

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 September 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

(State or other jurisdiction of incorporation or organization)

98-0091805

(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

Non-accelerated filer

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 October 15, 2021 was 430,741,280.

CHUBB LIMITED
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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)	September 30 2021	December 31 2020
Assets		
Investments		
Fixed maturities available for sale, at fair value, net of valuation allowance - \$12 and \$20 (amortized cost – \$89,335 and \$85,188)	\$ 92,685	\$ 90,699
Fixed maturities held to maturity, at amortized cost, net of valuation allowance - \$35 and \$44 (fair value – \$11,119 and \$12,510)	10,515	11,653
Equity securities, at fair value	4,557	4,027
Short-term investments, at fair value (amortized cost – \$3,529 and \$4,349)	3,529	4,345
Other investments, at fair value	10,843	7,945
Total investments	122,129	118,669
Cash	1,620	1,747
Restricted cash	176	89
Securities lending collateral	2,368	1,844
Accrued investment income	825	867
Insurance and reinsurance balances receivable, net of valuation allowance - \$42 and \$44	11,723	10,480
Reinsurance recoverable on losses and loss expenses, net of valuation allowance - \$325 and \$314	16,648	15,592
Reinsurance recoverable on policy benefits	206	206
Deferred policy acquisition costs	5,532	5,402
Value of business acquired	245	263
Goodwill	15,387	15,400
Other intangible assets	5,578	5,811
Prepaid reinsurance premiums	3,092	2,769
Investments in partially-owned insurance companies	3,006	2,813
Other assets	10,519	8,822
Total assets	\$ 199,054	\$ 190,774
Liabilities		
Unpaid losses and loss expenses	\$ 72,631	\$ 67,811
Unearned premiums	19,519	17,652
Future policy benefits	5,890	5,713
Insurance and reinsurance balances payable	7,104	6,708
Securities lending payable	2,368	1,844
Accounts payable, accrued expenses, and other liabilities	15,470	14,052
Deferred tax liabilities	217	892
Repurchase agreements	1,406	1,405
Long-term debt	14,823	14,948
Trust preferred securities	308	308
Total liabilities	139,736	131,333
Commitments and contingencies (refer to Note 7)		
Shareholders' equity		
Common Shares (CHF 24.15 par value; 474,021,114 and 477,605,264 shares issued; 430,876,252 and 450,732,625 shares outstanding)	10,985	11,064
Common Shares in treasury (43,144,862 and 26,872,639 shares)	(6,621)	(3,644)
Additional paid-in capital	8,752	9,815
Retained earnings	45,224	39,337
Accumulated other comprehensive income (AOCI)	978	2,869
Total shareholders' equity	59,318	59,441
Total liabilities and shareholders' equity	\$ 199,054	\$ 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		Nine Months Ended	
	September 30		September 30	
	2021	2020	2021	2020
Revenues				
Net premiums written	\$ 10,510	\$ 9,078	\$ 28,718	\$ 25,410
Increase in unearned premiums	(510)	(313)	(1,684)	(723)
Net premiums earned	10,000	8,765	27,034	24,687
Net investment income	866	840	2,613	2,528
Net realized gains (losses) (includes \$(10), \$49, \$26, and \$(303) reclassified from AOCI)	(21)	(141)	833	(1,069)
Total revenues	10,845	9,464	30,480	26,146
Expenses				
Losses and loss expenses	6,629	5,835	16,688	16,897
Policy benefits	151	198	503	550
Policy acquisition costs	1,778	1,645	5,141	4,853
Administrative expenses	806	733	2,325	2,201
Interest expense	122	130	366	390
Other (income) expense	(763)	(485)	(2,030)	(372)
Amortization of purchased intangibles	71	72	216	217
Total expenses	8,794	8,128	23,209	24,736
Income before income tax	2,051	1,336	7,271	1,410
Income tax expense (includes \$(3), \$7, \$(5), and \$(35) on unrealized gains and losses reclassified from AOCI)	218	142	873	295
Net income	\$ 1,833	\$ 1,194	\$ 6,398	\$ 1,115
Other comprehensive income (loss)				
Unrealized appreciation (depreciation)	\$ (564)	\$ 687	\$ (2,151)	\$ 1,456
Reclassification adjustment for net realized (gains) losses included in net income	10	(49)	(26)	303
	(554)	638	(2,177)	1,759
Change in:				
Cumulative foreign currency translation adjustment	(414)	246	(84)	(168)
Postretirement benefit liability adjustment	4	(23)	(33)	(59)
Other comprehensive income (loss), before income tax	(964)	861	(2,294)	1,532
Income tax (expense) benefit related to OCI items	120	(103)	403	(295)
Other comprehensive income (loss)	(844)	758	(1,891)	1,237
Comprehensive income	\$ 989	\$ 1,952	\$ 4,507	\$ 2,352
Earnings per share				
Basic earnings per share	\$ 4.21	\$ 2.64	\$ 14.42	\$ 2.47
Diluted earnings per share	\$ 4.18	\$ 2.63	\$ 14.33	\$ 2.46

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		Nine Months Ended	
	2021	September 30 2020	2021	September 30 2020
Common Shares				
Balance – beginning of period	\$ 11,064	\$ 11,121	\$ 11,064	\$ 11,121
Cancellation of treasury shares	(79)	(57)	(79)	(57)
Balance – end of period	10,985	11,064	10,985	11,064
Common Shares in treasury				
Balance – beginning of period	(5,772)	(3,866)	(3,644)	(3,754)
Common Shares repurchased	(1,516)	—	(3,956)	(326)
Cancellation of treasury shares	590	323	590	323
Net shares issued under employee share-based compensation plans	77	2	389	216
Balance – end of period	(6,621)	(3,541)	(6,621)	(3,541)
Additional paid-in capital				
Balance – beginning of period	9,046	10,416	9,815	11,203
Net shares issued under employee share-based compensation plans	(2)	(6)	(184)	(195)
Exercise of stock options	(15)	(1)	(45)	(30)
Share-based compensation expense	69	59	216	183
Funding of dividends declared to Retained earnings	(346)	(353)	(1,050)	(1,046)
Balance – end of period	8,752	10,115	8,752	10,115
Retained earnings				
Balance – beginning of period	43,902	35,991	39,337	36,142
Cumulative effect of adoption of accounting guidance	—	—	—	(72)
Balance – beginning of period, as adjusted	43,902	35,991	39,337	36,070
Net income	1,833	1,194	6,398	1,115
Cancellation of treasury shares	(511)	(266)	(511)	(266)
Funding of dividends declared from Additional paid-in capital	346	353	1,050	1,046
Dividends declared on Common Shares	(346)	(353)	(1,050)	(1,046)
Balance – end of period	45,224	36,919	45,224	36,919
Accumulated other comprehensive income				
Net unrealized appreciation (depreciation) on investments				
Balance – beginning of period	3,342	3,424	4,673	2,543
Change in period, before reclassification from AOCI, net of income tax (expense) benefit of \$101, \$(102), \$395 and \$(300)	(463)	585	(1,756)	1,156
Amounts reclassified from AOCI, net of income tax (expense) benefit of \$(3), \$7, \$(5), \$(35)	7	(42)	(31)	268
Change in period, net of income tax (expense) benefit of \$98, \$(95), \$390 and \$(335)	(456)	543	(1,787)	1,424
Balance – end of period	2,886	3,967	2,886	3,967
Cumulative foreign currency translation adjustment				
Balance – beginning of period	(1,323)	(2,313)	(1,637)	(1,939)
Change in period, net of income tax (expense) benefit of \$23, \$(13), \$7 and \$27	(391)	233	(77)	(141)
Balance – end of period	(1,714)	(2,080)	(1,714)	(2,080)
Postretirement benefit liability adjustment				
Balance – beginning of period	(197)	(13)	(167)	15
Change in period, net of income tax (expense) benefit of \$(1), \$5, \$6 and \$13	3	(18)	(27)	(46)
Balance – end of period	(194)	(31)	(194)	(31)
Accumulated other comprehensive income	978	1,856	978	1,856
Total shareholders' equity	\$ 59,318	\$ 56,413	\$ 59,318	\$ 56,413

See accompanying notes to the consolidated financial statements

CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

Chubb Limited and Subsidiaries

(in millions of U.S. dollars)	Nine Months Ended September 30	
	2021	2020
Cash flows from operating activities		
Net income	\$ 6,398	\$ 1,115
Adjustments to reconcile net income to net cash flows from operating activities		
Net realized (gains) losses	(833)	1,069
Amortization of premiums/discounts on fixed maturities	242	280
Amortization of purchased intangibles	216	217
Deferred income taxes	(268)	(287)
Unpaid losses and loss expenses	4,907	5,112
Unearned premiums	2,032	881
Future policy benefits	163	138
Insurance and reinsurance balances payable	408	280
Accounts payable, accrued expenses, and other liabilities	45	190
Income taxes payable	212	(95)
Insurance and reinsurance balances receivable	(1,257)	(324)
Reinsurance recoverable	(1,071)	(496)
Deferred policy acquisition costs	(208)	(77)
Other	(2,437)	(762)
Net cash flows from operating activities	8,549	7,241
Cash flows from investing activities		
Purchases of fixed maturities available for sale	(23,028)	(20,793)
Purchases of fixed maturities held to maturity	(434)	(42)
Purchases of equity securities	(799)	(3,622)
Sales of fixed maturities available for sale	5,225	9,537
Sales of equity securities	750	1,526
Maturities and redemptions of fixed maturities available for sale	13,710	8,709
Maturities and redemptions of fixed maturities held to maturity	1,488	841
Net change in short-term investments	809	(434)
Net derivative instruments settlements	(66)	(74)
Private equity contributions	(1,872)	(1,056)
Private equity distributions	891	588
Payment, including deposit, for Huatai Group interest	(208)	(1,557)
Other	(217)	(352)
Net cash flows used for investing activities	(3,751)	(6,729)
Cash flows from financing activities		
Dividends paid on Common Shares	(1,056)	(1,035)
Common Shares repurchased	(3,941)	(333)
Proceeds from issuance of long-term debt	—	988
Proceeds from issuance of repurchase agreements	1,405	1,402
Repayment of repurchase agreements	(1,405)	(1,402)
Proceeds from share-based compensation plans	239	77
Policyholder contract deposits and other	365	322
Policyholder contract withdrawals and other	(331)	(253)
Other	(81)	—
Net cash flows used for financing activities	(4,805)	(234)
Effect of foreign currency rate changes on cash and restricted cash	(33)	(51)
Net increase (decrease) in cash and restricted cash	(40)	227
Cash and restricted cash – beginning of period	1,836	1,646
Cash and restricted cash – end of period	\$ 1,796	\$ 1,873
Supplemental cash flow information		
Taxes paid	\$ 931	\$ 668
Interest paid	\$ 316	\$ 323

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)	September 30		December 31
	2021		2020
Cash	\$ 1,620	\$	1,747
Restricted cash	176		89
Total cash and restricted cash shown in the Consolidated statements of cash flows	\$ 1,796	\$	1,836

c) Goodwill

During the nine months ended September 30, 2021, Goodwill decreased \$13 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
Cigna's Life and Accident and Health (A&H) Insurance Business in Asia-Pacific Markets

On October 7, 2021, we entered into a definitive agreement to acquire the life and non-life insurance companies that house the personal accident, supplemental health and life insurance business of Cigna in seven Asia-Pacific markets, including Korea, Taiwan, New Zealand, Thailand, Hong Kong and Indonesia and its interest in a joint venture in Turkey, for \$5.75 billion in cash. The transaction is expected to be completed in 2022. The timing of completion is subject to required regulatory approvals and customary closing conditions.

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 September 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. In July 2021, Chubb signed an agreement of intent to purchase an additional 6.4 percent ownership interest in Huatai Group. In connection with the agreement, Chubb paid a deposit of approximately \$143 million. The purchase of the additional ownership interests is contingent upon important conditions. As Chubb's ownership interest increases, we will continue to evaluate the appropriateness of consolidation accounting in accordance with the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 810, *Consolidation*, and other applicable regulations.

3. Investments
a) Fixed maturities

September 30, 2021

(in millions of U.S. dollars)

	Amortized Cost	Valuation Allowance	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value	
<i>Available for sale</i>						
U.S. Treasury / Agency	\$ 2,172	\$ —	\$ 120	\$ (5)	\$ 2,287	
Non-U.S.	24,988	(6)	1,139	(194)	25,927	
Corporate and asset-backed securities	37,283	(6)	1,596	(157)	38,716	
Mortgage-backed securities	19,333	—	695	(65)	19,963	
Municipal	5,559	—	236	(3)	5,792	
	\$ 89,335	\$ (12)	\$ 3,786	\$ (424)	\$ 92,685	
	Amortized Cost	Valuation Allowance	Net Carrying Value	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value
<i>Held to maturity</i>						
U.S. Treasury / Agency	\$ 1,209	\$ —	\$ 1,209	\$ 38	\$ —	\$ 1,247
Non-U.S.	1,259	(5)	1,254	76	—	1,330
Corporate and asset-backed securities	2,079	(28)	2,051	209	—	2,260
Mortgage-backed securities	1,771	(1)	1,770	99	(1)	1,868
Municipal	4,232	(1)	4,231	183	—	4,414
	\$ 10,550	\$ (35)	\$ 10,515	\$ 605	\$ (1)	\$ 11,119

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
<i>Available for sale</i>					
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
<i>Held to maturity</i>						
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:

(in millions of U.S. dollars, except for percentages)	September 30, 2021		December 31, 2020	
	Amortized cost	% of Total	Amortized cost	% of Total
AAA	\$ 2,216	21 %	\$ 2,511	22 %
AA	5,479	52 %	6,193	53 %
A	2,011	19 %	2,138	18 %
BBB	815	8 %	826	7 %
BB	28	— %	28	— %
Other	1	— %	1	— %
Total	\$ 10,550	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)			September 30		December 31	
	Net Carrying Value		2021		2020	
			Fair Value		Fair Value	
Available for sale						
Due in 1 year or less	\$	4,568	\$	4,568	\$	4,760
Due after 1 year through 5 years		25,747		25,747		26,227
Due after 5 years through 10 years		28,117		28,117		27,232
Due after 10 years		14,290		14,290		14,010
		72,722		72,722		72,229
Mortgage-backed securities		19,963		19,963		18,470
	\$	92,685	\$	92,685	\$	90,699
Held to maturity						
Due in 1 year or less	\$	947	\$	954	\$	1,231
Due after 1 year through 5 years		3,666		3,792		3,760
Due after 5 years through 10 years		2,498		2,627		3,228
Due after 10 years		1,634		1,878		2,136
		8,745		9,251		10,364
Mortgage-backed securities		1,770		1,868		2,146
	\$	10,515	\$	11,119	\$	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 September 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:

September 30, 2021 (in millions of U.S. dollars)	0 – 12 Months		Over 12 Months		Total	
	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss
U.S. Treasury / Agency	\$ 231	\$ (5)	\$ —	\$ —	\$ 231	\$ (5)
Non-U.S.	5,704	(147)	780	(40)	6,484	(187)
Corporate and asset-backed securities	6,686	(124)	662	(20)	7,348	(144)
Mortgage-backed securities	5,948	(61)	157	(4)	6,105	(65)
Municipal	239	(2)	8	(1)	247	(3)
Total AFS fixed maturities	\$ 18,808	\$ (339)	\$ 1,607	\$ (65)	\$ 20,415	\$ (404)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

December 31, 2020 (in millions of U.S. dollars)	0 – 12 Months			Over 12 Months			Total Gross Unrealized Loss
	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss	Fair Value		
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 September 30		Nine Months Ended September 30	
	2021	2020	2021	2020
Fixed maturities:				
Gross realized gains	\$ 27	\$ 50	\$ 120	\$ 195
Gross realized losses	(27)	(32)	(99)	(331)
Net (provision for) recovery of expected credit losses	1	42	17	(4)
Impairment ⁽¹⁾	(11)	(11)	(12)	(163)
Total fixed maturities	\$ (10)	\$ 49	\$ 26	\$ (303)
Equity securities	(42)	—	475	119
Other investments	11	31	111	(71)
Foreign exchange	106	(222)	85	(351)
Investment and embedded derivative instruments	(9)	9	9	38
Fair value adjustments on insurance derivative	(59)	46	252	(426)
S&P futures	(4)	(52)	(112)	(30)
Other derivative instruments	(10)	1	(8)	(2)
Other	(4)	(3)	(5)	(43)
Net realized gains (losses) (pre-tax)	\$ (21)	\$ (141)	\$ 833	\$ (1,069)

⁽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)	2021			Three Months Ended September 30 2020		
	Equity Securities	Other Investments	Total	Equity Securities	Other Investments	Total
Net gains (losses) recognized during the period	\$ (42)	\$ 11	\$ (31)	\$ —	\$ 31	\$ 31
Less: Net gains recognized from sales of securities	19	—	19	34	—	34
Unrealized gains (losses) recognized for securities still held at reporting date	\$ (61)	\$ 11	\$ (50)	\$ (34)	\$ 31	\$ (3)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

	2021			Nine Months Ended September 30 2020		
	Equity Securities	Other Investments	Total	Equity Securities	Other Investments	Total
(in millions of U.S. dollars)						
Net gains (losses) recognized during the period	\$ 475	\$ 111	\$ 586	\$ 119	\$ (71)	\$ 48
Less: Net gains recognized from sales of securities	109	—	109	197	—	197
Unrealized gains (losses) recognized for securities still held at reporting date	\$ 366	\$ 111	\$ 477	\$ (78)	\$ (71)	\$ (149)

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

	Three Months Ended September 30		Nine Months Ended September 30	
	2021	2020	2021	2020
(in millions of U.S. dollars)				
<i>Available for sale</i>				
Valuation allowance for expected credit losses - beginning of period	\$ 11	\$ 69	\$ 20	\$ —
Impact of adoption of new accounting guidance	—	—	—	25
Provision for expected credit loss	3	5	8	183
Initial allowance for purchased securities with credit deterioration	—	—	—	5
Write-offs charged against the expected credit loss	—	—	—	(5)
Recovery of expected credit loss	(2)	(40)	(16)	(174)
Valuation allowance for expected credit losses - end of period	\$ 12	\$ 34	\$ 12	\$ 34
<i>Held to maturity</i>				
Valuation allowance for expected credit losses - beginning of period	\$ 37	\$ 51	\$ 44	\$ —
Impact of adoption of new accounting guidance	—	—	—	44
Provision for expected credit loss	—	2	—	9
Recovery of expected credit loss	(2)	(8)	(9)	(8)
Valuation allowance for expected credit losses - end of period	\$ 35	\$ 45	\$ 35	\$ 45

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:

(in millions of U.S. dollars)	Expected Liquidation Period of Underlying Assets	September 30		December 31	
		Fair Value	Maximum Future Funding Commitments	Fair Value	Maximum Future Funding Commitments
Financial	2 to 10 Years	\$ 1,064	\$ 309	\$ 673	\$ 237
Real Assets	2 to 11 Years	1,092	772	805	598
Distressed	2 to 8 Years	568	813	358	970
Private Credit	3 to 8 Years	82	279	88	270
Traditional	2 to 14 Years	6,616	4,958	4,519	1,125
Vintage	1 to 2 Years	64	—	73	—
Investment funds	Not Applicable	282	—	254	—
		\$ 9,768	\$ 7,131	\$ 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

September 30, 2021 and December 31, 2020 are investments, primarily fixed maturities, totaling \$18.82 billion and \$19.61 billion, respectively, and cash of \$176 million and \$89 million, respectively.

The following table presents the components of restricted assets:

(in millions of U.S. dollars)	September 30 2021	December 31 2020
Trust funds	\$ 11,669	\$ 12,305
Deposits with U.S. regulatory authorities	2,418	2,438
Deposits with non-U.S. regulatory authorities	2,858	2,905
Assets pledged under repurchase agreements	1,425	1,462
Other pledged assets	632	584
Total	\$ 19,002	\$ 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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

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.

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

September 30, 2021

(in millions of U.S. dollars)

	Level 1	Level 2	Level 3	Total
Assets:				
<i>Fixed maturities available for sale</i>				
U.S. Treasury / Agency	\$ 1,786	\$ 501	\$ —	\$ 2,287
Non-U.S.	—	25,267	660	25,927
Corporate and asset-backed securities	—	36,857	1,859	38,716
Mortgage-backed securities	—	19,910	53	19,963
Municipal	—	5,792	—	5,792
	1,786	88,327	2,572	92,685
Equity securities	4,478	—	79	4,557
Short-term investments	2,012	1,507	10	3,529
Other investments ⁽¹⁾	292	468	—	760
Securities lending collateral	—	2,368	—	2,368
Investment derivative instruments	97	—	—	97
Other derivative instruments	35	—	—	35
Separate account assets	5,225	105	—	5,330
Total assets measured at fair value ⁽¹⁾	\$ 13,925	\$ 92,775	\$ 2,661	\$ 109,361
Liabilities:				
Investment derivative instruments	\$ 111	\$ —	\$ —	\$ 111
GLB ⁽²⁾	—	—	818	818
Total liabilities measured at fair value	\$ 111	\$ —	\$ 818	\$ 929

⁽¹⁾ Excluded from the table above are partially-owned investments, investment funds, and limited partnerships of \$9,768 million, policy loans of \$235 million and other investments of \$80 million at September 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:				
<i>Fixed maturities available for sale</i>				
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⁾
	September 30, 2021	December 31, 2020				
GLB ⁽¹⁾	\$ 818	\$ 1,089	Actuarial model	Lapse rate	3% – 34%	4.6 %
				Annuitization rate	0% – 100%	3.5 %

⁽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 nine months ended September 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):

Three Months Ended September 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	\$ 642	\$ 1,688	\$ 47	\$ 78	\$ 3	\$ 10	\$ 760		
Transfers into Level 3	22	45	—	—	—	—	—		
Transfers out of Level 3	—	—	—	—	—	(10)	—		
Change in Net Unrealized Gains/Losses in OCI	(15)	2	—	—	—	—	—		
Net Realized Gains/Losses	(3)	—	—	1	—	—	59		
Purchases	60	272	17	4	7	—	—		
Sales	(19)	(13)	—	(4)	—	—	—		
Settlements	(27)	(135)	(11)	—	—	—	—		
Other	—	—	—	—	—	—	(1)		
Balance, end of period	\$ 660	\$ 1,859	\$ 53	\$ 79	\$ 10	\$ —	\$ 818		
Net Realized Gains/Losses Attributable to Changes in Fair Value at the balance sheet date	\$ —	\$ —	\$ —	\$ (1)	\$ —	\$ —	\$ 59		
Change in Net Unrealized Gains/Losses included in OCI at the balance sheet date	\$ (15)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —		

⁽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 September 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	\$ 469	\$ 1,369	\$ 60	\$ 64	\$ 2	\$ 10	\$ 1,372		
Transfers into Level 3	—	1	—	—	—	—	—	—	
Transfers out of Level 3	—	(1)	—	—	—	—	—	—	
Change in Net Unrealized Gains/Losses in OCI	21	13	—	—	(1)	—	—	—	
Net Realized Gains/Losses	1	3	—	2	—	—	(46)	—	
Purchases	41	194	2	3	7	—	—	—	
Sales	(19)	(80)	—	(3)	—	—	—	—	
Settlements	(19)	(54)	(1)	—	(1)	—	—	—	
Other	—	—	—	—	—	—	—	(8)	
Balance, end of period	\$ 494	\$ 1,445	\$ 61	\$ 66	\$ 7	\$ 10	\$ 1,318		
Net Realized Gains/Losses Attributable to Changes in Fair Value at the balance sheet date	\$ —	\$ 3	\$ —	\$ 2	\$ —	\$ —	\$ (46)		
Change in Net Unrealized Gains/Losses included in OCI at the balance sheet date	\$ 20	\$ 12	\$ —	\$ —	\$ (1)	\$ —	\$ —		

⁽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

	Available-for-Sale Debt Securities						Assets	Liabilities
Nine Months Ended September 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	\$ 546	\$ 1,573	\$ 60	\$ 73	\$ 5	\$ 10	\$ 1,089	
Transfers into Level 3	22	91	—	—	—	—	—	
Transfers out of Level 3	(10)	(3)	—	—	—	(10)	—	
Change in Net Unrealized Gains/Losses in OCI	(2)	14	—	—	—	—	—	
Net Realized Gains/Losses	—	3	—	8	—	—	(252)	
Purchases	235	681	18	11	10	—	—	
Sales	(35)	(88)	(1)	(13)	—	—	—	
Settlements	(96)	(412)	(24)	—	(5)	—	—	
Other	—	—	—	—	—	—	(19)	
Balance, end of period	\$ 660	\$ 1,859	\$ 53	\$ 79	\$ 10	\$ —	\$ 818	
Net Realized Gains/Losses Attributable to Changes in Fair Value at the balance sheet date	\$ —	\$ 3	\$ —	\$ 5	\$ —	\$ —	\$ (252)	
Change in Net Unrealized Gains/Losses included in OCI at the balance sheet date	\$ 2	\$ 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

Nine Months Ended September 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	\$ 449	\$ 1,451	\$ 60	\$ 69	\$ 6	\$ 10	\$ 897	
Transfers into Level 3	—	92	—	—	—	—	—	
Transfers out of Level 3	(16)	(73)	—	—	—	—	—	
Change in Net Unrealized Gains/Losses in OCI	1	(31)	—	—	(1)	—	—	
Net Realized Gains/Losses	(2)	(23)	—	(1)	—	—	426	
Purchases	190	416	2	14	9	—	—	
Sales	(81)	(147)	—	(16)	—	—	—	
Settlements	(47)	(240)	(1)	—	(7)	—	—	
Other	—	—	—	—	—	—	(5)	
Balance, end of period	\$ 494	\$ 1,445	\$ 61	\$ 66	\$ 7	\$ 10	\$ 1,318	
Net Realized Gains/Losses Attributable to Changes in Fair Value at the balance sheet date	\$ —	\$ (6)	\$ —	\$ 1	\$ —	\$ —	\$ 426	
Change in Net Unrealized Gains/Losses included in OCI at the balance sheet date	\$ —	\$ (25)	\$ —	\$ —	\$ (1)	\$ —	\$ —	

⁽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:

September 30, 2021 (in millions of U.S. dollars)	Level 1	Level 2	Level 3	Fair Value Total	Net Carrying Value
Assets:					
<i>Fixed maturities held to maturity</i>					
U.S. Treasury / Agency	\$ 1,195	\$ 52	\$ —	\$ 1,247	\$ 1,209
Non-U.S.	—	1,330	—	1,330	1,254
Corporate and asset-backed securities	—	2,260	—	2,260	2,051
Mortgage-backed securities	—	1,868	—	1,868	1,770
Municipal	—	4,414	—	4,414	4,231
Total assets	\$ 1,195	\$ 9,924	\$ —	\$ 11,119	\$ 10,515
Liabilities:					
Repurchase agreements	\$ —	\$ 1,406	\$ —	\$ 1,406	\$ 1,406
Long-term debt	—	16,648	—	16,648	14,823
Trust preferred securities	—	465	—	465	308
Total liabilities	\$ —	\$ 18,519	\$ —	\$ 18,519	\$ 16,537

December 31, 2020 (in millions of U.S. dollars)	Level 1	Level 2	Level 3	Fair Value Total	Net Carrying Value
Assets:					
<i>Fixed maturities held to maturity</i>					
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)	September 30, 2021		December 31, 2020	
	Net Reinsurance Recoverable ⁽¹⁾	Valuation allowance	Net Reinsurance Recoverable ⁽¹⁾	Valuation allowance
Reinsurance recoverable on unpaid losses and loss expenses	\$ 15,550	\$ 269	\$ 14,647	\$ 257
Reinsurance recoverable on paid losses and loss expenses	1,098	56	945	57
Reinsurance recoverable on losses and loss expenses	\$ 16,648	\$ 325	\$ 15,592	\$ 314
Reinsurance recoverable on policy benefits	\$ 206	\$ 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 higher underlying ceded exposures due to premium growth, unfavorable prior period development in certain lines, crop activity, and catastrophe losses.

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:

(in millions of U.S. dollars)	2021	Nine Months Ended September 30 2020
Valuation allowance for uncollectible reinsurance - beginning of period	\$ 314	\$ 316
Provision for uncollectible reinsurance	16	21
Write-offs charged against the valuation allowance	(4)	(19)
Foreign exchange revaluation	(1)	2
Valuation allowance for uncollectible reinsurance - end of period	\$ 325	\$ 320

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:

(in millions of U.S. dollars)	2021	Nine Months Ended September 30 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	17,556	17,109
Prior years ⁽²⁾	(868)	(212)
Total	16,688	16,897
Net losses and loss expenses paid in respect of losses occurring in:		
Current year	4,771	4,766
Prior years	7,922	7,597
Total	12,693	12,363
Foreign currency revaluation and other	(78)	95
Net unpaid losses and loss expenses – end of period	57,081	53,138
Reinsurance recoverable on unpaid losses ⁽¹⁾	15,550	14,767
Gross unpaid losses and loss expenses – end of period	\$ 72,631	\$ 67,905

⁽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 \$87 million and \$23 million for the nine months ended September 30, 2021 and 2020, respectively.

Gross and net unpaid losses and loss expenses increased \$4,820 million and \$3,917 million, respectively, for the nine months ended September 30, 2021, driven by an increase in underlying exposure due to premium growth, crop activity, and net catastrophe losses incurred, 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.

(in millions of U.S. dollars)	Three Months Ended September 30			Nine Months Ended September 30		
	Long-tail	Short-tail	Total	Long-tail	Short-tail	Total
2021						
North America Commercial P&C Insurance	\$ (101)	\$ (56)	\$ (157)	\$ (243)	\$ (197)	\$ (440)
North America Personal P&C Insurance	—	(182)	(182)	—	(266)	(266)
North America Agricultural Insurance	—	7	7	—	5	5
Overseas General Insurance	(13)	(15)	(28)	(8)	(201)	(209)
Global Reinsurance	(4)	—	(4)	(26)	15	(11)
Corporate	43	—	43	140	—	140
Total	\$ (75)	\$ (246)	\$ (321)	\$ (137)	\$ (644)	\$ (781)
2020						
North America Commercial P&C Insurance	\$ (255)	\$ 55	\$ (200)	\$ (439)	\$ (12)	\$ (451)
North America Personal P&C Insurance	—	48	48	—	48	48
North America Agricultural Insurance	—	18	18	—	4	4
Overseas General Insurance	(71)	11	(60)	(72)	(28)	(100)
Global Reinsurance	(6)	—	(6)	(25)	(4)	(29)
Corporate	54	—	54	339	—	339
Total	\$ (278)	\$ 132	\$ (146)	\$ (197)	\$ 8	\$ (189)

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 September 30, 2021, net favorable PPD was \$157 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 \$101 million in long-tail business, primarily from:
 - Net favorable development of \$97 million in our workers' compensation business mainly impacting accident years 2016 and prior, driven by lower than expected loss experience, and related improvements in loss development factors;
 - Net favorable development of \$36 million on large multi-line prospective deals in the 2017 and prior accident years, due to lower than expected reported loss activity. These structured deals typically cover large clients for multiple product lines and with varying loss limitations; this development is net of premium returns of \$46 million tied to the loss performance of the particular deals; and
 - Net adverse development of \$31 million in commercial excess and umbrella portfolios, mainly in accident years 2018 and 2019, driven by higher than expected reported loss activity.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

- Net favorable development of \$56 million in short-tail business, primarily from:
 - Net favorable development of \$54 million in our property and marine portfolios, mainly in accident years 2019 and 2020, which experienced lower than expected loss development on catastrophe and non-catastrophe losses.

For the nine months ended September 30, 2021, net favorable PPD was \$440 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 \$243 million in long-tail business, primarily from:
 - Net favorable development of \$255 million in our workers' compensation business. 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 improvements to loss development factors;
 - 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 favorable development of \$36 million on large multi-line prospective deals due to the same factors experienced for the three months ended September 30, 2021, as described above;
 - Net adverse development of \$26 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 adverse development of \$74 million in commercial automobile liability, driven by adverse reported loss experience, mainly impacting accident years 2017 and 2019; and
 - Net adverse development of \$74 million in commercial excess and umbrella portfolios, with accident years 2016 through 2019 experiencing higher than expected reported loss activity, partly offset by lower than expected emergence in accident years 2015 and prior.
- Net favorable development of \$197 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 \$83 million in property and marine coverages mainly in accident years 2019 and 2020, driven by lower than expected loss development;
 - Net favorable development of \$46 million in accident and health, mainly in accident years 2019 and 2020, where loss emergence was lower than expected; and

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

- 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.

2020

For the three months ended September 30, 2020, net favorable PPD was \$200 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 \$255 million in long-tail business, primarily from:
 - Net favorable development of \$155 million in workers' compensation business mainly impacting accident years 2016 and prior, driven by lower than expected paid and reported loss activity, and related updates to loss development factors, partly offset by adverse development in accident year 2019;
 - Net favorable development of \$47 million in commercial excess and umbrella portfolios, driven by accident years 2014 and prior, and accident year 2019. The 2014 and prior development was a function of lower than expected paid and reported loss activity. The development on the 2019 accident year relates to three large policies covering specific perils, which expired in the quarter, with no covered events occurring;
 - Net favorable development of \$41 million on large multi-line prospective deals in the 2016 and prior accident years, due to lower than expected reported loss activity. These structured deals typically cover large clients for multiple product lines and with varying loss limitations; this development is net of premium returns of \$26 million tied to the loss performance of the particular deals;
 - Net favorable development of \$40 million in our foreign casualty business, mainly in accident year 2016, due to lower than expected reported loss activity, partly offset by a large loss in accident year 2017; and
 - Net adverse development of \$29 million in assumed general liability and excess lines mainly in accident years 2016 and prior due to higher than expected reported loss activity.
- Net adverse development of \$55 million in short-tail business, primarily from:
 - Net adverse development of \$35 million in our property portfolios, due to adverse non-catastrophe loss development mainly in accident year 2019, partially offset by favorable catastrophe-driven loss experience; and
 - Net adverse development of \$21 million in our marine portfolios, mainly impacting the 2019 accident year, driven by higher than expected non-catastrophe loss development.

For the nine months ended September 30, 2020, net favorable PPD was \$451 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 \$439 million in long-tail business, primarily from:
 - Net favorable development of \$337 million in 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 favorable 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 2016 and prior, driven by lower than expected loss experience and related updates to loss development factors;
 - Net favorable development of \$66 million in professional liability (errors & omissions and cyber risk), driven by accident years 2016 and prior, which experienced lower than expected loss 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 related updates to loss development factors;

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

- Net favorable development of \$41 million on large multi-line prospective deals due to the same factors experienced for the three months ended September 30, 2020, as described above;
 - Net favorable development of \$40 million in our foreign casualty businesses due to the same factors experienced for the three months ended September 30, 2020, as described above;
 - 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.
- Net favorable development of \$12 million in short-tail business due to the same factors experienced for the three months ended September 30, 2020, as described above, which was offset by:
 - Net favorable development of \$37 million, in accident and 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 September 30, 2021, net favorable PPD was \$182 million, driven by favorable development of \$176 million in homeowners, including valuables, mainly in accident year 2020, which experienced better than expected non-catastrophe loss development.

For the nine months ended September 30, 2021, net favorable PPD was \$266 million, driven by favorable development of \$216 million in homeowners, including valuables, due to the same factors experienced for the three months ended September 30, 2021 as described above and a favorable \$43 million in automobile, predominantly from better than expected frequency results in accident year 2020 for physical damage coverages.

2020

For the three and nine months ended September 30, 2020, net adverse PPD was \$48 million, which was the net result of several underlying favorable and adverse movements, and was driven by the following principal changes:

- Net adverse development of \$69 million in our homeowners lines, including valuables, mainly in accident years 2017 through 2019 due to higher than expected non-catastrophe loss emergence and adverse development arising from natural catastrophes in accident years 2017 and 2018; and
- Net favorable development of \$22 million in our personal excess lines, driven by favorable development mainly in the 2017 accident year, partly offset by adverse development in accident year 2019.

**Overseas General Insurance
2021**

For the three months ended September 30, 2021, net favorable PPD was \$28 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 \$15 million in short-tail business, primarily from favorable claim development in surety in accident years 2018 through 2020.
- Net favorable development of \$13 million in long-tail business, primarily from:
 - Net favorable development of \$72 million in casualty lines, including favorable development of \$97 million in accident years 2017 and prior, due to lower than expected loss emergence across primary and excess lines in Continental Europe and U.K., partially offset by adverse development of \$25 million in accident years 2018 through 2020, primarily due to higher than expected loss development and corresponding changes in loss development patterns on business in Asia Pacific;

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

- Net favorable development of \$24 million in other long tail lines including Environmental and Political Risks, primarily in accident years 2017 and prior; and
- Net adverse development of \$84 million in financial lines, with adverse development primarily in accident years 2011 through 2020 in Directors and Officers (D&O) on specific claims in Australia, and U.K., and adverse professional indemnity development, including medical malpractice, in various regions.

For the nine months ended September 30, 2021, net favorable PPD was \$209 million, primarily from:

- Net favorable development of \$201 million in short-tail business, primarily from:
 - Net favorable development of \$55 million in accident and health lines, mainly due to favorable loss development across all regions in accident years 2019 and 2020;
 - Net favorable development of \$54 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; and
 - Net favorable development of \$35 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.

2020

For the three months ended September 30, 2020, net favorable PPD was \$60 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 \$71 million in long-tail business, primarily from:
 - Net favorable development of \$94 million in casualty lines, including favorable development of \$143 million in accident years 2016 and prior, due to lower than expected loss emergence across primary and excess lines in Continental Europe, U.K., and Asia Pacific, partially offset by adverse development of \$49 million in accident years 2017 through 2019, primarily due to adverse large loss experience in the U.K. and Asia Pacific;
 - Net favorable development of \$22 million in political risks, driven by benign loss experience in 2018 and 2019; and
 - Net adverse development of \$57 million in financial lines, with adverse development of \$125 million in accident years 2016 through 2019, primarily due to adverse large loss experience in D&O in the U.K. and Asia Pacific. This was partially offset by favorable development of \$68 million in accident years 2015 and prior, primarily from favorable case-specific settlements within Continental Europe and Asia Pacific financial institutions.

For the nine months ended September 30, 2020, net favorable PPD was \$100 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 \$72 million in long-tail lines due to the same factors experienced for the three months ended September 30, 2020 described above; and
- Net favorable development of \$28 million in short-tail business, including \$22 million in marine lines across all regions mainly in accident years 2017 and 2018.

Global Reinsurance

2020

For the three and nine months ended September 30, 2020, net favorable PPD was \$6 million and \$29 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 months ended September 30, 2021, net adverse development was \$43 million, driven principally by development in environmental liabilities of \$33 million due to certain case specific incurred activity.

For the nine months ended September 30, 2021, net adverse development was \$140 million, driven by adverse development of \$68 million for molestation claims, as well as the adverse development noted above regarding environmental liabilities. The remainder of the adverse development was driven by increased claim costs on non-A&E run-off workers' compensation exposures, and charges relating to unallocated loss adjustment expenses incurred.

2020

For the three months ended September 30, 2020, net adverse development was \$54 million, driven principally by development in environmental liabilities of \$35 million due to certain case specific incurred activity.

For the nine months ended September 30, 2020 net adverse development was \$339 million, driven by adverse development of \$254 million for U.S. child molestation claims, predominantly revival statute-related, as well as the adverse development noted above regarding environmental liabilities. The remainder of the adverse development 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:

(in millions of U.S. dollars)	Consolidated Balance Sheet Location	Derivative Asset	September 30, 2021		Derivative Asset	December 31, 2020		
			Fair Value Derivative (Liability)	Notional Value/ Payment Provision		Fair Value Derivative (Liability)	Notional Value/ Payment Provision	
<i>Investment and embedded derivative instruments:</i>								
Foreign currency forward contracts	OA / (AP)	\$ 22	\$ (89)	\$ 4,235	\$ 22	\$ (49)	\$ 2,807	
Options/Futures contracts on notes, bonds, and equities	OA / (AP)	75	(22)	13,005	13	(3)	1,749	
Convertible securities ⁽¹⁾	FM AFS / ES	12	—	13	9	—	11	
		\$ 109	\$ (111)	\$ 17,253	\$ 44	\$ (52)	\$ 4,567	
<i>Other derivative instruments:</i>								
Futures contracts on equities ⁽²⁾	OA / (AP)	\$ 35	\$ —	\$ 867	\$ —	\$ (17)	\$ 709	
Other	OA / (AP)	—	—	157	—	—	16	
		\$ 35	\$ —	\$ 1,024	\$ —	\$ (17)	\$ 725	
GLB ⁽³⁾	(AP)	\$ —	\$ (818)	\$ 1,539	\$ —	\$ (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 September 30, 2021 and December 31, 2020, net derivative assets of \$22 million and net derivative liabilities of \$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:

(in millions of U.S. dollars)	Three Months Ended		Nine Months Ended	
	2021	September 30 2020	2021	September 30 2020
<i>Investment and embedded derivative instruments:</i>				
Foreign currency forward contracts	\$ (15)	\$ —	\$ (37)	\$ 53
All other futures contracts, options, and equities	6	9	45	(15)
Convertible securities ⁽¹⁾	—	—	1	—
Total investment and embedded derivative instruments	\$ (9)	\$ 9	\$ 9	\$ 38
<i>GLB and other derivative instruments:</i>				
GLB	\$ (59)	\$ 46	\$ 252	\$ (426)
Futures contracts on equities ⁽²⁾	(4)	(52)	(112)	(30)
Other	(10)	1	(8)	(2)
Total GLB and other derivative instruments	\$ (73)	\$ (5)	\$ 132	\$ (458)
	\$ (82)	\$ 4	\$ 141	\$ (420)

⁽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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

(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:

(in millions of U.S. dollars)	September 30, 2021	Remaining contractual maturity December 31, 2020 Overnight and Continuous
<i>Collateral held under securities lending agreements:</i>		
Cash	\$ 1,402	\$ 551
U.S. Treasury / Agency	119	148
Non-U.S.	833	1,032
Corporate and asset-backed securities	11	30
Mortgage-backed securities	1	4
States, municipalities, and political subdivisions	1	—
Equity securities	1	79
	\$ 2,368	\$ 1,844
Gross amount of recognized liability for securities lending payable	\$ 2,368	\$ 1,844

At September 30, 2021 and December 31, 2020, our repurchase agreement obligations of \$1,406 million and \$1,405 million, respectively, 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:

(in millions of U.S. dollars)	September 30, 2021			Remaining contractual maturity December 31, 2020		
	30-90 Days	Greater than 90 Days	Total	30-90 Days	Greater than 90 Days	Total
Collateral pledged under repurchase agreements:						
Cash	\$ —	\$ —	\$ —	\$ —	\$ 4	\$ 4
U.S. Treasury / Agency	—	104	104	—	106	106
Mortgage-backed securities	475	846	1,321	481	871	1,352
	\$ 475	\$ 950	\$ 1,425	\$ 481	\$ 981	\$ 1,462
Gross amount of recognized liabilities for repurchase agreements			\$ 1,406			\$ 1,405
Difference ⁽¹⁾			\$ 19			\$ 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 September 30, 2021, we have commitments to purchase fixed income securities of \$825 million over the next several years.

e) Other investments

At September 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 \$9.5 billion. In connection with these investments, we have commitments that may require funding of up to \$7.1 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 September 30, 2021, \$62 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

h) Leases

At September 30, 2021 and December 31, 2020, the right-of-use asset was \$434 million and \$473 million, respectively, recorded within Other assets on the Consolidated balance sheets and the lease liability was \$472 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 September 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):

	2021		Three Months Ended September 30 2020		2021		Nine Months Ended September 30 2020	
	CHF	USD	CHF	USD	CHF	USD	CHF	USD
Total dividend distributions per common share	0.73	\$ 0.80	0.71	\$ 0.78	2.14	\$ 2.38	2.18	\$ 2.31

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. At our May 2021 annual general meeting, our shareholders approved the cancellation of 3,584,150 shares purchased under our share repurchase program during 2020. The capital reduction by cancellation of shares was subject to publication requirements and a two-month waiting period in accordance with Swiss law and became effective August 4, 2021. During the nine months ended September 30, 2021, 22,877,400 shares were repurchased, 3,584,150 shares were canceled, and 3,021,027 net shares were issued under employee share-based compensation plans. At September 30, 2021, 43,144,862 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. 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 was 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		Nine Months Ended		October 1, 2021 through October 27, 2021
	2021	September 30 2020	2021	September 30 2020	
Number of shares repurchased	8,412,000	—	22,877,400	2,266,150	167,700
Cost of shares repurchased	\$ 1,516	\$ —	\$ 3,956	\$ 326	\$ 29
Repurchase authorization remaining at end of period	\$ 3,551	\$ 1,124	\$ 3,551	\$ 1,124	\$ 3,522

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 in the Consolidated statements of operations were as follows:

Three Months Ended September 30 (in millions of U.S. dollars)	2021		Pension Benefit Plans 2020		Other Postretirement Benefit Plans	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans	2021	2020
Service cost	\$ —	\$ 1	\$ —	\$ 1	\$ 1	\$ —
Non-service cost (benefit):						
Interest cost	18	5	24	6	1	1
Expected return on plan assets	(64)	(10)	(56)	(11)	(1)	(1)
Amortization of net actuarial loss	—	—	—	—	—	—
Amortization of prior service cost ⁽¹⁾	—	—	—	1	—	(20)
Settlements	1	—	1	—	—	—
Total non-service cost (benefit)	(45)	(5)	(31)	(4)	—	(20)
Net periodic benefit cost (benefit)	\$ (45)	\$ (4)	\$ (31)	\$ (3)	\$ 1	\$ (20)

⁽¹⁾ At June 30, 2021, the remaining prior service cost amortization related to the 2016 harmonization of our U.S. retirement program was fully amortized. Refer to Note 13 to the Consolidated Financial Statements of our 2020 Form 10-K for additional information.

Nine Months Ended September 30 (in millions of U.S. dollars)	2021		Pension Benefit Plans 2020		Other Postretirement Benefit Plans	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans	2021	2020
Service cost	\$ —	\$ 3	\$ —	\$ 3	\$ 1	\$ —
Non-service cost (benefit):						
Interest cost	53	14	74	17	1	2
Expected return on plan assets	(191)	(32)	(168)	(32)	(1)	(3)
Amortization of net actuarial loss	—	2	—	1	—	—
Amortization of prior service cost	—	—	—	1	(26)	(60)
Settlements	1	—	3	—	—	—
Total non-service cost (benefit)	(137)	(16)	(91)	(13)	(26)	(61)
Net periodic benefit cost (benefit)	\$ (137)	\$ (13)	\$ (91)	\$ (10)	\$ (25)	\$ (61)

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 September 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	1	—
Total service cost	1	1	1	—
Non-service cost (benefit):				
Losses and loss expenses	(5)	(3)	—	(2)
Administrative expenses	(45)	(32)	—	(18)
Total non-service cost (benefit)	(50)	(35)	—	(20)
Net periodic benefit cost (benefit)	\$ (49)	\$ (34)	\$ 1	\$ (20)

Nine Months Ended September 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	3	3	1	—
Total service cost	3	3	1	—
Non-service cost (benefit):				
Losses and loss expenses	(14)	(9)	(3)	(6)
Administrative expenses	(139)	(95)	(23)	(55)
Total non-service cost (benefit)	(153)	(104)	(26)	(61)
Net periodic benefit cost (benefit)	\$ (150)	\$ (101)	\$ (25)	\$ (61)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

11. Other income and expense

(in millions of U.S. dollars)	Three Months Ended September 30		Nine Months Ended September 30	
	2021	2020	2021	2020
Equity in net income (loss) of partially-owned entities ⁽¹⁾	\$ 802	\$ 479	\$ 2,073	\$ 435
Gains (losses) from fair value changes in separate account assets ⁽²⁾	(24)	24	(5)	8
Federal excise and capital taxes	(5)	(4)	(15)	(16)
Other	(10)	(14)	(23)	(55)
Total	\$ 763	\$ 485	\$ 2,030	\$ 372

⁽¹⁾ Principally comprises our share of operating income and mark-to-market movement on private equities where we hold more than three percent. Also includes net income from our investment in Huatai of \$40 million and \$144 million for the three and nine months ended September 30, 2021, respectively, compared to \$37 million and \$86 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 September 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	\$ 4,369	\$ 1,300	\$ 1,415	\$ 2,596	\$ 221	\$ 609	\$ —	\$ —	\$ 10,510
Net premiums earned	3,954	1,244	1,338	2,664	211	589	—	—	10,000
Losses and loss expenses	2,754	846	1,138	1,487	192	179	43	(10)	6,629
Policy benefits	—	—	—	—	—	175	—	(24)	151
Policy acquisition costs	537	254	61	703	55	168	—	—	1,778
Administrative expenses	273	73	4	266	9	82	99	—	806
Underwriting income (loss)	390	71	135	208	(45)	(15)	(142)	34	636
Net investment income (loss)	507	60	6	157	99	102	(10)	(55)	866
Other (income) expense ⁽¹⁾	8	1	—	—	—	(19)	(722)	(31)	(763)
Amortization expense of purchased intangibles	—	2	7	11	—	2	49	—	71
Segment income	\$ 889	\$ 128	\$ 134	\$ 354	\$ 54	\$ 104	\$ 521	\$ 10	\$ 2,194
Net realized gains (losses)							(11)	(10)	(21)
Interest expense							122	—	122
Income tax expense							218	—	218
Net income							\$ 170	\$ —	\$ 1,833

⁽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 September 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	\$ 3,778	\$ 1,285	\$ 986	\$ 2,238	\$ 181	\$ 610	\$ —	\$ —	\$ 9,078
Net premiums earned	3,456	1,231	971	2,337	171	599	—	—	8,765
Losses and loss expenses	2,444	961	845	1,192	154	183	55	1	5,835
Policy benefits	—	—	—	—	—	174	—	24	198
Policy acquisition costs	489	248	56	637	40	175	—	—	1,645
Administrative expenses	243	65	5	260	9	80	71	—	733
Underwriting income (loss)	280	(43)	65	248	(32)	(13)	(126)	(25)	354
Net investment income (loss)	510	64	7	130	85	95	(19)	(32)	840
Other (income) expense	7	1	—	1	—	(23)	(415)	(56)	(485)
Amortization expense of purchased intangibles	—	2	7	10	—	1	52	—	72
Segment income	\$ 783	\$ 18	\$ 65	\$ 367	\$ 53	\$ 104	\$ 218	\$ (1)	\$ 1,607
Net realized gains (losses)							(142)	1	(141)
Interest expense							130	—	130
Income tax expense							142	—	142
Net income (loss)							\$ (196)	\$ —	\$ 1,194

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

For the Nine Months Ended September 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	\$ 12,318	\$ 3,761	\$ 2,110	\$ 7,983	\$ 702	\$ 1,844	\$ —	\$ —	\$ 28,718
Net premiums earned	11,431	3,652	1,858	7,721	583	1,789	—	—	27,034
Losses and loss expenses	7,740	2,341	1,554	3,936	422	562	141	(8)	16,688
Policy benefits	—	—	—	—	—	508	—	(5)	503
Policy acquisition costs	1,540	746	100	2,070	147	538	—	—	5,141
Administrative expenses	772	200	10	811	27	247	258	—	2,325
Underwriting income (loss)	1,379	365	194	904	(13)	(66)	(399)	13	2,377
Net investment income (loss)	1,582	189	21	447	250	301	(42)	(135)	2,613
Other (income) expense	24	(3)	—	3	—	(79)	(1,845)	(130)	(2,030)
Amortization expense of purchased intangibles	—	8	20	36	—	4	148	—	216
Segment income	\$ 2,937	\$ 549	\$ 195	\$ 1,312	\$ 237	\$ 310	\$ 1,256	\$ 8	\$ 6,804
Net realized gains (losses)							841	(8)	833
Interest expense							366	—	366
Income tax expense							873	—	873
Net income							\$ 858	\$ —	\$ 6,398

For the Nine Months Ended September 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	\$ 10,750	\$ 3,719	\$ 1,604	\$ 6,857	\$ 606	\$ 1,874	\$ —	\$ —	\$ 25,410
Net premiums earned	10,427	3,623	1,441	6,838	520	1,838	—	—	24,687
Losses and loss expenses	8,123	2,406	1,223	3,935	314	556	342	(2)	16,897
Policy benefits	—	—	—	—	—	542	—	8	550
Policy acquisition costs	1,452	724	96	1,903	127	551	—	—	4,853
Administrative expenses	751	199	12	759	28	238	214	—	2,201
Underwriting income (loss)	101	294	110	241	51	(49)	(556)	(6)	186
Net investment income (loss)	1,544	195	23	396	214	285	(65)	(64)	2,528
Other (income) expense	19	4	1	10	1	(52)	(283)	(72)	(372)
Amortization expense of purchased intangibles	—	8	20	33	—	3	153	—	217
Segment income (loss)	\$ 1,626	\$ 477	\$ 112	\$ 594	\$ 264	\$ 285	\$ (491)	\$ 2	\$ 2,869
Net realized gains (losses)							(1,067)	(2)	(1,069)
Interest expense							390	—	390
Income tax expense							295	—	295
Net income (loss)							\$ (2,243)	\$ —	\$ 1,115

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

(in millions of U.S. dollars, except share and per share data)	Three Months Ended September 30 2020		Nine Months Ended September 30 2020	
	2021		2021	
Numerator:				
Net income	\$ 1,833	\$ 1,194	\$ 6,398	\$ 1,115
Denominator:				
Denominator for basic earnings per share:				
Weighted-average shares outstanding	435,318,088	451,794,046	443,595,026	451,683,093
Denominator for diluted earnings per share:				
Share-based compensation plans	3,123,550	1,471,434	3,032,989	1,894,699
Weighted-average shares outstanding and assumed conversions	438,441,638	453,265,480	446,628,015	453,577,792
Basic earnings per share	\$ 4.21	\$ 2.64	\$ 14.42	\$ 2.47
Diluted earnings per share	\$ 4.18	\$ 2.63	\$ 14.33	\$ 2.46
Potential anti-dilutive share conversions	1,758,853	7,053,316	1,439,882	6,767,727

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 nine months ended September 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.

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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 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 September 30, 2021, we had total assets of \$199 billion and shareholders' equity of \$59 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 Nine Months Ended September 30, 2021 and 2020

(in millions of U.S. dollars, except for percentages)	Three Months Ended September 30		% Change Q-21 vs. Q-20	Nine Months Ended September 30		% Change YTD-21 vs. YTD-20
	2021	2020		2021	2020	
Net premiums written	\$ 10,510	\$ 9,078	15.8 %	\$ 28,718	\$ 25,410	13.0 %
Net premiums written - constant dollars ⁽¹⁾			14.2 %			11.1 %
Net premiums earned	10,000	8,765	14.1 %	27,034	24,687	9.5 %
Net investment income	866	840	3.1 %	2,613	2,528	3.4 %
Net realized gains (losses)	(21)	(141)	(85.2) %	833	(1,069)	NM
Total revenues	10,845	9,464	14.6 %	30,480	26,146	16.6 %
Losses and loss expenses	6,629	5,835	13.6 %	16,688	16,897	(1.2) %
Policy benefits	151	198	(23.4) %	503	550	(8.6) %
Policy acquisition costs	1,778	1,645	8.1 %	5,141	4,853	5.9 %
Administrative expenses	806	733	9.9 %	2,325	2,201	5.7 %
Interest expense	122	130	(6.3) %	366	390	(6.3) %
Other (income) expense	(763)	(485)	57.3 %	(2,030)	(372)	NM
Amortization of purchased intangibles	71	72	(1.4) %	216	217	(0.6) %
Total expenses	8,794	8,128	8.2 %	23,209	24,736	(6.2) %
Income before income tax	2,051	1,336	53.6 %	7,271	1,410	NM
Income tax expense	218	142	53.4 %	873	295	195.7 %
Net income	\$ 1,833	\$ 1,194	53.5 %	\$ 6,398	\$ 1,115	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 September 30, 2021

- Net income was \$1.8 billion compared with \$1.2 billion in the prior year period. Net income in the current quarter was driven by strong underwriting results, including growth in net premiums earned and improvements in our loss and loss expense ratios. Both commercial P&C and consumer lines grew globally, driven by positive rate increases, higher new business, increased exposure and strong renewal retention. Returns from our private equity investments contributed to the higher net income.
- Total pre-tax and after-tax catastrophe losses were \$1.1 billion (12.2 percentage points of the combined ratio) and \$943 million, respectively, compared with \$925 million (11.3 percentage points of the combined ratio) and \$797 million, respectively, in the prior year period.
- Total pre-tax and after-tax favorable prior period development were \$321 million (3.6 percentage points of the combined ratio) and \$227 million, respectively, compared with favorable prior period development of \$146 million (1.8 percentage points of the combined ratio) and \$126 million, respectively, in the prior year period.
- The P&C combined ratio was 93.4 percent compared with 95.2 percent in the prior year period. P&C current accident year combined ratio excluding catastrophe losses was 84.8 percent compared with 85.7 percent in the prior year period. The current year ratios decreased due to underlying loss ratio improvement and the favorable impact of higher net premiums earned on the expense ratio. The prior year loss ratio was favorably impacted by COVID-related reduced claim frequency primarily in the automobile portfolios in North America and Latin America of 1.0 percentage point.
- Consolidated net premiums written were \$10.5 billion, up 15.8 percent, or 14.2 percent in constant dollars, comprising positive growth in both commercial P&C lines and consumer lines of 22.0 percent and 3.1 percent, respectively.
- Consolidated net premiums earned were \$10.0 billion, up 14.1 percent, or 12.6 percent in constant dollars, comprising positive growth in both commercial P&C lines and consumer lines of 21.1 percent and 0.8 percent, respectively.
- Net investment income was \$866 million compared with \$840 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 decreased by \$744 million in the quarter, primarily reflecting total capital returned to shareholders in the quarter of \$1.9 billion, including share repurchases of \$1.5 billion, at an average purchase price of \$180.23 per share, and dividends of \$346 million, and net unrealized losses on investments of \$456 million. Partially offsetting the decrease was net income of \$1.8 billion.

Net Premiums Written	Three Months Ended September 30			% Change C\$ Q-21 vs. Q-20	Nine Months Ended September 30			% Change C\$ YTD-21 vs. YTD-20
	2021	2020	Q-21 vs. Q-20		2021	2020	YTD-21 vs. YTD-20	
(in millions of U.S. dollars, except for percentages)								
Commercial casualty	\$ 1,957	\$ 1,722	13.6 %	12.7 %	\$ 5,215	\$ 4,541	14.9 %	13.9 %
Workers' compensation	488	432	12.8 %	12.8 %	1,597	1,485	7.5 %	7.5 %
Professional liability	1,328	1,103	20.4 %	18.2 %	3,681	3,012	22.2 %	19.6 %
Surety	139	127	8.8 %	6.6 %	435	394	10.4 %	9.4 %
Commercial multiple peril ⁽¹⁾	310	270	14.8 %	14.8 %	889	778	14.2 %	14.2 %
Property and other short-tail lines	1,572	1,270	23.8 %	21.5 %	4,906	3,948	24.3 %	20.5 %
Total Commercial P&C lines	5,794	4,924	17.6 %	16.2 %	16,723	14,158	18.1 %	16.2 %
Agriculture	1,415	986	43.6 %	43.6 %	2,110	1,604	31.6 %	31.6 %
Personal automobile	383	380	0.9 %	(3.4) %	1,134	1,174	(3.4) %	(5.3) %
Personal homeowners	978	955	2.5 %	2.3 %	2,778	2,708	2.6 %	2.1 %
Personal other	454	417	9.0 %	5.4 %	1,386	1,237	12.1 %	7.5 %
Total Personal lines	1,815	1,752	3.7 %	1.8 %	5,298	5,119	3.5 %	1.7 %
Total Property and Casualty lines	9,024	7,662	17.8 %	16.4 %	24,131	20,881	15.6 %	13.8 %
Global A&H lines ⁽²⁾	922	913	0.9 %	(1.4) %	2,855	2,931	(2.6) %	(5.6) %
Reinsurance lines	221	181	22.3 %	20.6 %	702	606	15.9 %	14.4 %
Life	343	322	6.4 %	4.9 %	1,030	992	3.8 %	1.4 %
Total consolidated	\$ 10,510	\$ 9,078	15.8 %	14.2 %	\$ 28,718	\$ 25,410	13.0 %	11.1 %

⁽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 consolidated net premiums written for the three and nine months ended September 30, 2021 reflects growth across most lines of business, comprising commercial lines growth of 22.0 percent and consumer lines growth of 3.1 percent, driven by higher new business, positive rate increases, increased exposure, and strong renewal retention.

- Commercial casualty grew globally, driven by higher new business and positive rate increases, primarily across North America, Europe, and Asia. Additionally, there was increased exposure primarily on in-force policies following the adverse impact of prior year exposure adjustments resulting from the COVID-19 pandemic.
- Workers' compensation growth was due to increased exposure primarily on in-force policies following the adverse impact of prior year exposure adjustments resulting from the COVID-19 pandemic.
- Professional liability grew globally, reflecting higher new business, improved retention and positive rate increases in North America, Asia, and Europe.
- Commercial multiple peril increased due to higher new and renewal business, including exposure increases, in North America.
- Property and other short-tail lines grew due to higher new business, improved retention and positive rate increases in Asia, North America, and Europe.
- Personal lines increased globally primarily reflecting new business and positive rate increases in homeowners' lines in North America and Latin America, and growth in specialty lines in Europe and Asia. Growth was partially offset by declines in automobile lines in North America primarily due to the unfavorable impact of automobile return premiums. Latin America also had declines in automobile lines for the nine months ended September 30, 2021 as a result of continued reduced exposures from the impact of the COVID-19 pandemic, but began to experience modest growth for the three months ended September 30, 2021.
- Global A&H lines began to experience modest growth for the three months ended September 30, 2021, but was unfavorably impacted from less travel volume and reduced consumer activity in Asia and Latin America for the nine

months ended September 30, 2021. Our North American Combined Insurance supplemental A&H business decreased due to 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 in Asia and Latin America, 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 September 30, 2021, net premiums earned increased \$1,235 million, or 14.1 percent, comprising 21.1 percent positive growth in commercial P&C lines and 0.8 percent positive growth in consumer lines. For the nine months ended September 30, 2021, net premiums earned increased \$2,347 million or 9.5 percent, comprising 15.0 percent positive growth in commercial P&C lines and 0.1 percent positive growth in consumer lines.

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.

(in millions of U.S. dollars)	Three Months Ended September 30		Nine Months Ended September 30	
	2021	2020	2021	2020
Catastrophe losses	\$ 1,146	\$ 925	\$ 2,126	\$ 2,969
Favorable prior period development	\$ 321	\$ 146	\$ 781	\$ 189

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

- 2021: Hurricane Ida losses of \$806 million, winter storm losses in the U.S., flooding in Europe, and other severe weather-related events in the U.S. and internationally.
- 2020: COVID-19 pandemic claims of \$1,378 million, severe weather-related events in the U.S. and internationally, and civil unrest-related losses 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 September 30, 2021 was \$321 million, including adverse development of \$33 million related to legacy environmental exposures. Excluding the adverse development, we had favorable development of \$354 million with 30 percent in long-tail lines, principally from accident years 2017 and prior, and 70 percent in short-tail lines, primarily in homeowners and property lines.

Pre-tax net favorable PPD for the nine months ended September 30, 2021 was \$781 million, including adverse development of \$33 million related to legacy environmental exposures and \$68 million for molestation claims. Excluding the adverse development, we had favorable development of \$882 million with 27 percent in long-tail lines, principally from accident years 2017 and prior, and 73 percent in short-tail lines, primarily in homeowners, accident and health, property, and surety lines.

Pre-tax net adverse PPD for the three months ended September 30, 2020 was \$146 million, including adverse development of \$35 million related to legacy environmental exposures. The remaining favorable development of \$181 million comprises \$312

million of favorable development from long-tail lines, principally from accident years 2016 and prior, and adverse development of \$131 million in short-tail lines.

Pre-tax net favorable prior period development for the nine months ended September 30, 2020 was \$189 million, including adverse development of \$259 million for U.S. child molestation claims, predominately reviver statute-related and \$35 million adverse development related to legacy environmental exposures. The remaining favorable development of \$483 million principally comprises favorable development from long-tail lines, principally from accident years 2016 and prior.

Refer to the prior period development discussion in Note 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 September 30		Nine Months Ended September 30	
	2021	2020	2021	2020
Loss and loss expense ratio				
CAY loss ratio excluding catastrophe losses	60.1 %	59.7 %	58.7 %	59.4 %
Catastrophe losses	12.2 %	11.3 %	8.4 %	12.9 %
Prior period development	(3.7)%	(1.8)%	(3.2)%	(0.8)%
Loss and loss expense ratio	68.6 %	69.2 %	63.9 %	71.5 %
Policy acquisition cost ratio	17.1 %	18.0 %	18.3 %	18.8 %
Administrative expense ratio	7.7 %	8.0 %	8.2 %	8.6 %
P&C Combined ratio	93.4 %	95.2 %	90.4 %	98.9 %

The decrease in the loss and loss expense ratio for the three and nine months ended September 30, 2021 was primarily due to higher favorable prior period development.

The CAY loss ratio excluding catastrophe losses increased 0.4 percentage points for the three months ended September 30, 2021. The prior year loss ratio was favorably impacted by a COVID-related reduced claim frequency benefit of 1.0 percentage point primarily in the automobile portfolios in North America and Latin America. Excluding this prior year benefit, the CAY loss ratio excluding catastrophe losses decreased 0.6 percentage points reflecting underlying loss ratio improvement.

The CAY loss ratio excluding catastrophe losses decreased 0.7 percentage points for the nine months ended September 30, 2021 reflecting underlying loss ratio improvement. The prior year loss ratio was favorably impacted by a COVID-related reduced claim frequency benefit of 0.3 percentage point. Excluding this prior year benefit, the CAY loss ratio excluding catastrophe losses decreased 1.0 percentage point reflecting underlying loss ratio improvement.

The policy acquisition cost ratio decreased 0.9 percentage points and 0.5 percentage points for the three and nine months ended September 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 0.3 percentage points and 0.4 percentage points for the three and nine months ended September 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 September 30, 2021 and 2020, Policy benefits were \$151 million and \$198 million, respectively, which included separate account liabilities (gains) losses of \$(24) million and \$24 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 \$175 million and \$174 million for the three months ended September 30, 2021 and 2020, respectively, reflecting growth in our International Life operations, offset by a decline in our Combined Insurance North America supplemental accident and health business and our life reinsurance business.

For the nine months ended September 30, 2021 and 2020, Policy benefits were \$503 million and \$550 million, which included separate account liabilities (gains) losses of \$(5) million and \$8 million, respectively. Excluding the separate account gains and losses, Policy benefits were \$508 million and \$542 million for the nine months ended September 30, 2021 and 2020, respectively, reflecting growth in our International Life operations, offset by a decline in our Combined Insurance North America supplemental accident and health business and our life reinsurance business.

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 Nine Months Ended September 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).

(in millions of U.S. dollars, except for percentages)	Three Months Ended			Nine Months Ended		
	2021	September 30 2020	% Change Q-21 vs. Q-20	2021	September 30 2020	% Change YTD-21 vs. YTD-20
Net premiums written	\$ 4,369	\$ 3,778	15.6 %	\$ 12,318	\$ 10,750	14.6 %
Net premiums earned	3,954	3,456	14.4 %	11,431	10,427	9.6 %
Losses and loss expenses	2,754	2,444	12.7 %	7,740	8,123	(4.7) %
Policy acquisition costs	537	489	9.7 %	1,540	1,452	6.0 %
Administrative expenses	273	243	11.8 %	772	751	2.7 %
Underwriting income	390	280	39.9 %	1,379	101	NM
Net investment income	507	510	(0.7) %	1,582	1,544	2.5 %
Other (income) expense	8	7	17.6 %	24	19	31.9 %
Segment income	\$ 889	\$ 783	13.6 %	\$ 2,937	\$ 1,626	80.6 %
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	62.3 %	63.8 %	(1.5) pts	63.1 %	64.7 %	(1.6) pts
Catastrophe losses	11.9 %	12.9 %	(1.0) pts	8.7 %	17.6 %	(8.9) pts
Prior period development	(4.5)%	(6.0)%	1.5 pts	(4.1)%	(4.4)%	0.3 pts
Loss and loss expense ratio	69.7 %	70.7 %	(1.0) pts	67.7 %	77.9 %	(10.2) pts
Policy acquisition cost ratio	13.5 %	14.2 %	(0.7) pts	13.5 %	13.9 %	(0.4) pts
Administrative expense ratio	6.9 %	7.0 %	(0.1) pts	6.7 %	7.2 %	(0.5) pts
Combined ratio	90.1 %	91.9 %	(1.8) pts	87.9 %	99.0 %	(11.1) pts

NM - not meaningful

Catastrophe Losses and Prior Period Development

(in millions of U.S. dollars)	Three Months Ended		Nine Months Ended	
	September 30 2021	September 30 2020	September 30 2021	September 30 2020
Catastrophe losses	\$ 472	\$ 447	\$ 999	\$ 1,838
Favorable prior period development	\$ 157	\$ 200	\$ 440	\$ 451

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

- 2021: Hurricane Ida losses of \$391 million, 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., and natural catastrophes including Nashville, Tennessee tornado, Hurricane Laura, Hurricane Sally, Tropical Storm Isaias, Midwest derecho, U.S. wildfires, 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 \$591 million, or 15.6 percent, and \$1,568 million, or 14.6 percent, for the three and nine months ended September 30, 2021, respectively, comprising:

- Commercial P&C lines: Positive growth of 16.6 percent and 15.9 percent, respectively, reflecting strong new business written, positive rate increases, and strong premium retention across a number of retail and wholesale lines, including financial lines, primary and excess casualty, and property.
- Consumer lines: Negative growth of 3.9 percent and 10.9 percent, respectively, principally from exposure declines in A&H.

Net premiums earned increased \$498 million, or 14.4 percent, and \$1,004 million, or 9.6 percent for the three and nine months ended September 30, 2021, respectively, reflecting the growth in net premiums written described above.

Combined Ratio

The loss and loss expense ratio and the CAY loss ratio excluding catastrophe losses decreased for the three and nine months ended September 30, 2021, due to underlying loss ratio improvement. The loss and loss expense ratio for the nine months ended September 30, 2021 was also impacted by lower catastrophe losses compared to the prior year which included significant losses related to the COVID-19 pandemic and the favorable impact of lower year-over-year large structured transactions written.

The policy acquisition cost ratio decreased 0.7 percentage point and 0.4 percentage point for the three and nine months ended September 30, 2021, respectively, reflecting lower commissions and a change in mix of business towards lines that have a lower acquisition cost ratio. The decrease in the policy acquisition ratio for the nine months ended, September 30, 2021 was partially offset by the impact of lower year-over-year structured transactions noted above.

The administrative expense ratio decreased 0.1 percentage point and 0.5 percentage point for the three and nine months ended September 30, 2021, respectively, primarily due to the favorable impact of higher net premiums earned, partially offset by increased spending to support growth.

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.

(in millions of U.S. dollars, except for percentages)	Three Months Ended			Nine Months Ended		
	2021	September 30 2020	% Change Q-21 vs. Q-20	2021	September 30 2020	% Change YTD-21 vs. YTD-20
Net premiums written	\$ 1,300	\$ 1,285	1.2 %	\$ 3,761	\$ 3,719	1.1 %
Net premiums earned	1,244	1,231	1.0 %	3,652	3,623	0.8 %
Losses and loss expenses	846	961	(12.0) %	2,341	2,406	(2.7) %
Policy acquisition costs	254	248	2.3 %	746	724	3.1 %
Administrative expenses	73	65	11.7 %	200	199	0.2 %
Underwriting income	71	(43)	NM	365	294	24.2 %
Net investment income	60	64	(7.9) %	189	195	(3.4) %
Other (income) expense	1	1	—	(3)	4	NM
Amortization of purchased intangibles	2	2	—	8	8	—
Segment income	\$ 128	\$ 18	NM	\$ 549	\$ 477	15.1 %
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	50.7 %	49.2 %	1.5 pts	52.5 %	53.0 %	(0.5) pts
Catastrophe losses	31.9 %	24.7 %	7.2 pts	18.9 %	12.0 %	6.9 pts
Prior period development	(14.6)%	4.2 %	(18.8) pts	(7.3)%	1.4 %	(8.7) pts
Loss and loss expense ratio	68.0 %	78.1 %	(10.1) pts	64.1 %	66.4 %	(2.3) pts
Policy acquisition cost ratio	20.4 %	20.1 %	0.3 pts	20.4 %	20.0 %	0.4 pts
Administrative expense ratio	5.9 %	5.3 %	0.6 pts	5.5 %	5.5 %	— pts
Combined ratio	94.3 %	103.5 %	(9.2) pts	90.0 %	91.9 %	(1.9) pts

NM - not meaningful

Catastrophe Losses and Prior Period Development

(in millions of U.S. dollars)	Three Months Ended		Nine Months Ended	
	September 30 2021	September 30 2020	September 30 2021	September 30 2020
Catastrophe losses	\$ 397	\$ 305	\$ 698	\$ 436
Favorable (unfavorable) prior period development	\$ 182	\$ (48)	\$ 266	\$ (48)

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

- 2021: Hurricane Ida losses of \$281 million, winter storm losses and other severe weather-related events in the U.S.
- 2020: U.S. wildfires, Tropical Storm Isaias, Midwest derecho, Hurricane Sally, Hurricane Laura, 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 \$15 million, or 1.2 percent, and \$42 million, or 1.1 percent for the three and nine months ended September 30, 2021, respectively, primarily driven by new business and strong renewal retention, from both rate and exposure increases in homeowners. Partially offsetting the increase were cancellations in parts of California exposed to wildfires, and the unfavorable impact of automobile return premiums.

Net premiums earned increased \$13 million, or 1.0 percent, and \$29 million, or 0.8 percent for the three and nine months ended September 30, 2021, respectively, reflecting the growth in net premiums written described above.

Combined Ratio

The loss and loss expense ratio decreased for the three and nine months ended September 30, 2021, reflecting higher favorable prior period development, partially offset by higher catastrophe losses. The CAY loss ratio excluding catastrophe losses increased for the three months ended September 30, 2021 and decreased for the nine months ended September 30, 2021. The prior year loss ratio was favorably impacted by a COVID-related reduced claim frequency benefit of 3.3 percentage points and 1.1 percentage points, respectively, in the automobile portfolio. Excluding this prior year benefit, the CAY loss ratio excluding catastrophe losses decreased reflecting underlying loss ratio improvement in homeowners.

The policy acquisition cost ratio increased 0.3 percentage point and 0.4 percentage point for the three and nine months ended September 30, 2021, respectively, primarily due to lower ceded commissions. The nine months ended September 30, 2021 was also impacted by a favorable commission accrual adjustment in the prior year.

The administrative expense ratio increased 0.6 percentage point for the three months ended September 30, 2021 primarily due to increased spending to support growth and was flat for the nine months ended September 30, 2021.

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.

(in millions of U.S. dollars, except for percentages)	Three Months Ended			Nine Months Ended		
	2021	September 30 2020	% Change Q-21 vs. Q-20	2021	September 30 2020	% Change YTD-21 vs. YTD-20
Net premiums written	\$ 1,415	\$ 986	43.6 %	\$ 2,110	\$ 1,604	31.6 %
Net premiums earned	1,338	971	37.9 %	1,858	1,441	29.0 %
Losses and loss expenses	1,138	845	34.6 %	1,554	1,223	27.0 %
Policy acquisition costs	61	56	9.1 %	100	96	4.5 %
Administrative expenses	4	5	4.1 %	10	12	(11.9) %
Underwriting income	135	65	107.3 %	194	110	76.0 %
Net investment income	6	7	(0.8) %	21	23	(6.3) %
Other (income) expense	—	—	—	—	1	NM
Amortization of purchased intangibles	7	7	—	20	20	—
Segment income	\$ 134	\$ 65	107.5 %	\$ 195	\$ 112	74.1 %
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	84.0 %	84.2 %	(0.2) pts	82.3 %	83.0 %	(0.7) pts
Catastrophe losses	0.6 %	1.0 %	(0.4) pts	1.1 %	1.7 %	(0.6) pts
Prior period development	0.4 %	1.9 %	(1.5) pts	0.2 %	0.2 %	— pts
Loss and loss expense ratio	85.0 %	87.1 %	(2.1) pts	83.6 %	84.9 %	(1.3) pts
Policy acquisition cost ratio	4.6 %	5.8 %	(1.2) pts	5.4 %	6.6 %	(1.2) pts
Administrative expense ratio	0.3 %	0.4 %	(0.1) pts	0.6 %	0.8 %	(0.2) pts
Combined ratio	89.9 %	93.3 %	(3.4) pts	89.6 %	92.3 %	(2.7) pts

NM - not meaningful

Catastrophe Losses and Prior Period Development

(in millions of U.S. dollars)	Three Months Ended September 30		Nine Months Ended September 30	
	2021	2020	2021	2020
Catastrophe losses	\$ 8	\$ 10	\$ 20	\$ 24
Unfavorable prior period development	\$ (7)	\$ (18)	\$ (5)	\$ (4)

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

Premiums

Net premiums written increased \$429 million, or 43.6 percent, and \$506 million, or 31.6 percent for the three and nine months ended September 30, 2021, respectively, due mainly to an increase in MPCl, reflecting higher commodity prices and volatility factors, both of which impact pricing, as well as higher reported acreage from policyholders and policy count growth. In addition, our Chubb Agribusiness unit contributed to the net premiums written increase with strong new business growth.

Net premiums earned increased \$367 million, or 37.9 percent, and \$417 million, or 29.0 percent for the three and nine months ended September 30, 2021, respectively, reflecting the growth in net premiums written described above.

Combined Ratio

The loss and loss expense ratio and the CAY loss ratio excluding catastrophe losses decreased for the three and nine months ended September 30, 2021, primarily due to higher net premiums earned from MPCl, partially offset by the unfavorable impact of a commodity hedge loss in the current period.

The policy acquisition cost ratio decreased 1.2 percentage points for both the three and nine months ended September 30, 2021, primarily due to the favorable impact of higher net premiums earned. The policy acquisition cost ratio for the nine months ended September 30, 2021 also benefited from a lower year-over-year amount of supplemental commissions in our Chubb Agribusiness unit.

The administrative expense ratio decreased 0.1 percentage point and 0.2 percentage point for the three and nine months ended September 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.

(in millions of U.S. dollars, except for percentages)	Three Months Ended			Nine Months Ended		
	2021	September 30 2020	% Change Q-21 vs. Q-20	2021	September 30 2020	% Change YTD-21 vs. YTD-20
Net premiums written	\$ 2,596	\$ 2,238	15.9 %	\$ 7,983	\$ 6,857	16.4 %
Net premiums written - constant dollars			11.2 %			10.8 %
Net premiums earned	2,664	2,337	13.9 %	7,721	6,838	12.9 %
Losses and loss expenses	1,487	1,192	24.6 %	3,936	3,935	—
Policy acquisition costs	703	637	10.2 %	2,070	1,903	8.7 %
Administrative expenses	266	260	2.3 %	811	759	6.9 %
Underwriting income	208	248	(15.9) %	904	241	275.5 %
Net investment income	157	130	20.9 %	447	396	12.7 %
Other (income) expense	—	1	(100.0) %	3	10	(73.3) %
Amortization of purchased intangibles	11	10	8.1 %	36	33	10.6 %
Segment income	\$ 354	\$ 367	(3.5) %	\$ 1,312	\$ 594	120.8 %
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	49.8 %	49.5 %	0.3 pts	50.1 %	50.6 %	(0.5) pts
Catastrophe losses	7.0 %	4.1 %	2.9 pts	3.6 %	8.5 %	(4.9) pts
Prior period development	(1.0)%	(2.6)%	1.6 pts	(2.7)%	(1.5)%	(1.2) pts
Loss and loss expense ratio	55.8 %	51.0 %	4.8 pts	51.0 %	57.6 %	(6.6) pts
Policy acquisition cost ratio	26.4 %	27.3 %	(0.9) pts	26.8 %	27.8 %	(1.0) pts
Administrative expense ratio	10.0 %	11.1 %	(1.1) pts	10.5 %	11.1 %	(0.6) pts
Combined ratio	92.2 %	89.4 %	2.8 pts	88.3 %	96.5 %	(8.2) pts

Catastrophe Losses and Prior Period Development

(in millions of U.S. dollars)	Three Months Ended		Nine Months Ended	
	2021	September 30 2020	2021	September 30 2020
Catastrophe losses	\$ 188	\$ 95	\$ 278	\$ 584
Favorable prior period development	\$ 28	\$ 60	\$ 209	\$ 100

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

- 2021: Flooding in Europe, Hurricane Ida, winter storm losses and international weather-related events
- 2020: COVID-19 pandemic claims of \$373 million, storms in Australia, Australia wildfires, Hurricane Laura, Hurricane Sally, Tropical Storm Isaias, 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 September 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	\$ 1,173	45 %	\$ 955	43 %	\$ 1,002	22.7 %	17.1 %
Latin America	501	20 %	442	20 %	464	13.1 %	7.8 %
Asia	862	33 %	794	35 %	819	8.5 %	5.1 %
Other ⁽¹⁾	60	2 %	47	2 %	48	29.7 %	25.9 %
Net premiums written	\$ 2,596	100 %	\$ 2,238	100 %	\$ 2,333	15.9 %	11.2 %

Nine months ended September 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	\$ 3,912	49 %	\$ 3,111	45 %	\$ 3,309	25.7 %	18.2 %
Latin America	1,489	18 %	1,414	21 %	1,439	5.3 %	3.5 %
Asia	2,448	31 %	2,203	32 %	2,320	11.1 %	5.5 %
Other ⁽¹⁾	134	2 %	129	2 %	135	4.2 %	(0.8)%
Net premiums written	\$ 7,983	100 %	\$ 6,857	100 %	\$ 7,203	16.4 %	10.8 %

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

Premiums

Overall, net premiums written increased for the three and nine months ended September 30, 2021, reflecting growth in commercial P&C lines of 20.6 percent and 23.8 percent, or 16.0 percent and 17.8 percent on a constant-dollar basis, respectively, and growth in consumer lines of 9.2 percent and 6.4 percent, or 4.5 percent and 1.3 percent on a constant-dollar basis, respectively.

Growth in Europe, Middle East and Africa of 17.1 percent and 18.2 percent on a constant-dollar basis for the three and nine months ended September 30, 2021, respectively, was primarily driven by higher new business, higher retention and positive rate increases in commercial P&C lines, including commercial casualty, professional liability and property.

Latin America increased 7.8 percent on a constant-dollar basis for the three months ended September 30, 2021 driven by higher new business in homeowners and A&H. The prior year included the adverse impact of restrictions resulting from the COVID-19 pandemic in automobile and A&H. Latin America increased 3.5 percent on a constant-dollar basis for the nine months ended September 30, 2021 due to growth in commercial P&C lines.

Asia growth of 5.1 percent and 5.5 percent on a constant-dollar basis for the three and nine months ended September 30, 2021, respectively, was primarily driven by higher new business, higher retention and positive rate increases in commercial P&C lines, including professional liability and property.

Net premiums earned increased \$327 million and \$883 million, or \$237 million and \$542 million on a constant-dollar basis, for the three and nine months ended September 30, 2021, respectively, reflecting the increase in commercial P&C net premiums written described above.

Combined Ratio

The loss and loss expense ratio increased for the three months ended September 30, 2021, primarily due to higher catastrophe losses and lower favorable prior period development. The loss and loss expense ratio decreased for the nine months ended September 30, 2021, primarily from lower catastrophe losses and higher favorable prior period development. The CAY loss ratio excluding catastrophe losses increased for the three months ended September 30, 2021 and decreased for the nine months ended September 30, 2021. The prior year loss ratio was favorably impacted by a COVID-related reduced claim frequency benefit of 1.7 percentage points and 0.6 percentage point for the three and nine months ended September 30, 2020, respectively, primarily in the automobile portfolio in Latin America. Excluding this prior year benefit, the CAY loss ratio excluding catastrophe losses decreased for the three and nine months ended September 30, 2021, reflecting underlying loss ratio improvement, partially offset by lower premiums earned from A&H lines which have a lower loss ratio.

The policy acquisition cost ratio decreased 0.9 percentage point and 1.0 percentage point for the three and nine months ended September 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 1.1 percentage points and 0.6 percentage point for the three and nine months ended September 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.

(in millions of U.S. dollars, except for percentages)	Three Months Ended			Nine Months Ended		
	2021	September 30 2020	% Change Q-21 vs. Q-20	2021	September 30 2020	% Change YTD-21 vs. YTD-20
Net premiums written	\$ 221	\$ 181	22.3 %	\$ 702	\$ 606	15.9 %
Net premiums written - constant dollars			20.6 %			14.4 %
Net premiums earned	211	171	23.8 %	583	520	12.2 %
Losses and loss expenses	192	154	26.0 %	422	314	34.7 %
Policy acquisition costs	55	40	36.8 %	147	127	15.6 %
Administrative expenses	9	9	—	27	28	(2.7) %
Underwriting income (loss)	(45)	(32)	45.0 %	(13)	51	NM
Net investment income	99	85	17.6 %	250	214	17.1 %
Other (income) expense	—	—	—	—	1	NM
Segment income	\$ 54	\$ 53	3.0 %	\$ 237	\$ 264	(10.0) %
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	52.0 %	49.7 %	2.3 pts	50.5 %	49.0 %	1.5 pts
Catastrophe losses	41.7 %	42.0 %	(0.3) pts	24.2 %	16.3 %	7.9 pts
Prior period development	(2.5)%	(2.1)%	(0.4) pts	(2.3)%	(5.0)%	2.7 pts
Loss and loss expense ratio	91.2 %	89.6 %	1.6 pts	72.4 %	60.3 %	12.1 pts
Policy acquisition cost ratio	26.0 %	23.5 %	2.5 pts	25.2 %	24.5 %	0.7 pts
Administrative expense ratio	4.2 %	5.2 %	(1.0) pts	4.6 %	5.3 %	(0.7) pts
Combined ratio	121.4 %	118.3 %	3.1 pts	102.2 %	90.1 %	12.1 pts

NM - not meaningful

Catastrophe Losses and Prior Period Development

(in millions of U.S dollars)	Three Months Ended September 30		Nine Months Ended September 30	
	2021	2020	2021	2020
Catastrophe losses	\$ 81	\$ 68	\$ 131	\$ 81
Favorable prior period development	\$ 4	\$ 6	\$ 11	\$ 29

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

- 2021: Severe weather-related events in the U.S. and Canada, including Hurricane Ida and winter storms
- 2020: COVID-19 pandemic claims of \$10 million, Hurricane Laura, Hurricane Sally, Tropical Storm Isaias, and other severe weather-related events in Canada and 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 \$40 million and \$96 million for the three and nine months ended September 30, 2021, respectively, primarily from new business written and positive rate increases.

Net premiums earned increased \$40 million and \$63 million for the three and nine months ended September 30, 2021, respectively, primarily reflecting the increase in net premiums written described above.

Combined Ratio

The loss and loss expense ratio increased 1.6 percentage points for the three months ended September 30, 2021, primarily due to a shift in the mix of business towards lines which have a higher loss ratio, and increased 12.1 percentage points for the nine months ended September 30, 2021, primarily due to higher catastrophe losses and lower favorable prior period development. The CAY loss ratio excluding catastrophe losses increased 2.3 percentage points and 1.5 percentage points, for the three and nine months ended September 30, 2021, respectively, also primarily due to a shift in the mix of business towards lines which have a higher loss ratio.

The policy acquisition cost ratio increased 2.5 percentage points and 0.7 percentage points for the three and nine months ended September 30, 2021, respectively, primarily due to favorable expense adjustments in the prior year. Additionally, the increase for the three months ended September 30, 2020 was also due to a shift in mix of business towards lines that have higher acquisition costs.

The administrative expense ratio decreased 1.0 percentage point and 0.7 percentage points for the three and nine months ended September 30, 2021, respectively, 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.

(in millions of U.S. dollars, except for percentages)	Three Months Ended			% Change Q-21 vs. Q-20	Nine Months Ended		
	September 30				September 30		
	2021	2020		2021	2020	YTD-21 vs. YTD-20	% Change
Net premiums written	\$ 609	\$ 610		\$ 1,844	\$ 1,874		(1.5) %
Net premiums written - constant dollars			(1.4) %				(3.4) %
Net premiums earned	589	599	(1.6) %	1,789	1,838		(2.6) %
Losses and loss expenses	179	183	(1.8) %	562	556		1.5 %
Policy benefits	175	174	0.4 %	508	542		(6.3) %
Policy acquisition costs	168	175	(3.2) %	538	551		(2.2) %
Administrative expenses	82	80	1.8 %	247	238		3.9 %
Net investment income	102	95	7.2 %	301	285		5.7 %
Life Insurance underwriting income	87	82	6.6 %	235	236		(0.2) %
Other (income) expense	(19)	(23)	(19.1) %	(79)	(52)		50.6 %
Amortization of purchased intangibles	2	1	13.3 %	4	3		10.3 %
Segment income	\$ 104	\$ 104	—	\$ 310	\$ 285		9.0 %

Premiums

Net premiums written was relatively flat and decreased slightly for the three and nine months ended September 30, 2021, respectively, including growth of 14.8 percent and 12.0 percent, respectively, in our International Life operations, principally in Asia, from new business in Taiwan, Vietnam and Thailand, and in Latin America. This growth was offset by a decline in our North America Combined Insurance business of 7.3 percent and 7.5 percent for the three and nine months ended September 30, 2021, respectively, due to the adverse impact of the COVID-19 pandemic on face-to-face and worksite sales, and 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					Nine Months Ended				
	September 30			Q-21 vs. Q-20	% Change C\$ Q-21 vs. Q-20	September 30			Y-21 vs. Y-20	% Change C\$ Y-21 vs. Y-20
2021	2020	C\$ 2020	2021			2020	C\$ 2020			
Deposits collected on Universal life and investment contracts	\$ 658	\$ 363	\$ 380	81.3 %	73.0 %	\$ 1,814	\$ 1,115	\$ 1,173	62.7 %	54.5 %

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 \$295 million and \$699 million for the three and nine months ended September 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 \$5 million for the three months ended September 30, 2021, primarily due to higher net investment income. Life Insurance underwriting income was relatively flat for the nine months ended September 30, 2021. Segment income was relatively flat for the three months ended September 30, 2021. Segment income increased \$25 million for the nine months ended September 30, 2021, 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			Nine Months Ended		
	September 30		% Change	September 30		% Change
	2021	2020	Q-21 vs. Q-20	2021	2020	YTD-21 vs. YTD-20
Losses and loss expenses	\$ 43	\$ 55	(21.3) %	\$ 141	\$ 342	(58.7)%
Administrative expenses	99	71	40.3 %	258	214	20.6 %
Underwriting loss	142	126	13.6 %	399	556	(28.1)%
Net investment income (loss)	(10)	(19)	(47.6) %	(42)	(65)	(35.0)%
Interest expense	122	130	(6.3) %	366	390	(6.3)%
Net realized gains (losses)	(11)	(142)	(92.2) %	841	(1,067)	NM
Other (income) expense	(722)	(415)	73.2 %	(1,845)	(283)	NM
Amortization of purchased intangibles	49	52	(3.6) %	148	153	(3.0)%
Income tax expense	218	142	53.4 %	873	295	195.7 %
Net income (loss)	\$ 170	\$ (196)	NM	\$ 858	\$ (2,243)	NM

NM - not meaningful

Losses and loss expenses for the three months ended September 30, 2021 and 2020 were primarily from adverse development relating to our Brandywine environmental exposures of \$33 million and \$35 million, respectively. Losses and loss expenses for the nine months ended September 30, 2020, also includes \$254 million for U.S. child molestation claims, predominantly reviver statute-related.

Administrative expenses increased \$28 million and \$44 million for the three and nine months ended September 30, 2021, respectively, primarily due to higher employee-related expenses and 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). Refer to Note 11 to the Consolidated Financial Statements for additional information on Other (income) expense.

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 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):

(in millions of U.S. dollars)	2021			Three Months Ended September 30		
	Net Realized Gains (Losses)	Net Unrealized Gains (Losses)	Net Impact	Net Realized Gains (Losses)	Net Unrealized Gains (Losses)	Net Impact
Fixed maturities	\$ (10)	\$ (554)	\$ (564)	\$ 49	\$ 638	\$ 687
Fixed income and equity derivatives	(9)	—	(9)	9	—	9
Public equity						
Sales	19	—	19	34	—	34
Mark-to-market	(61)	—	(61)	(34)	—	(34)
Private equity (less than 3 percent ownership)						
Mark-to-market	11	—	11	31	—	31
Total investment portfolio	(50)	(554)	(604)	89	638	727
Mark-to-market from variable annuity reinsurance derivative transactions, net of applicable hedges	(63)	—	(63)	(6)	—	(6)
Other derivatives	(10)	—	(10)	1	—	1
Foreign exchange	106	(414)	(308)	(222)	246	24
Other	(4)	4	—	(3)	(23)	(26)
Net gains (losses), pre-tax	\$ (21)	\$ (964)	\$ (985)	\$ (141)	\$ 861	\$ 720

(in millions of U.S. dollars)	2021			Nine Months Ended September 30		
	Net Realized Gains (Losses)	Net Unrealized Gains (Losses)	Net Impact	Net Realized Gains (Losses)	Net Unrealized Gains (Losses)	Net Impact
Fixed maturities	\$ 26	\$ (2,177)	\$ (2,151)	\$ (303)	\$ 1,759	\$ 1,456
Fixed income and equity derivatives	9	—	9	38	—	38
Public equity						
Sales	109	—	109	197	—	197
Mark-to-market	366	—	366	(78)	—	(78)
Private equity (less than 3 percent ownership)						
Mark-to-market	111	—	111	(71)	—	(71)
Total investment portfolio	621	(2,177)	(1,556)	(217)	1,759	1,542
Mark-to-market from variable annuity reinsurance derivative transactions, net of applicable hedges	140	—	140	(456)	—	(456)
Other derivatives	(8)	—	(8)	(2)	—	(2)
Foreign exchange	85	(84)	1	(351)	(168)	(519)
Other	(5)	(33)	(38)	(43)	(59)	(102)
Net gains (losses), pre-tax	\$ 833	\$ (2,294)	\$ (1,461)	\$ (1,069)	\$ 1,532	\$ 463

Pre-tax net losses of \$604 million in our investment portfolio for the three months ended September 30, 2021 were principally the result of an increase in interest rates. Pre-tax net losses of \$1,556 million in our investment portfolio for the nine months ended September 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 \$63 million for the three months ended September 30, 2021, reflecting a net loss of \$59 million, primarily from an increase in the fair value of the GLB liabilities due to underperformance in certain equity markets, partially offset by an increase in interest rates, and a net realized loss of \$4 million related to these other derivatives. For the nine months ended September 30, 2021, the variable annuity reinsurance derivative transactions resulted in net realized gains of \$140 million reflecting a net gain of \$252 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 \$112 million related to these other derivatives.

For the three months ended September 30, 2020, the variable annuity reinsurance derivative transactions resulted in realized losses of \$6 million, reflecting a net decrease in the fair value of the GLB liabilities of \$46 million due to higher equity markets, particularly in the U.S., and a net realized loss of \$52 million related to these other derivatives. For the nine months ended September 30, 2020, the variable annuity reinsurance derivative transactions resulted in realized losses of \$456 million reflecting a net increase in the fair value of the GLB liabilities of \$426 million due to lower interest rates and lower international equity markets and a net realized loss of \$30 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 nine months ended September 30, 2021 our ETR was 10.7 percent and 12.0 percent, respectively. This compares to an ETR of 10.7 percent and 20.9 percent for the three and nine months ended September 30, 2020, respectively. The ETR for each period in both years was impacted by our mix of earnings among various jurisdictions and discrete tax benefits.

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. Reference to the year-over-year improvement of 0.6 percentage point and 1.0 percentage point in the P&C CAY excluding catastrophe loss ratio for the three and nine months ended September 30, 2021, respectively, is calculated by adjusting the prior year ratio to exclude the COVID-related reduced claim frequency impact. We believe this information is meaningful to evaluate trends in the underlying business on a comparable basis.

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 CATs and PPD:

Three Months Ended								
September 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 \$	2,754	\$ 846	\$ 1,138	\$ 1,487	\$ 192	\$ 43	\$ 6,460
Catastrophe losses and related adjustments								
Catastrophe losses, net of related adjustments		(472)	(397)	(8)	(188)	(81)	—	(1,146)
Reinstatement premiums collected (expensed) on catastrophe losses		—	—	—	—	12	—	12
Catastrophe losses, gross of related adjustments		(472)	(397)	(8)	(188)	(93)	—	(1,158)
PPD and related adjustments								
PPD, net of related adjustments - favorable (unfavorable)		157	182	(7)	28	4	(43)	321
Net premiums earned adjustments on PPD - unfavorable (favorable)		56	—	—	—	—	—	56
Expense adjustments - unfavorable (favorable)		3	—	—	—	—	—	3
PPD reinstatement premiums - unfavorable (favorable)		—	(2)	—	—	3	—	1
PPD, gross of related adjustments - favorable (unfavorable)		216	180	(7)	28	7	(43)	381
CAY loss and loss expense ex CATs	B \$	2,498	\$ 629	\$ 1,123	\$ 1,327	\$ 106	\$ —	\$ 5,683
Policy acquisition costs and administrative expenses								
Policy acquisition costs and administrative expenses	C \$	810	\$ 327	\$ 65	\$ 969	\$ 64	\$ 99	\$ 2,334
Expense adjustments - favorable (unfavorable)		(3)	—	—	—	—	—	(3)
Policy acquisition costs and administrative expenses, adjusted	D \$	807	\$ 327	\$ 65	\$ 969	\$ 64	\$ 99	\$ 2,331
Denominator								
Net premiums earned	E \$	3,954	\$ 1,244	\$ 1,338	\$ 2,664	\$ 211		\$ 9,411
Reinstatement premiums (collected) expensed on catastrophe losses		—	—	—	—	(12)		(12)
Net premiums earned adjustments on PPD - unfavorable (favorable)		56	—	—	—	—		56
PPD reinstatement premiums - unfavorable (favorable)		—	(2)	—	—	3		1
Net premiums earned excluding adjustments	F \$	4,010	\$ 1,242	\$ 1,338	\$ 2,664	\$ 202		\$ 9,456
P&C Combined ratio								
Loss and loss expense ratio	A/E	69.7 %	68.0 %	85.0 %	55.8 %	91.2 %		68.6 %
Policy acquisition cost and administrative expense ratio	C/E	20.4 %	26.3 %	4.9 %	36.4 %	30.2 %		24.8 %
P&C Combined ratio		90.1 %	94.3 %	89.9 %	92.2 %	121.4 %		93.4 %
CAY P&C Combined ratio ex CATs								
Loss and loss expense ratio, adjusted	B/F	62.3 %	50.7 %	84.0 %	49.8 %	52.0 %		60.1 %
Policy acquisition cost and administrative expense ratio, adjusted	D/F	20.1 %	26.3 %	4.9 %	36.4 %	31.5 %		24.7 %
CAY P&C Combined ratio ex CATs		82.4 %	77.0 %	88.9 %	86.2 %	83.5 %		84.8 %
Combined ratio								
Combined ratio								93.3 %
Add: impact of gains and losses on crop derivatives								0.1 %
P&C Combined ratio								93.4 %

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.

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Three Months Ended									
September 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 \$	2,444	\$ 961	\$ 845	\$ 1,192	\$ 154	\$ 55	\$	5,651
Catastrophe losses and related adjustments									
Catastrophe losses, net of related adjustments		(447)	(305)	(10)	(95)	(68)	—		(925)
Reinstatement premiums collected (expensed) on catastrophe losses		—	—	—	—	7	—		7
Catastrophe losses, gross of related adjustments		(447)	(305)	(10)	(95)	(75)	—		(932)
PPD and related adjustments									
PPD, net of related adjustments - favorable (unfavorable)		200	(48)	(18)	60	6	(54)		146
Net premiums earned adjustments on PPD - unfavorable (favorable)		28	—	—	—	—	—		28
Expense adjustments - unfavorable (favorable)		(1)	—	—	—	(2)	—		(3)
PPD reinstatement premiums - unfavorable (favorable)		—	(8)	—	—	—	—		(8)
PPD, gross of related adjustments - favorable (unfavorable)		227	(56)	(18)	60	4	(54)		163
CAY loss and loss expense ex CATs	B \$	2,224	\$ 600	\$ 817	\$ 1,157	\$ 83	\$ 1	\$	4,882
Policy acquisition costs and administrative expenses									
Policy acquisition costs and administrative expenses	C \$	732	\$ 313	\$ 61	\$ 897	\$ 49	\$ 71	\$	2,123
Expense adjustments - favorable (unfavorable)		1	—	—	—	2	—		3
Policy acquisition costs and administrative expenses, adjusted	D \$	733	\$ 313	\$ 61	\$ 897	\$ 51	\$ 71	\$	2,126
Denominator									
Net premiums earned	E \$	3,456	\$ 1,231	\$ 971	\$ 2,337	\$ 171		\$	8,166
Reinstatement premiums (collected) expensed on catastrophe losses		—	—	—	—	(7)			(7)
Net premiums earned adjustments on PPD - unfavorable (favorable)		28	—	—	—	—			28
PPD reinstatement premiums - unfavorable (favorable)		—	(8)	—	—	—			(8)
Net premiums earned excluding adjustments	F \$	3,484	\$ 1,223	\$ 971	\$ 2,337	\$ 164		\$	8,179
P&C Combined ratio									
Loss and loss expense ratio	A/E	70.7 %	78.1 %	87.1 %	51.0 %	89.6 %			69.2 %
Policy acquisition cost and administrative expense ratio	C/E	21.2 %	25.4 %	6.2 %	38.4 %	28.7 %			26.0 %
P&C Combined ratio		91.9 %	103.5 %	93.3 %	89.4 %	118.3 %			95.2 %
CAY P&C Combined ratio ex CATs									
Loss and loss expense ratio, adjusted	B/F	63.8 %	49.2 %	84.2 %	49.5 %	49.7 %			59.7 %
Policy acquisition cost and administrative expense ratio, adjusted	D/F	21.1 %	25.6 %	6.2 %	38.4 %	31.1 %			26.0 %
CAY P&C Combined ratio ex CATs		84.9 %	74.8 %	90.4 %	87.9 %	80.8 %			85.7 %
Combined ratio									
Combined ratio									95.2 %
Add: impact of gains and losses on crop derivatives									—
P&C Combined ratio									95.2 %

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.

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Nine Months Ended

September 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 \$	7,740	\$ 2,341	\$ 1,554	\$ 3,936	\$ 422	\$ 141	\$ 16,134
Catastrophe losses and related adjustments								
Catastrophe losses, net of related adjustments		(999)	(698)	(20)	(278)	(131)	—	(2,126)
Reinstatement premiums collected (expensed) on catastrophe losses		—	(16)	—	—	18	—	2
Catastrophe losses, gross of related adjustments		(999)	(682)	(20)	(278)	(149)	—	(2,128)
PPD and related adjustments								
PPD, net of related adjustments - favorable (unfavorable)		440	266	(5)	209	11	(140)	781
Net premiums earned adjustments on PPD - unfavorable (favorable)		67	—	(2)	—	—	—	65
Expense adjustments - unfavorable (favorable)		6	—	—	—	—	—	6
PPD reinstatement premiums - unfavorable (favorable)		6	(1)	—	7	4	—	16
PPD, gross of related adjustments - favorable (unfavorable)		519	265	(7)	216	15	(140)	868
CAY loss and loss expense ex CATs	B \$	7,260	\$ 1,924	\$ 1,527	\$ 3,874	\$ 288	\$ 1	\$ 14,874
Policy acquisition costs and administrative expenses								
Policy acquisition costs and administrative expenses	C \$	2,312	\$ 946	\$ 110	\$ 2,881	\$ 174	\$ 258	\$ 6,681
Expense adjustments - favorable (unfavorable)		(6)	—	—	—	—	—	(6)
Policy acquisition costs and administrative expenses, adjusted	D \$	2,306	\$ 946	\$ 110	\$ 2,881	\$ 174	\$ 258	\$ 6,675
Denominator								
Net premiums earned	E \$	11,431	\$ 3,652	\$ 1,858	\$ 7,721	\$ 583		\$ 25,245
Reinstatement premiums (collected) expensed on catastrophe losses		—	16	—	—	(18)		(2)
Net premiums earned adjustments on PPD - unfavorable (favorable)		67	—	(2)	—	—		65
PPD reinstatement premiums - unfavorable (favorable)		6	(1)	—	7	4		16
Net premiums earned excluding adjustments	F \$	11,504	\$ 3,667	\$ 1,856	\$ 7,728	\$ 569		\$ 25,324
P&C Combined ratio								
Loss and loss expense ratio	A/E	67.7 %	64.1 %	83.6 %	51.0 %	72.4 %		63.9 %
Policy acquisition cost and administrative expense ratio	C/E	20.2 %	25.9 %	6.0 %	37.3 %	29.8 %		26.5 %
P&C Combined ratio		87.9 %	90.0 %	89.6 %	88.3 %	102.2 %		90.4 %
CAY P&C Combined ratio ex CATs								
Loss and loss expense ratio, adjusted	B/F	63.1 %	52.5 %	82.3 %	50.1 %	50.5 %		58.7 %
Policy acquisition cost and administrative expense ratio, adjusted	D/F	20.1 %	25.8 %	5.9 %	37.3 %	30.5 %		26.4 %
CAY P&C Combined ratio ex CATs		83.2 %	78.3 %	88.2 %	87.4 %	81.0 %		85.1 %
Combined ratio								
Combined ratio								90.4 %
Add: impact of gains and losses on crop derivatives								—
P&C Combined ratio								90.4 %

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.

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Nine Months Ended

September 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 \$	8,123	\$ 2,406	\$ 1,223	\$ 3,935	\$ 314	\$ 342	\$ 16,343
Catastrophe losses and related adjustments								
Catastrophe losses, net of related adjustments		(1,838)	(436)	(24)	(584)	(81)	—	(2,963)
Reinstatement premiums collected (expensed) on catastrophe losses		(3)	(1)	—	(16)	7	—	(13)
Catastrophe losses, gross of related adjustments		(1,835)	(435)	(24)	(568)	(88)	—	(2,950)
PPD and related adjustments								
PPD, net of related adjustments - favorable (unfavorable)		451	(48)	(4)	100	29	(339)	189
Net premiums earned adjustments on PPD - unfavorable (favorable)		32	—	3	—	—	—	35
Expense adjustments - unfavorable (favorable)		(1)	—	—	—	(2)	—	(3)
PPD reinstatement premiums - unfavorable (favorable)		—	(8)	—	—	(1)	—	(9)
PPD, gross of related adjustments - favorable (unfavorable)		482	(56)	(1)	100	26	(339)	212
CAY loss and loss expense ex CATs	B \$	6,770	\$ 1,915	\$ 1,198	\$ 3,467	\$ 252	\$ 3	\$ 13,605
Policy acquisition costs and administrative expenses								
Policy acquisition costs and administrative expenses	C \$	2,203	\$ 923	\$ 108	\$ 2,662	\$ 155	\$ 214	\$ 6,265
Expense adjustments - favorable (unfavorable)		1	—	—	—	2	—	3
Policy acquisition costs and administrative expenses, adjusted	D \$	2,204	\$ 923	\$ 108	\$ 2,662	\$ 157	\$ 214	\$ 6,268
Denominator								
Net premiums earned	E \$	10,427	\$ 3,623	\$ 1,441	\$ 6,838	\$ 520		\$ 22,849
Reinstatement premiums (collected) expensed on catastrophe losses		3	1	—	16	(7)		13
Net premiums earned adjustments on PPD - unfavorable (favorable)		32	—	3	—	—		35
PPD reinstatement premiums - unfavorable (favorable)		—	(8)	—	—	(1)		(9)
Net premiums earned excluding adjustments	F \$	10,462	\$ 3,616	\$ 1,444	\$ 6,854	\$ 512		\$ 22,888
P&C Combined ratio								
Loss and loss expense ratio	A/E	77.9 %	66.4 %	84.9 %	57.6 %	60.3 %		71.5 %
Policy acquisition cost and administrative expense ratio	C/E	21.1 %	25.5 %	7.4 %	38.9 %	29.8 %		27.4 %
P&C Combined ratio		99.0 %	91.9 %	92.3 %	96.5 %	90.1 %		98.9 %
CAY P&C Combined ratio ex CATs								
Loss and loss expense ratio, adjusted	B/F	64.7 %	53.0 %	83.0 %	50.6 %	49.0 %		59.4 %
Policy acquisition cost and administrative expense ratio, adjusted	D/F	21.1 %	25.5 %	7.4 %	38.8 %	30.7 %		27.4 %
CAY P&C Combined ratio ex CATs		85.8 %	78.5 %	90.4 %	89.4 %	79.7 %		86.8 %
Combined ratio								
Combined ratio								98.9 %
Add: impact of gains and losses on crop derivatives								—
P&C Combined ratio								98.9 %

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 \$71 million and \$216 million for the three and nine months ended September 30, 2021, respectively, and principally relates to the Chubb Corp acquisition.

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

For the Years Ending December 31 (in millions of U.S. dollars)	Associated with the Chubb Corp Acquisition				Other intangible assets ⁽²⁾	Total Amortization of purchased intangibles
	Agency distribution relationships and renewal rights	Fair value adjustment on Unpaid losses and loss expenses	Total ⁽¹⁾			
Fourth quarter of 2021	\$ 54	\$ (5)	\$ 49	\$ 22	\$ 71	
2022	197	(14)	183	101	284	
2023	178	(7)	171	95	266	
2024	160	(6)	154	90	244	
2025	144	(6)	138	89	227	
2026	132	(5)	127	87	214	
Total	\$ 865	\$ (43)	\$ 822	\$ 484	\$ 1,306	

⁽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 September 30, 2021, the deferred tax liability associated with Other intangible assets (excluding the fair value adjustment on Unpaid losses and loss expense) was \$1,242 million.

The following table presents, as of September 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 fourth quarter 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
Fourth quarter of 2021	\$ 17
2022	66
2023	61
2024	56
2025	52
2026	48
Total	\$ 300

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

The following table presents at September 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 fourth quarter of 2021 and for the next five years:

For the Years Ending December 31 (in millions of U.S. dollars)	Amortization (expense) benefit of the fair value adjustment on	
	Acquired invested assets ⁽¹⁾	Assumed long-term debt ⁽²⁾
Fourth quarter of 2021	\$ (22)	\$ 6
2022	(115)	21
2023	(7)	21
2024	—	21
2025	—	21
2026	—	21
Total	\$ (144)	\$ 111

⁽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

(in millions of U.S. dollars)	Three Months Ended September 30		Nine Months Ended September 30	
	2021	2020	2021	2020
Fixed maturities ⁽¹⁾	\$ 804	\$ 826	\$ 2,480	\$ 2,487
Short-term investments	9	11	26	39
Other interest income	3	4	8	16
Equity securities	40	24	117	57
Other investments	56	18	122	59
Gross investment income ⁽¹⁾	912	883	2,753	2,658
Investment expenses	(46)	(43)	(140)	(130)
Net investment income ⁽¹⁾	\$ 866	\$ 840	\$ 2,613	\$ 2,528
⁽¹⁾ Includes amortization expense related to fair value adjustment of acquired invested assets related to the Chubb Corp acquisition	\$ (19)	\$ (28)	\$ (67)	\$ (90)

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 3.1 percent and 3.4 percent for the three and nine months ended September 30, 2021, respectively, primarily due to higher income from our private equity partnerships and increased dividends on public equities which resulted from a higher allocation to public equity securities. 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:

(in millions of U.S. dollars)	Three Months Ended September 30		Nine Months Ended September 30	
	2021	2020	2021	2020
Total mark-to-market gain on private equity, pre-tax	\$ 713	\$ 436	\$ 1,887	\$ 229

Investments

Our investment portfolio is invested primarily in publicly traded, investment grade, fixed income securities with an average credit quality of A as rated by the independent investment rating services Standard and Poor's (S&P)/Moody's Investors Service (Moody's) at September 30, 2021. 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 4.1 years and 4.0 years at September 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 \$4.4 billion at September 30, 2021.

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

(in millions of U.S. dollars)	September 30, 2021		December 31, 2020	
	Fair Value	Cost/ Amortized Cost, Net	Fair Value	Cost/ Amortized Cost, Net
Fixed maturities available for sale	\$ 92,685	\$ 89,323	\$ 90,699	\$ 85,168
Fixed maturities held to maturity	11,119	10,515	12,510	11,653
Short-term investments	3,529	3,529	4,345	4,349
Fixed income securities	107,333	103,367	107,554	101,170
Equity securities	4,557	4,557	4,027	4,027
Other investments	10,843	10,843	7,945	7,945
Total investments	\$ 122,733	\$ 118,767	\$ 119,526	\$ 113,142

The fair value of our total investments increased \$3.2 billion during the nine months ended September 30, 2021 due to strong operating cash flow and positive equity market returns. 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 September 30, 2021 and December 31, 2020. The first table lists investments according to type and second according to S&P credit rating:

(in millions of U.S. dollars, except for percentages)	September 30, 2021		December 31, 2020	
	Fair Value	% of Total	Fair Value	% of Total
U.S. Treasury / Agency	\$ 3,534	3 %	\$ 4,122	4 %
Corporate and asset-backed securities	40,976	39 %	38,769	36 %
Mortgage-backed securities	21,831	20 %	20,616	19 %
Municipal	10,206	10 %	11,943	11 %
Non-U.S.	27,257	25 %	27,759	26 %
Short-term investments	3,529	3 %	4,345	4 %
Total	\$ 107,333	100 %	\$ 107,554	100 %
AAA	\$ 15,432	14 %	\$ 15,622	15 %
AA	35,275	33 %	36,125	33 %
A	20,242	19 %	19,712	18 %
BBB	17,485	16 %	17,542	16 %
BB	9,236	9 %	9,699	9 %
B	9,115	8 %	8,267	8 %
Other	548	1 %	587	1 %
Total	\$ 107,333	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 September 30, 2021:

(in millions of U.S. dollars)	Fair Value
Wells Fargo & Co	\$ 725
Bank of America Corp	683
JP Morgan Chase & Co	616
Comcast Corp	498
Verizon Communications Inc	487
Morgan Stanley	479
AT&T Inc	453
Citigroup Inc	426
HSBC Holdings Plc	383
Goldman Sachs Group Inc	358

Mortgage-backed securities

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

September 30, 2021 (in millions of U.S. dollars)	S&P Credit Rating					Fair Value	Amortized Cost, Net
	AAA	AA	A	BBB	BB and below	Total	Total
Agency residential mortgage-backed securities (RMBS)	\$ 97	\$ 17,959	\$ —	\$ —	\$ —	\$ 18,056	\$ 17,453
Non-agency RMBS	290	39	70	34	7	440	439
Commercial mortgage-backed securities	2,909	250	160	12	4	3,335	3,211
Total mortgage-backed securities	\$ 3,296	\$ 18,248	\$ 230	\$ 46	\$ 11	\$ 21,831	\$ 21,103

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 46 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 September 30, 2021:

(in millions of U.S. dollars)	Fair Value	Amortized Cost, Net
Canada	\$ 997	\$ 983
Republic of Korea	918	859
United Kingdom	698	688
Province of Ontario	665	647
Kingdom of Thailand	555	506
United Mexican States	552	556
Federative Republic of Brazil	549	556
Province of Quebec	454	438
Socialist Republic of Vietnam	430	294
Commonwealth of Australia	423	398
Other Non-U.S. Government Securities	5,531	5,349
Total	\$ 11,772	\$ 11,274

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 September 30, 2021:

(in millions of U.S. dollars)		Fair Value	Amortized Cost, Net
United Kingdom	\$	2,528	\$ 2,435
Canada		1,832	1,767
France		1,296	1,245
United States ⁽¹⁾		1,210	1,172
Australia		924	886
Japan		734	719
Switzerland		607	579
Germany		604	581
Netherlands		538	513
China		469	460
Other Non-U.S. Corporate Securities		4,743	4,605
Total	\$	15,485	\$ 14,962

⁽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 September 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 \$160 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 September 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	20,857	4,169	16,688
Losses and loss expenses paid	(15,950)	(3,257)	(12,693)
Other (including foreign exchange translation)	(87)	(9)	(78)
Balance at September 30, 2021	\$ 72,631	\$ 15,550	\$ 57,081

⁽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)

During the three months ended September 30, 2021, we increased environmental net loss reserves for Brandywine managed operations by \$33 million. 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 September 30, 2021, for Worldwide, U.S. hurricane and California earthquake events, based on our in-force portfolio at July 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 \$2,717 million (or 4.6 percent of our total shareholders' equity at September 30, 2021). These estimates assume that reinsurance recoverable is fully collectible.

(in millions of U.S. dollars, except for percentages)	Modeled Net Probable Maximum Loss (PML) Pre-tax										
	Worldwide ⁽¹⁾			U.S. Hurricane ⁽²⁾				California Earthquake ⁽³⁾			
	Annual Aggregate		% of Total Shareholders' Equity	Annual Aggregate		% of Total Shareholders' Equity	Single Occurrence		% of Total Shareholders' Equity		
Chubb		Chubb			Chubb						
1-in-10	\$	1,879	3.2 %	\$	1,089	1.8 %	\$	141	0.2 %		
1-in-100	\$	3,973	6.7 %	\$	2,717	4.6 %	\$	1,311	2.2 %		
1-in-250	\$	6,547	11.0 %	\$	4,924	8.3 %	\$	1,487	2.5 %		

⁽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 September 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 September 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 nine months ended September 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 \$3.1 billion and \$800 million from its Bermuda subsidiaries during the nine months ended September 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 nine months ended September 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 nine months ended September 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 \$910 million and \$180 million from its subsidiaries during the nine months ended September 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 nine months ended September 30, 2021 and 2020.

Operating cash flows were \$8.5 billion in the nine months ended September 30, 2021, compared to \$7.2 billion in the prior year period. The increase of \$1.3 billion is due to higher premiums collected reflecting premium growth, principally in our commercial lines, partially offset by higher taxes paid.

Cash used for investing was \$3.8 billion in the nine months ended September 30, 2021, compared to \$6.7 billion in the prior year period, a decrease of \$2,978 million. Cash used for investing in the current year included lower net purchases of equity securities of \$2.0 billion and lower cash used related to acquisitions of Huatai Group ownership interest of \$1.3 billion, partially offset by higher private equity contributions, net of distributions received, of \$513 million.

Cash used for financing was \$4.8 billion in the nine months ended September 30, 2021, compared to \$234 million in the prior year period, an increase of \$4.6 billion principally from more shares repurchased in the current year. The prior year included \$988 million of net proceeds from the issuance of long-term debt.

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 September 30, 2021, there were \$1.4 billion in repurchase agreements outstanding with various maturities over the next eight 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)	September 30 2021	December 31 2020
Long-term debt	\$ 14,823	\$ 14,948
Trust preferred securities	308	308
Total shareholders' equity	59,318	59,441
Total capitalization	\$ 74,449	\$ 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 nine months ended September 30, 2021, we repurchased \$3.96 billion of Common Shares in a series of open market transactions under the Board of Directors (Board) share repurchase authorizations. At September 30, 2021, there were 43,144,862 Common Shares in treasury with a weighted average cost of \$153.47 per share, and \$3.55 billion in share repurchase authorization remained through June 30, 2022. For the period October 1, 2021 through October 27, 2021, we repurchased 167,700 Common Shares for a total of \$29 million in a series of open market transactions. At October 27, 2021, \$3.52 billion in share repurchase authorization remained.

We generally maintain the ability to issue certain classes of debt and equity securities via a Securities and Exchange Commission (SEC) shelf registration statement which is renewed every three years. This allows us capital market access for refinancing as well as for unforeseen or opportunistic capital needs. On October 6, 2021, we filed a new shelf registration statement which allows us to issue an unlimited amount of certain classes of debt and equity from time to time, replacing the shelf registration statement that was filed in October 2018. This new shelf registration statement expires in October 2024.

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)
September 17, 2021	October 8, 2021	\$0.80 (CHF 0.73)

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:

(in millions of U.S. dollars)	September 30 2021	Chubb Limited (Parent Guarantor) December 31 2020	September 30 2021	Chubb INA Holdings Inc. (Subsidiary Issuer) December 31 2020
Assets				
Investments	\$ —	\$ —	\$ 144	\$ 197
Cash	1	84	8	1
Due from parent guarantor/subsidiary issuer, net	—	479	143	—
Due from subsidiaries that are not issuers or guarantors, net	2,022	3,043	—	—
Other assets	7	10	588	463
Total assets	\$ 2,030	\$ 3,616	\$ 883	\$ 661
Liabilities				
Due to parent guarantor/subsidiary issuer, net	\$ 143	\$ —	\$ —	\$ 479
Due to subsidiaries that are not issuers or guarantors, net	—	—	1,886	2,529
Affiliated notional cash pooling programs	76	—	976	272
Long-term debt	—	—	14,823	14,948
Trust preferred securities	—	—	308	308
Other liabilities	342	323	1,436	1,418
Total liabilities	561	323	19,429	19,954
Total shareholders' equity	1,469	3,293	(18,546)	(19,293)
Total liabilities and shareholders' equity	\$ 2,030	\$ 3,616	\$ 883	\$ 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:

Nine Months Ended September 30, 2021

(in millions of U.S. dollars)	Chubb Limited (Parent Guarantor)	Chubb INA Holdings Inc. (Subsidiary Issuer)
Net investment income	\$ 3	\$ 1
Net realized gains (loss)	(5)	114
Administrative expenses	75	(82)
Interest (income) expense	(91)	425
Other (income) expense	(36)	(13)
Income tax expense (benefit)	15	(74)
Net income (loss)	\$ 35	\$ (141)
Comprehensive income (loss)	\$ 35	\$ (145)

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 September 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 September 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 fourth 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)

Interest Rate Shock		Worldwide Equity Shock					
		+10%	Flat	-10%	-20%	-30%	-40%
+100 bps	(Increase)/decrease in FVL	\$ 338	\$ 230	\$ 93	\$ (76)	\$ (284)	\$ (547)
	Increase/(decrease) in hedge value	(83)	—	83	166	249	333
	Increase/(decrease) in net income	\$ 255	\$ 230	\$ 176	\$ 90	\$ (35)	\$ (214)
Flat	(Increase)/decrease in FVL	\$ 138	\$ —	\$ (165)	\$ (361)	\$ (604)	\$ (905)
	Increase/(decrease) in hedge value	(83)	—	83	166	249	333
	Increase/(decrease) in net income	\$ 55	\$ —	\$ (82)	\$ (195)	\$ (355)	\$ (572)
-100 bps	(Increase)/decrease in FVL	\$ (105)	\$ (264)	\$ (451)	\$ (676)	\$ (952)	\$ (1,289)
	Increase/(decrease) in hedge value	(83)	—	83	166	249	333
	Increase/(decrease) in net income	\$ (188)	\$ (264)	\$ (368)	\$ (510)	\$ (703)	\$ (956)

Sensitivities to Other Economic Variables

(in millions of U.S. dollars)

	AA-rated Credit Spreads		Interest Rate Volatility		Equity Volatility	
	+100 bps	-100 bps	+2%	-2%	+2%	-2%
(Increase)/decrease in FVL	\$ 63	\$ (72)	\$ (1)	\$ —	\$ (14)	\$ 13
Increase/(decrease) in net income	\$ 63	\$ (72)	\$ (1)	\$ —	\$ (14)	\$ 13

Sensitivities to Actuarial Assumptions

(in millions of U.S. dollars)

	Mortality			
	+20%	+10%	-10%	-20%
(Increase)/decrease in FVL	\$ 19	\$ 9	\$ (10)	\$ (19)
Increase/(decrease) in net income	\$ 19	\$ 9	\$ (10)	\$ (19)

(in millions of U.S. dollars)

	Lapses			
	+50%	+25%	-25%	-50%
(Increase)/decrease in FVL	\$ 95	\$ 50	\$ (56)	\$ (118)
Increase/(decrease) in net income	\$ 95	\$ 50	\$ (56)	\$ (118)

(in millions of U.S. dollars)

	Annuitization			
	+50%	+25%	-25%	-50%
(Increase)/decrease in FVL	\$ (397)	\$ (211)	\$ 235	\$ 489
Increase/(decrease) in net income	\$ (397)	\$ (211)	\$ 235	\$ 489

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 September 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

(in millions of U.S. dollars)	Equity Shock					
	+20 %	Flat	-20 %	-40 %	-60 %	-80 %
GMDB net amount at risk	\$ 298	\$ 291	\$ 496	\$ 856	\$ 908	\$ 763
Claims at 100% immediate mortality	152	174	175	164	147	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

(in millions of U.S. dollars)	+20 %		Flat		Equity Shock -20 %		-40 %		-60 %		-80 %	
GLB net amount at risk	\$	813	\$	1,139	\$	1,723	\$	2,462	\$	2,996	\$	3,361

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

(in millions of U.S. dollars)	+20 %		Flat		Equity Shock -20 %		-40 %		-60 %		-80 %	
GMDB net amount at risk	\$	39	\$	46	\$	59	\$	74	\$	88	\$	98
GLB net amount at risk		305		400		532		704		883		1,006
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 September 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 September 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 September 30, 2021:

Period	Total Number of Shares Purchased ⁽¹⁾	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans ⁽²⁾	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plans ⁽³⁾
July 1 through July 31	590,360	\$ 168.69	588,000	\$ 4.97 billion
August 1 through August 31	5,914,269	\$ 180.77	5,908,300	\$ 3.90 billion
September 1 through September 30	1,918,069	\$ 182.08	1,915,700	\$ 3.55 billion
Total	8,422,698	\$ 180.22	8,412,000	

⁽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 September 30, 2021 as part of the publicly announced plans was \$1.52 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. 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 was used prior to the \$5.0 billion share repurchase authorization. For the period October 1, 2021 through October 27, 2021, we repurchased 167,700 Common Shares for a total of \$29 million in a series of open market transactions. At October 27, 2021, \$3.52 billion in share repurchase authorization 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	Form	Incorporated by Reference		Filed Herewith
			Original Number	Date Filed	
3.1	Articles of Association of the Company, as amended	8-K	3.1	August 6, 2021	
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 6, 2021	
4.2	Organizational Regulations of the Company, as amended	8-K	3.1	November 21, 2016	
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 September 30, 2021 formatted in Inline XBRL: (i) Consolidated Balance Sheets at September 30, 2021, and December 31, 2020; (ii) Consolidated Statements of Operations and Comprehensive Income for the three and nine months ended September 30, 2021 and 2020; (iii) Consolidated Statements of Shareholders' Equity for the three and nine months ended September 30, 2021 and 2020; (iv) Consolidated Statements of Cash Flows for the nine months ended September 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)				

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)

October 28, 2021

/s/ Evan G. Greenberg

Evan G. Greenberg

Chairman and Chief Executive Officer

October 28, 2021

/s/ Peter C. Enns

Peter C. Enns

Executive Vice President and Chief Financial Officer

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: October 28, 2021

/s/ Evan G. Greenberg

Evan G. Greenberg

Chairman and Chief Executive Officer

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: October 28, 2021

/s/ Peter C. Enns

Peter C. Enns

Executive Vice President and Chief Financial Officer

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 September 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: October 28, 2021

/s/ Evan G. Greenberg

Evan G. Greenberg

Chairman and Chief Executive Officer

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 September 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: October 28, 2021

/s/ Peter C. Enns

Peter C. Enns

Executive Vice President and Chief Financial Officer