, respectively.

The payment of any dividends from CGM or its subsidiaries is subject to applicable U.K. insurance laws and regulations. In addition, the release of funds by Syndicate 2488 to subsidiaries of CGM is subject to regulations promulgated by the Society of Lloyd's. The U.S. insurance subsidiaries of Chubb INA Holdings Inc. (Chubb INA) may pay dividends, without prior regulatory approval, subject to restrictions set out in state law of the subsidiary's domicile (or, if applicable, commercial domicile). Chubb INA's international subsidiaries are also subject to insurance laws and regulations particular to the countries in which the subsidiaries operate. These laws and regulations sometimes include restrictions that limit the amount of dividends payable without prior approval of regulatory insurance authorities. Chubb Limited received no dividends from CGM or Chubb INA during the six months ended June 30, 2021 and 2020. Debt issued by Chubb INA is serviced by statutorily permissible distributions by Chubb INA's insurance subsidiaries to Chubb INA as well as other group resources. Chubb INA received $470 million and nil from its subsidiaries during the six months ended June 30, 2021 and 2020, respectively.

Cash Flows

Our sources of liquidity include cash from operations, routine sales of investments, and financing arrangements. The following is a discussion of our cash flows for the six months ended June 30, 2021 and 2020.

Operating cash flows were $5.2 billion in the six months ended June 30, 2021, compared to $3.7 billion in the prior year period. The increase of $1.5 billion is due to higher premiums collected reflecting premium growth, principally in our commercial lines. Partially offsetting the increase are higher catastrophe loss payments and higher taxes paid.

Cash used for investing was $2.0 billion in the six months ended June 30, 2021, compared to $2.7 billion in the prior year period. Cash used for investing principally relates to net purchases of fixed maturities. In addition, the prior year included cash used for the incremental purchase of Huatai Group ownership interest of $1.6 billion.

Cash used for financing was $3.0 billion in the six months ended June 30, 2021, compared to $898 million in the prior year period, an increase of $2.1 billion principally from more shares repurchased in the current year.

Both internal and external forces influence our financial condition, results of operations, and cash flows. Claim settlements, premium levels, and investment returns may be impacted by changing rates of inflation and other economic conditions. In many

cases, significant periods of time, ranging up to several years or more, may lapse between the occurrence of an insured loss, the reporting of the loss to us, and the settlement of the liability for that loss.

We use repurchase agreements as a low-cost funding alternative. At June 30, 2021, there were $1.4 billion in repurchase agreements outstanding with various maturities over the next nine months.

Capital Resources

Capital resources consist of funds deployed or available to be deployed to support our business operations.

(in millions of U.S. dollars, except for ratios)	June 30 2021	December 31 2020
Long-term debt	**$ 14,954**	$ 14,948
Trust preferred securities	**308**	308
Total shareholders' equity	**60,062**	59,441
Total capitalization	**$ 75,324**	$ 74,697
Ratio of financial debt to total capitalization	**19.9 %**	20.0 %
Ratio of financial debt plus trust preferred securities to total capitalization	**20.3 %**	20.4 %

Repurchase agreements are excluded from the table above and are disclosed separately from short-term debt in the Consolidated balance sheets. The repurchase agreements are collateralized borrowings where we maintain the right and ability to redeem the collateral on short notice, unlike short-term debt which comprises the current maturities of our long-term debt instruments.

For the six months ended June 30, 2021, we repurchased $2.44 billion of Common Shares in a series of open market transactions under the Board of Directors (Board) share repurchase authorization. At June 30, 2021, there were 38,888,051 Common Shares in treasury with a weighted average cost of $148.42 per share, and $65 million in share repurchase authorization remained through December 31, 2021. Subsequently, on July 19, 2021, the Board authorized a one-time incremental share repurchase program of up to $5.0 billion through June 30, 2022. At July 28, 2021, $5.06 billion in share repurchase authorizations remained.

We generally maintain the ability to issue certain classes of debt and equity securities via an unlimited Securities and Exchange Commission (SEC) shelf registration which is renewed every three years. This allows us capital market access for refinancing as well as for unforeseen or opportunistic capital needs.

Dividends

We have paid dividends each quarter since we became a public company in 1993. Under Swiss law, dividends must be stated in Swiss francs though dividend payments are made by Chubb in U.S. dollars. Refer to Note 8 to the Consolidated Financial Statements for a discussion of our dividend methodology.

At our May 2021 annual general meeting, our shareholders approved an annual dividend for the following year of up to $3.20 per share, or CHF 2.87 per share, calculated using the USD/CHF exchange rate as published in the Wall Street Journal on May 20, 2021, expected to be paid in four quarterly installments of $0.80 per share after the general meeting by way of a distribution from capital contribution reserves, transferred to free reserves for payment. The Board determines the record and payment dates at which the annual dividend may be paid until the date of the 2022 annual general meeting, and is authorized to abstain from distributing a dividend at its discretion. The annual dividend approved in May 2021 represented a $0.08 per share increase ($0.02 per quarter) over the prior year dividend.

The following table represents dividends paid per Common Share to shareholders of record on each of the following dates:

Shareholders of record as of:	Dividends paid as of:	
December 18, 2020	January 8, 2021	$0.78 (CHF 0.71)
March 19, 2021	April 9, 2021	$0.78 (CHF 0.70)
June 18, 2021	July 9, 2021	$0.80 (CHF 0.71)

Information provided in connection with outstanding debt of subsidiaries

Chubb INA Holdings Inc. (Subsidiary Issuer) is an indirect 100 percent-owned and consolidated subsidiary of Chubb Limited (Parent Guarantor). The Parent Guarantor fully and unconditionally guarantees certain of the debt of the Subsidiary Issuer.

The following table presents the condensed balance sheets of Chubb Limited and Chubb INA Holdings Inc., after elimination of investment in any non-guarantor subsidiary:

	Chubb Limited (Parent Guarantor)		Chubb INA Holdings Inc. (Subsidiary Issuer)	
(in millions of U.S. dollars)	**June 30, 2021**	December 31, 2020	**June 30, 2021**	December 31, 2020
Assets				
Investments	**$ —**	$ —	**$ 207**	$ 197
Cash	**1**	84	**1**	1
Due from parent guarantor/subsidiary issuer, net	**—**	479	**449**	—
Due from subsidiaries that are not issuers or guarantors, net	**3,067**	3,043	**—**	—
Other assets	**8**	10	**448**	463
Total assets	**$ 3,076**	$ 3,616	**$ 1,105**	$ 661
Liabilities				
Due to parent guarantor/subsidiary issuer, net	**$ 449**	$ —	**$ —**	$ 479
Due to subsidiaries that are not issuers or guarantors, net	**—**	—	**2,712**	2,529
Affiliated notional cash pooling programs	**293**	—	**819**	272
Long-term debt	**—**	—	**14,954**	14,948
Trust preferred securities	**—**	—	**308**	308
Other liabilities	**309**	323	**1,296**	1,418
Total liabilities	**1,051**	323	**20,089**	19,954
Total shareholders' equity	**2,025**	3,293	**(18,984)**	(19,293)
Total liabilities and shareholders' equity	**$ 3,076**	$ 3,616	**$ 1,105**	$ 661

The following table presents the condensed statements of operations and comprehensive income of Chubb Limited and Chubb INA Holdings Inc., excluding equity in earnings from non-guarantor subsidiaries:

Six Months Ended June 30, 2021 (in millions of U.S. dollars)	Chubb Limited (Parent Guarantor)	Chubb INA Holdings Inc. (Subsidiary Issuer)
Net investment income	**$ 2**	**$ 1**
Net realized gains (loss)	**18**	**(13)**
Administrative expenses	**47**	**(78)**
Interest (income) expense	**(67)**	**289**
Other (income) expense	**(26)**	**(13)**
Income tax expense (benefit)	**17**	**(70)**
Net income (loss)	**$ 49**	**$ (140)**
Comprehensive income (loss)	**$ 49**	**$ (141)**

ITEM 3. Quantitative and Qualitative Disclosures about Market Risk

Refer to Item 7A included in our 2020 Form 10-K.

Foreign currency management
As a global company, Chubb entities transact business in multiple currencies. Our policy is to generally match assets, liabilities and required capital for each individual jurisdiction in local currency, which would include the use of derivatives. We do not hedge our net asset non-U.S. dollar capital positions. We occasionally engage in hedging activity for planned cross border transactions. For an estimated impact of foreign currency movement on our net assets denominated in non-U.S. currencies, refer to Item 7A in our 2020 Form 10-K. This information will be updated and disclosed in interim filings if our net assets in non-U.S. currencies change materially from the December 31, 2020 balances disclosed in the 2020 Form 10-K.

Reinsurance of GMDB and GLB guarantees
Chubb views its variable annuity reinsurance business as having a similar risk profile to that of catastrophe reinsurance with the probability of long-term economic loss relatively small, at the time of pricing. Adverse changes in market factors and policyholder behavior will have an impact on both realized gains (losses) and net income for GLB and both Life Insurance underwriting income and net income for GMDB. When evaluating these risks, we expect to be compensated for taking both the risk of a cumulative long-term economic net loss, as well as the short-term accounting variations caused by these market movements. Therefore, we evaluate this business in terms of its long-term economic risk and reward.

For the GMDB reinsurance business, net income is directly impacted by changes in future policy benefit reserves. For the GLB reinsurance business, net income is directly impacted by changes in the fair value of the GLB liability (FVL), which is classified as a derivative for accounting purposes. The FVL calculation is directly affected by market factors, including equity levels, interest rate levels, credit risk, and implied volatilities, as well as policyholder behaviors, such as annuitization and lapse rates, and policyholder mortality.

The tables below are estimates of the sensitivities to instantaneous changes in economic inputs (e.g., equity shock, interest rate shock etc.) or actuarial assumptions at June 30, 2021 of the FVL and of the fair value of specific derivative instruments held (hedge value) to partially offset the risk in the variable annuity guarantee reinsurance portfolio. The following assumptions should be considered when using the below tables:

- Equity shocks impact all global equity markets equally
  - Our liabilities are sensitive to global equity markets in the following proportions: 80 percent—90 percent U.S. equity, and 10 percent—20 percent international equity.
  - Our current hedge portfolio is sensitive only to U.S. equity markets.
  - We would suggest using the S&P 500 index as a proxy for U.S. equity, and the MSCI EAFE index as a proxy for international equity.

- Interest rate shocks assume a parallel shift in the U.S. yield curve
  - Our liabilities are also sensitive to global interest rates at various points on the yield curve, mainly the U.S. Treasury curve in the following proportions: 5 percent—15 percent short-term rates (maturing in less than 5 years), 15 percent—25 percent medium-term rates (maturing between 5 years and 10 years, inclusive), and 65 percent—75 percent long-term rates (maturing beyond 10 years).
  - A change in AA-rated credit spreads impacts the rate used to discount cash flows in the fair value model. AA-rated credit spreads are a proxy for both our own credit spreads and the credit spreads of the ceding insurers.

- The hedge sensitivity is from June 30, 2021 market levels and only applicable to the equity and interest rate sensitivities table below.

- The sensitivities are not directly additive because changes in one factor will affect the sensitivity to changes in other factors. The sensitivities do not scale linearly and may be proportionally greater for larger movements in the market factors. The sensitivities may also vary due to foreign exchange rate fluctuations. The calculation of the FVL is based on internal models that include assumptions regarding future policyholder behavior, including lapse, annuitization, and asset allocation. These assumptions impact both the absolute level of the FVL as well as the sensitivities to changes in market factors shown below. Actual sensitivity of our net income may differ from those disclosed in the tables below due to fluctuations in short-term market movements.

- In addition, the tables below do not reflect the expected quarterly run rate of net income generated by the variable annuity guarantee reinsurance portfolio if markets remain unchanged during the period. All else equal, if markets remain unchanged during the period, the FVL will increase, resulting in a realized loss. This realized loss occurs primarily because the guarantees provided in the underlying contracts continue to become more valuable even when markets remain unchanged. We refer to this increase in FVL as "timing effect". The unfavorable impact of timing effect on our FVL in a quarter is not reflected in the sensitivity tables below. For this reason, when using the tables below to estimate the sensitivity of FVL in the third quarter of 2021 to various changes, it is necessary to assume an additional $5 million to $45 million increase in FVL and realized losses. Note that both the timing effect and the quarterly run rate impact to net income change over time as the book ages.

Sensitivities to equity and interest rate movements

(in millions of U.S. dollars)		Worldwide Equity Shock					
Interest Rate Shock		+10%	Flat	-10%	-20%	-30%	-40%
+100 bps	(Increase)/decrease in FVL	$ 329	$ 221	$ 91	$ (77)	$ (285)	$ (548)
	Increase/(decrease) in hedge value	(83)	—	83	166	249	332
	Increase/(decrease) in net income	$ 246	$ 221	$ 174	$ 89	$ (36)	$ (216)
Flat	(Increase)/decrease in FVL	$ 132	$ —	$ (164)	$ (360)	$ (603)	$ (904)
	Increase/(decrease) in hedge value	(83)	—	83	166	249	332
	Increase/(decrease) in net income	$ 49	$ —	$ (81)	$ (194)	$ (354)	$ (572)
-100 bps	(Increase)/decrease in FVL	$ (102)	$ (261)	$ (449)	$ (673)	$ (948)	$ (1,286)
	Increase/(decrease) in hedge value	(83)	—	83	166	249	332
	Increase/(decrease) in net income	$ (185)	$ (261)	$ (366)	$ (507)	$ (699)	$ (954)

Sensitivities to Other Economic Variables	AA-rated Credit Spreads		Interest Rate Volatility		Equity Volatility	
(in millions of U.S. dollars)	+100 bps	-100 bps	+2%	-2%	+2%	-2%
(Increase)/decrease in FVL	$ 62	$ (70)	$ (1)	$ 1	$ (15)	$ 14
Increase/(decrease) in net income	$ 62	$ (70)	$ (1)	$ 1	$ (15)	$ 14

Sensitivities to Actuarial Assumptions

	Mortality			
(in millions of U.S. dollars)	+20%	+10%	-10%	-20%
(Increase)/decrease in FVL	$ 19	$ 9	$ (9)	$ (19)
Increase/(decrease) in net income	$ 19	$ 9	$ (9)	$ (19)

	Lapses			
(in millions of U.S. dollars)	+50%	+25%	-25%	-50%
(Increase)/decrease in FVL	$ 88	$ 48	$ (55)	$ (117)
Increase/(decrease) in net income	$ 88	$ 48	$ (55)	$ (117)

	Annuitization			
(in millions of U.S. dollars)	+50%	+25%	-25%	-50%
(Increase)/decrease in FVL	$ (390)	$ (207)	$ 224	$ 470
Increase/(decrease) in net income	$ (390)	$ (207)	$ 224	$ 470

Variable Annuity Net Amount at Risk

All our VA reinsurance treaties include annual or aggregate claim limits and many include an aggregate deductible which limit the net amount at risk under these programs. The tables below present the net amount at risk at June 30, 2021 following an immediate change in equity market levels, assuming all global equity markets are impacted equally.

a) Reinsurance covering the GMDB risk only

	Equity Shock					
(in millions of U.S. dollars)	+20 %	Flat	-20%	-40%	-60%	-80%
GMDB net amount at risk	$ 299	$ 284	$ 406	$ 801	$ 899	$ 765
Claims at 100% immediate mortality	153	160	177	166	149	128

The treaty claim limits function as a ceiling as equity markets fall. As the shocks in the table above become incrementally more negative, the impact on the NAR and claims at 100 percent mortality begin to drop due to the specific nature of these claim limits, many of which are annual claim limits calculated as a percentage of the reinsured account value. There is also some impact due to a small portion of the GMDB reinsurance under which claims are positively correlated to equity markets (claims decrease as equity markets fall).

b) Reinsurance covering the GLB risk only

	Equity Shock					
(in millions of U.S. dollars)	+20 %	Flat	-20%	-40%	-60%	-80%
GLB net amount at risk	$ 743	$ 1,050	$ 1,607	$ 2,372	$ 2,949	$ 3,349

The treaty claim limits cause the net amount at risk to increase at a declining rate as equity markets fall.

c) Reinsurance covering both the GMDB and GLB risks on the same underlying policyholders

	Equity Shock					
(in millions of U.S. dollars)	+20 %	Flat	-20%	-40%	-60%	-80%
GMDB net amount at risk	$ 36	$ 44	$ 55	$ 70	$ 85	$ 96
GLB net amount at risk	282	373	504	679	868	1,011
Claims at 100% immediate mortality	37	36	35	35	35	35

The treaty limits control the increase in the GMDB net amount at risk as equity markets fall. The GMDB net amount at risk continues to increase as equity markets fall because most of these reinsurance treaties do not have annual claim limits calculated as a percentage of the underlying account value. The treaty limits cause the GLB net amount at risk to increase at a declining rate as equity markets fall.

ITEM 4. Controls and Procedures

Chubb's management, with the participation of Chubb's Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of Chubb's disclosure controls and procedures as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934 as of June 30, 2021. Based upon that evaluation, Chubb's Chief Executive Officer and Chief Financial Officer concluded that Chubb's disclosure controls and procedures are effective in allowing information required to be disclosed in reports filed under the Securities Exchange Act of 1934 to be recorded, processed, summarized, and reported within time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to Chubb's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

There have been no changes in Chubb's internal controls over financial reporting during the three months ended June 30, 2021 that have materially affected, or are reasonably likely to materially affect, Chubb's internal controls over financial reporting.

PART II OTHER INFORMATION

ITEM 1. Legal Proceedings

The information required with respect to this item is included in Note 7 g) to the Consolidated Financial Statements, which is hereby incorporated herein by reference.

ITEM 1A. Risk Factors

There have been no material changes to the risk factors described under "Risk Factors" under Item 1A of Part I of our 2020 Form 10-K.

ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds and Issuer Repurchases of Equity Securities

Issuer's Repurchases of Equity Securities

The following table provides information with respect to purchases by Chubb of its Common Shares during the three months ended June 30, 2021:

Period	Total Number of Shares Purchased [1]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan [2]	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plan [3]
April 1 through April 30	900,648	$ 170.84	900,000	$ 1.83 billion
May 1 through May 31	7,058,200	$ 169.20	6,970,400	$ 652 million
June 1 through June 30	3,487,236	$ 168.66	3,485,000	$ 65 million
Total	11,446,084	$ 169.16	11,355,400	

(1) This column represents open market share repurchases and the surrender to Chubb of Common Shares to satisfy tax withholding obligations in connection with the vesting of restricted stock issued to employees and to cover the cost of the exercise of options by employees through stock swaps.

(2) The aggregate value of shares purchased in the three months ended June 30, 2021 as part of the publicly announced plan was $1.92 billion.

(3) In November 2020, the Board authorized the repurchase of up to $1.5 billion of Chubb's Common Shares from November 19, 2020 through December 31, 2021. In February 2021, the Board approved an increase to the November 2020 share repurchase program of $1.0 billion to a total of $2.5 billion, effective through December 31, 2021. Subsequently, on July 19, 2021, the Board authorized a one-time incremental share repurchase program of up to $5.0 billion through June 30, 2022. The $2.5 billion share repurchase authorization will be used prior to the $5.0 billion share repurchase authorization. At July 28, 2021, $5.06 billion in share repurchase authorizations remained. Refer to Note 8 to the Consolidated Financial Statements for more information on the Chubb Limited securities repurchase authorizations.

ITEM 6. Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Original Number	Date Filed	
3.1	Articles of Association of the Company, as amended	8-K	3.1	August 4, 2020	
3.2	Organizational Regulations of the Company, as amended	8-K	3.1	November 21, 2016	
4.1	Articles of Association of the Company, as amended	8-K	4.1	August 4, 2020	
4.2	Organizational Regulations of the Company, as amended	8-K	3.1	November 21, 2016	
10.1*	Chubb Limited 2016 Long-Term Incentive Plan, as amended and restated	8-K	10.1	May 20, 2021	
22.1	Guaranteed Securities	10-K	22.1	February 25, 2021	
31.1	Certification Pursuant to Section 302 of The Sarbanes-Oxley Act of 2002				X
31.2	Certification Pursuant to Section 302 of The Sarbanes-Oxley Act of 2002				X
32.1	Certification Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of The Sarbanes-Oxley Act of 2002				X
32.2	Certification Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of The Sarbanes-Oxley Act of 2002				X
101.1	The following financial information from Chubb Limited's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021 formatted in Inline XBRL: (i) Consolidated Balance Sheets at June 30, 2021, and December 31, 2020; (ii) Consolidated Statements of Operations and Comprehensive Income for the three and six months ended June 30, 2021 and 2020; (iii) Consolidated Statements of Shareholders' Equity for the three and six months ended June 30, 2021 and 2020; (iv) Consolidated Statements of Cash Flows for the six months ended June 30, 2021 and 2020; and (v) Notes to Consolidated Financial Statements				X
104.1	The Cover Page Interactive Data File formatted in Inline XBRL (The cover page XBRL tags are embedded in the Inline XBRL document and included in Exhibit 101.1)				

* Management contract, 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.

CHUBB LIMITED

(Registrant)

July 29, 2021 /s/ Evan G. Greenberg

Evan G. Greenberg

Chairman and Chief Executive Officer

July 29, 2021 /s/ Peter C. Enns

Peter C. Enns

Executive Vice President and Chief Financial Officer

Exhibit 31.1

CERTIFICATION PURSUANT TO
SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002

I, Evan G. Greenberg, certify that:

1) I have reviewed this quarterly report on Form 10-Q of Chubb Limited;

2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the 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 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 29, 2021

/s/ Evan G. Greenberg

Evan G. Greenberg

Chairman and Chief Executive Officer

Exhibit 31.2

CERTIFICATION PURSUANT TO
SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002

I, Peter C. Enns, certify that:

1) I have reviewed this quarterly report on Form 10-Q of Chubb Limited;

2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the 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 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 29, 2021

/s/ Peter C. Enns

Peter C. Enns

Executive Vice President and 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

The undersigned officer of Chubb Limited (the Corporation) hereby certifies that the Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021, fully complies with the applicable reporting requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a)) and that the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Date: July 29, 2021

/s/ Evan G. Greenberg

Evan G. Greenberg

Chairman and Chief Executive Officer

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

The undersigned officer of Chubb Limited (the Corporation) hereby certifies that the Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021, fully complies with the applicable reporting requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a)) and that the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Date: July 29, 2021

/s/ Peter C. Enns

Peter C. Enns

Executive Vice President and Chief Financial Officer