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, 2022

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Transition Period from to

Commission File No. 1-11778

CHUBB LIMITED

(Exact name of registrant as specified in its charter)

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

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

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☑ No ☐

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

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☑

The number of registrant's Common Shares (CHF 24.15 par value) outstanding as of October 21, 2022 was 415,050,274.

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 2022	December 31 2021
Assets		
Investments		
Fixed maturities available for sale, at fair value, net of valuation allowance - $147 and $14 (amortized cost – $93,316 and $90,493)	**$ 83,741**	$ 93,108
Fixed maturities held to maturity, at amortized cost, net of valuation allowance - $33 and $35 (fair value – $8,491 and $10,647)	**8,976**	10,118
Equity securities, at fair value	**844**	4,782
Short-term investments, at fair value (amortized cost – $4,536 and $3,147)	**4,534**	3,146
Other investments, at fair value	**13,645**	11,169
Total investments	**111,740**	122,323
Cash	**2,128**	1,659
Restricted cash	**136**	152
Securities lending collateral	**1,626**	1,831
Accrued investment income	**900**	821
Insurance and reinsurance balances receivable, net of valuation allowance - $51 and $46	**12,853**	11,322
Reinsurance recoverable on losses and loss expenses, net of valuation allowance - $352 and $329	**18,754**	17,366
Reinsurance recoverable on policy benefits	**297**	213
Deferred policy acquisition costs	**5,578**	5,513
Value of business acquired	**3,324**	236
Goodwill	**16,107**	15,213
Other intangible assets	**5,383**	5,455
Prepaid reinsurance premiums	**3,265**	3,028
Investments in partially-owned insurance companies	**2,943**	3,130
Other assets	**13,077**	11,792
Total assets	**$ 198,111**	$ 200,054
Liabilities		
Unpaid losses and loss expenses	**$ 75,992**	$ 72,943
Unearned premiums	**20,520**	19,101
Future policy benefits	**9,586**	5,947
Insurance and reinsurance balances payable	**7,829**	7,243
Securities lending payable	**1,626**	1,831
Accounts payable, accrued expenses, and other liabilities	**16,673**	15,004
Deferred tax liabilities	**2**	389
Repurchase agreements	**2,417**	1,406
Short-term debt	**1,475**	999
Long-term debt	**14,044**	15,169
Trust preferred securities	**308**	308
Total liabilities	**150,472**	140,340
Commitments and contingencies (refer to Note 8)		
Shareholders' equity		
Common Shares (CHF 24.15 par value; 446,376,614 and 474,021,114 shares issued; 415,020,484 and 426,572,612 shares outstanding)	**10,346**	10,985
Common Shares in treasury (31,356,130 and 47,448,502 shares)	**(4,978)**	(7,464)
Additional paid-in capital	**7,429**	8,478
Retained earnings	**47,022**	47,365
Accumulated other comprehensive income (loss) (AOCI)	**(12,180)**	350
Total shareholders' equity	**47,639**	59,714
Total liabilities and shareholders' equity	**$ 198,111**	$ 200,054

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 September 30		Nine Months Ended September 30	
	2022	2021	**2022**	2021
Revenues				
Net premiums written	**$ 12,020**	$ 10,510	**$ 31,521**	$ 28,718
Increase in unearned premiums	**(485)**	(510)	**(1,683)**	(1,684)
Net premiums earned	**11,535**	10,000	**29,838**	27,034
Net investment income	**979**	866	**2,689**	2,613
Net realized gains (losses)	**(384)**	(21)	**(787)**	833
Total revenues	**12,130**	10,845	**31,740**	30,480
Expenses				
Losses and loss expenses	**7,279**	6,629	**17,474**	16,688
Policy benefits	**486**	151	**790**	503
Policy acquisition costs	**1,975**	1,778	**5,451**	5,141
Administrative expenses	**883**	806	**2,479**	2,325
Interest expense	**150**	122	**416**	366
Other (income) expense	**188**	(763)	**(21)**	(2,030)
Amortization of purchased intangibles	**69**	71	**211**	216
Cigna integration expenses	**23**	—	**26**	—
Total expenses	**11,053**	8,794	**26,826**	23,209
Income before income tax	**1,077**	2,051	**4,914**	7,271
Income tax expense	**265**	218	**913**	873
Net income	**$ 812**	$ 1,833	**$ 4,001**	$ 6,398
Other comprehensive income (loss)				
Change in:				
Unrealized depreciation	**$ (3,045)**	$ (554)	**$ (12,041)**	$ (2,177)
Cumulative foreign currency translation adjustment	**(966)**	(414)	**(1,676)**	(84)
Other, including postretirement benefit liability adjustment	**(59)**	4	**(35)**	(33)
Other comprehensive loss, before income tax	**(4,070)**	(964)	**(13,752)**	(2,294)
Income tax benefit related to OCI items	**165**	120	**1,222**	403
Other comprehensive loss	**(3,905)**	(844)	**(12,530)**	(1,891)
Comprehensive income (loss)	**$ (3,093)**	$ 989	**$ (8,529)**	$ 4,507
Earnings per share				
Basic earnings per share	**$ 1.95**	$ 4.21	**$ 9.50**	$ 14.42
Diluted earnings per share	**$ 1.94**	$ 4.18	**$ 9.41**	$ 14.33

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 September 30		Nine Months Ended September 30	
	2022	2021	**2022**	2021
Common Shares				
Balance – beginning of period	**$ 10,666**	$ 11,064	**$ 10,985**	$ 11,064
Cancellation of treasury shares	**(320)**	(79)	**(639)**	(79)
Balance – end of period	**10,346**	10,985	**10,346**	10,985
Common Shares in treasury				
Balance – beginning of period	**(6,794)**	(5,772)	**(7,464)**	(3,644)
Common Shares repurchased	**(685)**	(1,516)	**(2,815)**	(3,956)
Cancellation of treasury shares	**2,473**	590	**4,983**	590
Net shares issued under employee share-based compensation plans	**28**	77	**318**	389
Balance – end of period	**(4,978)**	(6,621)	**(4,978)**	(6,621)
Additional paid-in capital				
Balance – beginning of period	**7,707**	9,046	**8,478**	9,815
Net shares redeemed (issued) under employee share-based compensation plans	**10**	(2)	**(185)**	(184)
Exercise of stock options	**(8)**	(15)	**(35)**	(45)
Share-based compensation expense	**66**	69	**205**	216
Funding of dividends declared to Retained earnings	**(346)**	(346)	**(1,034)**	(1,050)
Balance – end of period	**7,429**	8,752	**7,429**	8,752
Retained earnings				
Balance – beginning of period	**48,363**	43,902	**47,365**	39,337
Net income	**812**	1,833	**4,001**	6,398
Cancellation of treasury shares	**(2,153)**	(511)	**(4,344)**	(511)
Funding of dividends declared from Additional paid-in capital	**346**	346	**1,034**	1,050
Dividends declared on Common Shares	**(346)**	(346)	**(1,034)**	(1,050)
Balance – end of period	**47,022**	45,224	**47,022**	45,224
Accumulated other comprehensive income (loss) (AOCI)				
Balance – beginning of period	**(8,275)**	1,822	**350**	2,869
Total other comprehensive loss	**(3,905)**	(844)	**(12,530)**	(1,891)
Balance – end of period	**(12,180)**	978	**(12,180)**	978
Total shareholders' equity	**$ 47,639**	$ 59,318	**$ 47,639**	$ 59,318

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 2022	2021
Cash flows from operating activities		
Net income	**$ 4,001**	$ 6,398
Adjustments to reconcile net income to net cash flows from operating activities		
Net realized (gains) losses	**787**	(833)
Amortization of premiums/discounts on fixed maturities	**185**	242
Amortization of purchased intangibles	**211**	216
Equity in net income of partially-owned entities	**(192)**	(2,073)
Deferred income taxes	**(7)**	(268)
Unpaid losses and loss expenses	**4,848**	4,907
Unearned premiums	**2,035**	2,032
Future policy benefits	**40**	163
Insurance and reinsurance balances payable	**559**	408
Accounts payable, accrued expenses, and other liabilities	**573**	45
Income taxes payable	**(108)**	212
Insurance and reinsurance balances receivable	**(1,756)**	(1,257)
Reinsurance recoverable	**(1,881)**	(1,071)
Deferred policy acquisition costs	**(320)**	(208)
Other	**(383)**	(364)
Net cash flows from operating activities	**8,592**	8,549
Cash flows from investing activities		
Purchases of fixed maturities available for sale	**(23,533)**	(23,028)
Purchases of fixed maturities held to maturity	**(454)**	(434)
Purchases of equity securities	**(837)**	(799)
Sales of fixed maturities available for sale	**14,142**	5,225
Sales of equity securities	**4,453**	750
Maturities and redemptions of fixed maturities available for sale	**7,882**	13,710
Maturities and redemptions of fixed maturities held to maturity	**1,357**	1,488
Net change in short-term investments	**(1,106)**	809
Net derivative instruments settlements	**(52)**	(66)
Private equity contributions	**(2,194)**	(1,872)
Private equity distributions	**649**	891
Acquisition of subsidiaries (net of cash acquired of $366 and nil)	**(4,982)**	—
Payment for Huatai Group interest	**(113)**	(208)
Other	**(414)**	(217)
Net cash flows used for investing activities	**(5,202)**	(3,751)
Cash flows from financing activities		
Dividends paid on Common Shares	**(1,030)**	(1,056)
Common Shares repurchased	**(2,783)**	(3,941)
Proceeds from issuance of repurchase agreements	**3,552**	1,405
Repayment of repurchase agreements	**(2,554)**	(1,405)
Proceeds from share-based compensation plans	**198**	239
Policyholder contract deposits and other	**357**	365
Policyholder contract withdrawals and other	**(362)**	(331)
Tax withholding payments for share-based compensation plans	**(100)**	(81)
Net cash flows used for financing activities	**(2,722)**	(4,805)
Effect of foreign currency rate changes on cash and restricted cash	**(215)**	(33)
Net increase (decrease) in cash and restricted cash	**453**	(40)
Cash and restricted cash – beginning of period	**1,811**	1,836
Cash and restricted cash – end of period	**$ 2,264**	$ 1,796
Supplemental cash flow information		
Taxes paid	**$ 964**	$ 931
Interest paid	**$ 339**	$ 316

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 13 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 2021 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 2022**	December 31 2021
Cash	**$ 2,128**	$ 1,659
Restricted cash	**136**	152
Total cash and restricted cash shown in the Consolidated statements of cash flows	**$ 2,264**	$ 1,811

c) 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 Accident and Health (A&H) and Life Insurance Business in Asian Markets

On July 1, 2022, we completed the acquisition of the life and non-life insurance companies that house the personal accident, supplemental health, and life insurance business of Cigna in six Asian markets. Chubb paid $5.36 billion in cash for the operations, which include Cigna's accident and health (A&H) and life business in Korea, Taiwan, New Zealand, Thailand, Hong Kong, and Indonesia, collectively referred to as Cigna's business in Asia. The reduction in the final purchase price from the original agreement reflects the impacts of rising interest rates and foreign exchange rates on acquired book value and other minor adjustments. This complementary strategic acquisition expands our presence and advances our long-term growth opportunity in Asia. Effective July 1, 2022, the results of operations of this acquired business are reported primarily in our Life Insurance segment and, to a lesser extent, our Overseas General Insurance segment.

The interim consolidated financial statements include the results of Cigna's business in Asia from July 1, 2022. The acquisition of Cigna's business in Asia generated $1,340 million of goodwill, attributable to expected growth and profitability, and $269 million of other intangible assets. None of the goodwill is expected to be deductible for income tax purposes. Additionally, the acquisition of Cigna's business in Asia generated $3,379 million of value of business acquired (VOBA). Refer to Note 7 for more information. Chubb financed the transaction through a combination of available cash and $2.0 billion in repurchase agreement transactions, of which $1.0 billion were outstanding as of September 30, 2022, and due to expire by the end of 2022.

The following table summarizes Chubb's best estimate of fair value of the assets acquired and liabilities assumed at July 1, 2022. The fair value of assets and liabilities, including intangible assets and tax-related items (classified below in Other assets and Other liabilities), are preliminary and may change with offsetting adjustments to goodwill. Chubb may make further adjustments to its purchase price allocation through the end of the permissible one-year measurement period. Chubb does not expect changes, if any, to materially affect its financial position, results of operations, or cash flows.

Preliminary estimate of assets acquired and liabilities assumed from Cigna's business in Asia		**July 1**
(in millions of U.S. dollars)		**2022**
Assets		
Investments and Cash	**$**	**5,311**
Accrued investment income		**33**
Insurance and reinsurance balances receivable		**52**
Reinsurance recoverable on losses and loss expenses		**3**
Reinsurance recoverable on future policy benefits		**82**
Value of business acquired		**3,379**
Goodwill and other intangible assets		**1,609**
Other assets		**655**
Total assets	**$**	**11,124**
Liabilities		
Unpaid losses and loss expenses	**$**	**10**
Unearned premiums		**60**
Future policy benefits		**3,844**
Insurance and reinsurance balances payable		**115**
Accounts payable, accrued expenses, and other liabilities		**925**
Deferred tax liabilities		**839**
Total liabilities	**$**	**5,793**
Net acquired assets, including goodwill		**5,331**
Total	**$**	**11,124**

Direct costs related to the acquisition were expensed as incurred. Cigna integration expenses were $23 million and $26 million for the three and nine months ended September 30, 2022, respectively, and include one-time costs that are directly attributable to third-party consulting fees, employee-related retention costs, and other professional and legal fees related to the acquisition.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

The following table summarizes the results of operations of the acquired Cigna business in Asia since the acquisition date that have been included within our Consolidated statements of operations for both the three and nine months ended September 30, 2022.

(in millions of U.S. dollars)		
Total revenues	$	681
Net income	$	21

The preliminary purchase price allocation to intangible assets recorded in connection with the Cigna acquisition and their related useful lives at July 1, 2022, are as follows:

(in millions of U.S. dollars)		Amount	Weighted-average useful life
Definite life			
Agency distribution relationships and renewal rights	$	190	20 years
Unearned premium reserves (UPR) intangible asset		9	1 year
Indefinite life			
Trademarks		70	Indefinite
Total identified intangible assets	$	269	

The following table presents supplemental unaudited pro forma consolidated information for the periods indicated as though the acquisition of Cigna's business in Asia that occurred on July 1, 2022, had instead occurred on January 1, 2021. The unaudited pro forma consolidated financial information is presented for informational purposes only and is not necessarily indicative of the operating results that would have occurred had the acquisition been consummated on January 1, 2021, nor is it necessarily indicative of future operating results. Significant assumptions used to determine pro forma operating results include amortization of VOBA and other intangible assets and recognition of interest expense associated with the repurchase agreement transactions used to effect the acquisition.

	Three Months Ended September 30		Nine Months Ended September 30	
Pro forma:				
(in millions of U.S. dollars)	**2022**	2021	**2022**	2021
Net premiums earned	**$ 11,535**	$ 10,788	**$ 31,362**	$ 29,406
Total revenues	**$ 12,132**	$ 11,632	**$ 33,253**	$ 32,879
Net income	**$ 825**	$ 1,894	**$ 4,203**	$ 6,649

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 700 branches and approximately 19 million customers in China.

As of September 30, 2022, Chubb's aggregate ownership interest in Huatai Group was approximately 47.3 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.

During 2021, Chubb entered into agreements with several counterparties to purchase incremental ownership interests in Huatai Group totaling approximately 31.8 percent for approximately $2.2 billion. In connection with these agreements, Chubb paid approximately $1.1 billion in deposits. In January 2022, we paid $113 million relating to these agreements. Chubb entered into an agreement to acquire an approximate 7.1 percent ownership interest in Huatai Group for approximately $0.5 billion, which was paid as a deposit in 2020. The purchase of the additional ownership interest is contingent upon important conditions.

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

3. Investments

a) Fixed maturities

September 30, 2022 (in millions of U.S. dollars)	Amortized Cost	Valuation Allowance	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value
Available for sale					
U.S. Treasury / Agency	$ 2,725	$ —	$ 5	$ (174)	$ 2,556
Non-U.S.	26,766	(61)	77	(2,599)	24,183
Corporate and asset-backed securities	40,776	(85)	30	(4,341)	36,380
Mortgage-backed securities	18,425	(1)	1	(2,190)	16,235
Municipal	4,624	—	6	(243)	4,387
	$ 93,316	$ (147)	$ 119	$ (9,547)	$ 83,741

	Amortized Cost	Valuation Allowance	Net Carrying Value	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value
Held to maturity						
U.S. Treasury / Agency	$ 1,281	$ —	$ 1,281	$ —	$ (52)	$ 1,229
Non-U.S.	1,046	(4)	1,042	—	(86)	956
Corporate and asset-backed securities	1,769	(27)	1,742	—	(157)	1,585
Mortgage-backed securities	1,549	(1)	1,548	—	(110)	1,438
Municipal	3,364	(1)	3,363	1	(81)	3,283
	$ 9,009	$ (33)	$ 8,976	$ 1	$ (486)	$ 8,491

December 31, 2021 (in millions of U.S. dollars)	Amortized Cost	Valuation Allowance	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value
Available for sale					
U.S. Treasury / Agency	$ 2,111	$ —	$ 109	$ (6)	$ 2,214
Non-U.S.	25,156	(8)	953	(272)	25,829
Corporate and asset-backed securities	37,844	(6)	1,410	(185)	39,063
Mortgage-backed securities	20,080	—	532	(123)	20,489
Municipal	5,302	—	216	(5)	5,513
	$ 90,493	$ (14)	$ 3,220	$ (591)	$ 93,108

	Amortized Cost	Valuation Allowance	Net Carrying Value	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value
Held to maturity						
U.S. Treasury / Agency	$ 1,213	$ —	$ 1,213	$ 34	$ (3)	$ 1,244
Non-U.S.	1,201	(5)	1,196	66	—	1,262
Corporate and asset-backed securities	2,032	(28)	2,004	197	—	2,201
Mortgage-backed securities	1,731	(1)	1,730	74	(1)	1,803
Municipal	3,976	(1)	3,975	162	—	4,137
	$ 10,153	$ (35)	$ 10,118	$ 533	$ (4)	$ 10,647

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

The following table presents the amortized cost of our held to maturity securities according to S&P rating:

	September 30, 2022		December 31, 2021	
(in millions of U.S. dollars, except for percentages)	**Amortized cost**	**% of Total**	Amortized cost	% of Total
AAA	**$ 1,710**	**19 %**	$ 2,089	21 %
AA	**4,975**	**55 %**	5,303	52 %
A	**1,679**	**19 %**	1,964	19 %
BBB	**622**	**7 %**	773	8 %
BB	**23**	**— %**	23	— %
Other	**—**	**— %**	1	— %
Total	**$ 9,009**	**100 %**	$ 10,153	100 %

The following table presents fixed maturities by contractual maturity:

	September 30, 2022		December 31, 2021	
(in millions of U.S. dollars)	**Net Carrying Value**	**Fair Value**	Net Carrying Value	Fair Value
Available for sale				
Due in 1 year or less	**$ 3,173**	**$ 3,173**	$ 4,498	$ 4,498
Due after 1 year through 5 years	**23,685**	**23,685**	25,542	25,542
Due after 5 years through 10 years	**26,350**	**26,350**	28,207	28,207
Due after 10 years	**14,298**	**14,298**	14,372	14,372
	67,506	**67,506**	72,619	72,619
Mortgage-backed securities	**16,235**	**16,235**	20,489	20,489
	$ 83,741	**$ 83,741**	$ 93,108	$ 93,108
Held to maturity				
Due in 1 year or less	**$ 1,003**	**$ 990**	$ 888	$ 894
Due after 1 year through 5 years	**3,373**	**3,233**	3,744	3,846
Due after 5 years through 10 years	**1,743**	**1,677**	2,242	2,349
Due after 10 years	**1,309**	**1,153**	1,514	1,755
	7,428	**7,053**	8,388	8,844
Mortgage-backed securities	**1,548**	**1,438**	1,730	1,803
	$ 8,976	**$ 8,491**	$ 10,118	$ 10,647

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, 2022 and December 31, 2021 comprised both investment grade and below investment grade securities for which fair value declined, principally due to rising interest rates since the date of purchase. Refer to Note 3 in the 2021 Form 10-K for further information on factors considered in the evaluation of expected credit losses.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

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 been in an unrealized loss position:

September 30, 2022 (in millions of U.S. dollars)	0 – 12 Months Fair Value	0 – 12 Months Gross Unrealized Loss	Over 12 Months Fair Value	Over 12 Months Gross Unrealized Loss	Total Fair Value	Total Gross Unrealized Loss
U.S. Treasury / Agency	**$ 1,873**	**$ (145)**	**$ 227**	**$ (29)**	**$ 2,100**	**$ (174)**
Non-U.S.	**16,585**	**(1,480)**	**3,907**	**(588)**	**20,492**	**(2,068)**
Corporate and asset-backed securities	**28,533**	**(2,832)**	**2,621**	**(456)**	**31,154**	**(3,288)**
Mortgage-backed securities	**12,776**	**(1,459)**	**3,324**	**(728)**	**16,100**	**(2,187)**
Municipal	**3,905**	**(216)**	**70**	**(18)**	**3,975**	**(234)**
Total AFS fixed maturities	**$ 63,672**	**$ (6,132)**	**$ 10,149**	**$ (1,819)**	**$ 73,821**	**$ (7,951)**

December 31, 2021 (in millions of U.S. dollars)	0 – 12 Months Fair Value	0 – 12 Months Gross Unrealized Loss	Over 12 Months Fair Value	Over 12 Months Gross Unrealized Loss	Total Fair Value	Total Gross Unrealized Loss
U.S. Treasury / Agency	$ 363	$ (3)	$ 70	$ (3)	$ 433	$ (6)
Non-U.S.	6,917	(196)	1,093	(62)	8,010	(258)
Corporate and asset-backed securities	9,449	(145)	806	(32)	10,255	(177)
Mortgage-backed securities	8,086	(116)	190	(7)	8,276	(123)
Municipal	226	(5)	—	—	226	(5)
Total AFS fixed maturities	$ 25,041	$ (465)	$ 2,159	$ (104)	$ 27,200	$ (569)

During the nine months ended September 30, 2022, the tax benefit on certain unrealized losses in our investment portfolio was reduced by a valuation allowance of $950 million necessary due to limitations on the utilization of these losses. As part of evaluating whether it was more likely than not that we could realize these losses, we considered realized gains, carryback capacity and available tax planning strategies.

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

(in millions of U.S. dollars)	Three Months Ended September 30 2022	Three Months Ended September 30 2021	Nine Months Ended September 30 2022	Nine Months Ended September 30 2021
Available for sale				
Valuation allowance for expected credit losses - beginning of period	**$ 78**	$ 11	**$ 14**	$ 20
Provision for expected credit loss	**91**	3	**169**	8
Foreign currency revaluation	**(2)**	—	**(2)**	—
Recovery of expected credit loss	**(20)**	(2)	**(34)**	(16)
Valuation allowance for expected credit losses - end of period	**$ 147**	$ 12	**$ 147**	$ 12
Held to maturity				
Valuation allowance for expected credit losses - beginning of period	**$ 34**	$ 37	**$ 35**	$ 44
Provision for expected credit loss	**—**	—	**1**	—
Recovery of expected credit loss	**(1)**	(2)	**(3)**	(9)
Valuation allowance for expected credit losses - end of period	**$ 33**	$ 35	**$ 33**	$ 35

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

c) Net realized gains (losses)

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

	Three Months Ended September 30		Nine Months Ended September 30	
(in millions of U.S. dollars)	**2022**	2021	**2022**	2021
Fixed maturities:				
Gross realized gains	**$ 144**	$ 27	**$ 545**	$ 120
Gross realized losses	**(331)**	(27)	**(1,158)**	(99)
Net (provision for) recovery of expected credit losses	**(70)**	1	**(133)**	17
Impairment [1]	**(22)**	(11)	**(111)**	(12)
Total fixed maturities	**(279)**	(10)	**(857)**	26
Equity securities	**(80)**	(42)	**(287)**	475
Other investments	**(42)**	11	**17**	111
Foreign exchange	**198**	106	**541**	85
Investment and embedded derivative instruments	**(198)**	(9)	**(232)**	9
Fair value adjustments on insurance derivative	**22**	(59)	**(86)**	252
S&P futures	**54**	(4)	**240**	(112)
Other derivative instruments	**(19)**	(10)	**(9)**	(8)
Other [2]	**(40)**	(4)	**(114)**	(5)
Net realized gains (losses) (pre-tax)	**$ (384)**	$ (21)	**$ (787)**	$ 833

(1) Relates to certain securities we intended to sell and securities written to market entering default.
(2) Other realized losses includes $36 million related to impairment of fixed assets. The nine months ended September 30, 2022 also includes impairment of assets related to Chubb's Russian entities.

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:

	Three Months Ended September 30					
	2022			2021		
(in millions of U.S. dollars)	**Equity Securities**	**Other Investments**	**Total**	Equity Securities	Other Investments	Total
Net gains (losses) recognized during the period	**$ (80)**	**$ (42)**	**$ (122)**	$ (42)	$ 11	$ (31)
Less: Net gains (losses) recognized from sales of securities	**(12)**	**—**	**(12)**	19	—	19
Unrealized gains (losses) recognized for securities still held at reporting date	**$ (68)**	**$ (42)**	**$ (110)**	$ (61)	$ 11	$ (50)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

	Nine Months Ended September 30					
	2022			2021		
(in millions of U.S. dollars)	**Equity Securities**	**Other Investments**	**Total**	Equity Securities	Other Investments	Total
Net gains (losses) recognized during the period	**$ (287)**	**$ 17**	**$ (270)**	$ 475	$ 111	$ 586
Less: Net gains recognized from sales of securities	**406**	**—**	**406**	109	—	109
Unrealized gains (losses) recognized for securities still held at reporting date	**$ (693)**	**$ 17**	**$ (676)**	$ 366	$ 111	$ 477

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:

		September 30, 2022		December 31, 2021	
(in millions of U.S. dollars)	**Expected Liquidation Period of Underlying Assets**	**Fair Value**	**Maximum Future Funding Commitments**	Fair Value	Maximum Future Funding Commitments
Financial	**2 to 10 Years**	**$ 1,085**	**$ 528**	$ 1,096	$ 267
Real assets	**2 to 13 Years**	**2,045**	**807**	1,193	766
Distressed	**2 to 8 Years**	**1,055**	**746**	753	641
Private credit	**3 to 8 Years**	**194**	**450**	84	279
Traditional	**2 to 14 Years**	**7,548**	**5,091**	6,647	5,200
Vintage	**1 to 2 Years**	**51**	**—**	68	—
Investment funds	**Not Applicable**	**414**	**—**	267	—
		$ 12,392	**$ 7,622**	$ 10,108	$ 7,153

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

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

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 September 30, 2022 and December 31, 2021 are investments, primarily fixed maturities, totaling $16,202 million and $17,092 million, respectively, and cash of $136 million and $152 million, respectively.

The following table presents the components of restricted assets:

(in millions of U.S. dollars)		**September 30 2022**		December 31 2021
Trust funds	**$**	**7,992**	$	9,915
Deposits with U.S. regulatory authorities		**2,318**		2,402
Deposits with non-U.S. regulatory authorities		**2,825**		2,873
Assets pledged under repurchase agreements		**2,529**		1,420
Other pledged assets		**674**		634
Total	**$**	**16,338**	$	17,244

4. Fair value measurements

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

The three levels of the hierarchy are as follows:

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

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

We use pricing services to obtain fair value measurements for the majority of our investment securities. Based on management's understanding of the methodologies used, these pricing services only produce an estimate of fair value if there is observable

market information that would allow them to make a fair value estimate. Based on our understanding of the market inputs used by the pricing services, all applicable investments have been valued in accordance with GAAP. We do not adjust prices obtained from pricing services. The following is a description of the valuation techniques and inputs used to determine fair values for financial instruments carried at fair value, as well as the general classification of such financial instruments pursuant to the valuation hierarchy.

Fixed maturities
We use pricing services to estimate fair value measurements for the majority of our fixed maturities. The pricing services use market quotations for fixed maturities that have quoted prices in active markets; such securities are classified within Level 1. For fixed maturities other than U.S. Treasury securities that generally do not trade on a daily basis, the pricing services prepare estimates of fair value measurements using their pricing applications or pricing models, which include available relevant market information, benchmark curves, benchmarking of like securities, sector groupings, and matrix pricing. Additional valuation factors that can be taken into account are nominal spreads, dollar basis, and liquidity adjustments. The pricing services evaluate each asset class based on relevant market and credit information, perceived market movements, and sector news. The market inputs used in the pricing evaluation, listed in the approximate order of priority include: benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, reference data, and industry and economic events. The extent of the use of each input is dependent on the asset class and the market conditions. Given the asset class, the priority of the use of inputs may change, or some market inputs may not be relevant. Additionally, fixed maturities valuation is more subjective when markets are less liquid due to the lack of market based inputs (i.e., stale pricing) and may require the use of models to be priced. The lack of market based inputs may increase the potential that an investment's estimated fair value is not reflective of the price at which an actual transaction would occur. The overwhelming majority of fixed maturities are classified within Level 2 because the most significant inputs used in the pricing techniques are observable. For a small number of fixed maturities, we obtain a single broker quote (typically from a market maker). Due to the disclaimers on the quotes that indicate that the price is indicative only, we include these fair value estimates in Level 3.

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

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

Other investments
Fair values for the majority of Other investments including investments in partially-owned investment companies, investment funds, and limited partnerships are based on their respective 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 derivatives not designated as hedging 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.

Derivatives designated as hedging instruments
Certain of our derivatives are cross-currency swaps designated as fair value and net investment hedging instruments. 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.

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.

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. GLBs 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.

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

September 30, 2022 (in millions of U.S. dollars)	Level 1	Level 2	Level 3	Total
Assets:				
Fixed maturities available for sale				
U.S. Treasury / Agency	$ 2,032	$ 524	$ —	$ 2,556
Non-U.S.	—	23,677	506	24,183
Corporate and asset-backed securities	—	34,084	2,296	36,380
Mortgage-backed securities	—	16,216	19	16,235
Municipal	—	4,387	—	4,387
	2,032	78,888	2,821	83,741
Equity securities	761	—	83	844
Short-term investments	2,782	1,749	3	4,534
Other investments [1]	506	381	—	887
Securities lending collateral	—	1,626	—	1,626
Investment derivatives not designated as hedging instruments	129	—	—	129
Other derivative instruments	109	—	—	109
Derivatives designated as hedging instruments	—	71	—	71
Separate account assets	4,810	81	—	4,891
Total assets measured at fair value [1]	$ 11,129	$ 82,796	$ 2,907	$ 96,832
Liabilities:				
Investment derivatives not designated as hedging instruments	$ 306	$ —	$ —	$ 306
Derivatives designated as hedging instruments	—	101	—	101
GLB [2]	—	—	784	784
Total liabilities measured at fair value	$ 306	$ 101	$ 784	$ 1,191

(1) Excluded from the table above are partially-owned investments, investment funds, and limited partnerships of $12,392 million, policy loans of $316 million, and other investments of $50 million at September 30, 2022 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)
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December 31, 2021 (in millions of U.S. dollars)	Level 1	Level 2	Level 3	Total
Assets:				
Fixed maturities available for sale				
U.S. Treasury / Agency	$ 1,680	$ 534	$ —	$ 2,214
Non-U.S.	—	25,196	633	25,829
Corporate and asset-backed securities	—	37,014	2,049	39,063
Mortgage-backed securities	—	20,463	26	20,489
Municipal	—	5,513	—	5,513
	1,680	88,720	2,708	93,108
Equity securities	4,705	—	77	4,782
Short-term investments	1,744	1,395	7	3,146
Other investments [1]	286	481	—	767
Securities lending collateral	—	1,831	—	1,831
Investment derivative instruments	58	—	—	58
Separate account assets	5,461	99	—	5,560
Total assets measured at fair value [1]	$ 13,934	$ 92,526	$ 2,792	$ 109,252
Liabilities:				
Investment derivative instruments	$ 166	$ —	$ —	$ 166
Other derivative instruments	16	—	—	16
GLB [2]	—	—	745	745
Total liabilities measured at fair value	$ 182	$ —	$ 745	$ 927

[1] Excluded from the table above are partially-owned investments, investment funds, and limited partnerships of $10,108 million, policy loans of $243 million and other investments of $51 million at December 31, 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.

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, 2022	December 31, 2021				
GLB [1]	**$ 784**	$ 745	**Actuarial model**	**Lapse rate**	**3% – 30%**	**3.5%**
				Annuitization rate	**0% – 100%**	**4.6%**

[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)

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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 by blending the experience with data received from other ceding companies. 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. In the third quarter of 2022, we completed a review of policyholder behavior related to annuitizations, partial withdrawals, lapses, and mortality for our variable annuity reinsurance business. As a result, we refined our policyholder behavior assumptions (mainly those relating to annuitizations and partial withdrawals). This refinement increased the fair value of GLB liabilities, and resulted in a realized loss of approximately $40 million. We also made routine model refinements to the internal valuation model which had an insignificant impact on net income. For detailed information on our lapse and annuitization rate assumptions, refer to Note 4 to the Consolidated Financial Statements of our 2021 Form 10-K.

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

	Assets					Liabilities
	Available-for-Sale Debt Securities					
Three Months Ended September 30, 2022 (in millions of U.S. dollars)	Non-U.S.	Corporate and asset-backed securities	Mortgage-backed securities	Equity securities	Short-term investments	GLB [1]
Balance, beginning of period	$ 549	$ 2,261	$ 19	$ 81	$ 9	$ 832
Transfers into Level 3	—	2	—	—	—	—
Transfers out of Level 3	—	(4)	—	—	—	—
Change in Net Unrealized Gains/Losses in OCI	(34)	(16)	—	—	—	—
Net Realized Gains/Losses	(4)	(9)	—	3	(1)	(22)
Purchases	39	164	4	3	1	—
Sales	(19)	(8)	—	(4)	—	—
Settlements	(25)	(94)	(4)	—	(6)	—
Other	—	—	—	—	—	(26)
Balance, end of period	$ 506	$ 2,296	$ 19	$ 83	$ 3	$ 784
Net Realized Gains/Losses Attributable to Changes in Fair Value at the Balance Sheet date	$ (1)	$ (3)	$ —	$ 3	$ (1)	$ (22)
Change in Net Unrealized Gains/Losses included in OCI at the Balance Sheet date	$ (35)	$ (19)	$ —	$ —	$ —	$ —

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

	Assets						Liabilities
	Available-for-Sale Debt Securities						
Three 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	$ 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

Nine Months Ended September 30, 2022 (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	GLB [1]
Balance, beginning of period	$ 633	$ 2,049	$ 26	$ 77	$ 7	$ 745
Transfers into Level 3	23	41	—	1	—	—
Transfers out of Level 3	(23)	(97)	(5)	—	—	—
Change in Net Unrealized Gains/Losses in OCI	(88)	(68)	—	—	—	—
Net Realized Gains/Losses	(6)	(9)	—	7	(1)	86
Purchases	108	658	4	6	8	—
Sales	(44)	(59)	—	(8)	—	—
Settlements	(97)	(219)	(6)	—	(11)	—
Other	—	—	—	—	—	(47)
Balance, end of period	$ 506	$ 2,296	$ 19	$ 83	$ 3	$ 784
Net Realized Gains/Losses Attributable to Changes in Fair Value at the Balance Sheet date	$ (3)	$ (4)	$ —	$ 6	$ (1)	$ 86
Change in Net Unrealized Gains/Losses included in OCI at the Balance Sheet date	$ (89)	$ (71)	$ —	$ —	$ —	$ —

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

Nine 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	$ 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.

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 2021 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, 2022 (in millions of U.S. dollars)	Level 1	Level 2	Level 3	Fair Value Total	Net Carrying Value
Assets:					
Fixed maturities held to maturity					
U.S. Treasury / Agency	**$ 1,157**	**$ 72**	**$ —**	**$ 1,229**	**$ 1,281**
Non-U.S.	**—**	**956**	**—**	**956**	**1,042**
Corporate and asset-backed securities	**—**	**1,585**	**—**	**1,585**	**1,742**
Mortgage-backed securities	**—**	**1,438**	**—**	**1,438**	**1,548**
Municipal	**—**	**3,283**	**—**	**3,283**	**3,363**
Total assets	**$ 1,157**	**$ 7,334**	**$ —**	**$ 8,491**	**$ 8,976**
Liabilities:					
Repurchase agreements	**$ —**	**$ 2,417**	**$ —**	**$ 2,417**	**$ 2,417**
Short-term debt	**—**	**1,469**	**—**	**1,469**	**1,475**
Long-term debt	**—**	**12,067**	**—**	**12,067**	**14,044**
Trust preferred securities	**—**	**387**	**—**	**387**	**308**
Total liabilities	**$ —**	**$ 16,340**	**$ —**	**$ 16,340**	**$ 18,244**

December 31, 2021 (in millions of U.S. dollars)	Level 1	Level 2	Level 3	Fair Value Total	Net Carrying Value
Assets:					
Fixed maturities held to maturity					
U.S. Treasury / Agency	$ 1,192	$ 52	$ —	$ 1,244	$ 1,213
Non-U.S.	—	1,262	—	1,262	1,196
Corporate and asset-backed securities	—	2,201	—	2,201	2,004
Mortgage-backed securities	—	1,803	—	1,803	1,730
Municipal	—	4,137	—	4,137	3,975
Total assets	$ 1,192	$ 9,455	$ —	$ 10,647	$ 10,118
Liabilities:					
Repurchase agreements	$ —	$ 1,406	$ —	$ 1,406	$ 1,406
Short-term debt	—	1,019	—	1,019	999
Long-term debt	—	16,848	—	16,848	15,169
Trust preferred securities	—	460	—	460	308
Total liabilities	$ —	$ 19,733	$ —	$ 19,733	$ 17,882

5. Reinsurance

Reinsurance recoverable on ceded reinsurance

(in millions of U.S. dollars)	September 30, 2022 Net Reinsurance Recoverable [1]	September 30, 2022 Valuation allowance	December 31, 2021 Net Reinsurance Recoverable [1]	December 31, 2021 Valuation allowance
Reinsurance recoverable on unpaid losses and loss expenses	**$ 17,380**	**$ 297**	$ 16,184	$ 271
Reinsurance recoverable on paid losses and loss expenses	**1,374**	**55**	1,182	58
Reinsurance recoverable on losses and loss expenses	**$ 18,754**	**$ 352**	$ 17,366	$ 329
Reinsurance recoverable on policy benefits	**$ 297**	**$ 4**	$ 213	$ 4

[1] Net of valuation allowance for uncollectible reinsurance.

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

The increase in reinsurance recoverable on losses and loss expenses was primarily due to prior period development in certain lines and higher underlying ceded exposures due to premium growth, partially offset by foreign currency movement.

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

	Nine Months Ended September 30	
(in millions of U.S. dollars)	**2022**	2021
Valuation allowance for uncollectible reinsurance - beginning of period	**$ 329**	$ 314
Provision for uncollectible reinsurance	**30**	16
Write-offs charged against the valuation allowance	**(4)**	(4)
Foreign exchange revaluation	**(3)**	(1)
Valuation allowance for uncollectible reinsurance - end of period	**$ 352**	$ 325

For additional information, refer to Note 1 d) to the Consolidated Financial Statements of our 2021 Form 10-K.

6. Unpaid losses and loss expenses

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

	Nine Months Ended September 30	
(in millions of U.S. dollars)	**2022**	2021
Gross unpaid losses and loss expenses – beginning of period	**$ 72,943**	$ 67,811
Reinsurance recoverable on unpaid losses – beginning of period [1]	**(16,184)**	(14,647)
Net unpaid losses and loss expenses – beginning of period	**56,759**	53,164
Net losses and loss expenses incurred in respect of losses occurring in:		
Current year	**18,426**	17,556
Prior years [2]	**(952)**	(868)
Total	**17,474**	16,688
Net losses and loss expenses paid in respect of losses occurring in:		
Current year	**5,104**	4,771
Prior years	**9,217**	7,922
Total	**14,321**	12,693
Foreign currency revaluation and other	**(1,300)**	(78)
Net unpaid losses and loss expenses – end of period	**58,612**	57,081
Reinsurance recoverable on unpaid losses [1]	**17,380**	15,550
Gross unpaid losses and loss expenses – end of period	**$ 75,992**	$ 72,631

(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 $243 million and $87 million for the nine months ended September 30, 2022 and 2021, respectively.

Gross and net unpaid losses and loss expenses increased $3,049 million and $1,853 million, respectively, for the nine months ended September 30, 2022, driven by an increase in underlying exposure due to premium growth and net catastrophe losses, partially offset by favorable prior period development, and favorable foreign exchange movement.

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 financial lines; while short-tail lines include lines such as most property lines, energy, personal accident, and agriculture.

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

	Three Months Ended September 30			Nine Months Ended September 30		
(in millions of U.S. dollars)	**Long-tail**	**Short-tail**	**Total**	**Long-tail**	**Short-tail**	**Total**
2022						
North America Commercial P&C Insurance	**$ (29)**	**$ (137)**	**$ (166)**	**$ (315)**	**$ (246)**	**$ (561)**
North America Personal P&C Insurance	**—**	**(133)**	**(133)**	**—**	**(187)**	**(187)**
North America Agricultural Insurance	**—**	**9**	**9**	**—**	**(17)**	**(17)**
Overseas General Insurance	**(5)**	**—**	**(5)**	**(5)**	**(233)**	**(238)**
Global Reinsurance	**—**	**—**	**—**	**(7)**	**29**	**22**
Corporate	**73**	**—**	**73**	**272**	**—**	**272**
Total	**$ 39**	**$ (261)**	**$ (222)**	**$ (55)**	**$ (654)**	**$ (709)**
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)

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*.** Net favorable development for the three months ended September 30, 2022, included $164 million from lower than expected loss experience in workers' compensation lines and $66 million, net of premium adjustments, from lower claims activity in large multi-line loss sensitive accounts. The favorable development was partially offset by net adverse development of $58 million from higher than expected claims severity in commercial auto liability, and $71 million from commercial umbrella/excess portfolios. Net favorable development on our short-tail businesses primarily included $132 million from property and marine portfolios, where paid and reported loss activity for the most recent accident years was lower than expected. Net favorable development for the nine months ended September 30, 2022, also included favorable development in workers' compensation lines due to updates to loss development factors and our annual assessment of multi-claimant events, including industrial accidents.

Net favorable development for the three and nine months ended September 30, 2021, included $97 million and $255 million from workers' compensation lines due to lower than expected loss experience. This favorable development for the nine months ended September 30, 2021, from workers' compensation lines also included related updates to loss development factors and our annual assessment of multi-claimant events, including industrial accidents. The favorable development for the nine months ended September 30, 2021, was partially offset by net adverse development in commercial auto liability of $74 million and commercial excess and umbrella portfolios of $74 million.

North America Personal P&C Insurance. Net favorable development for the three and nine months ended September 30, 2022, included favorable development in the homeowners and valuables lines of business, driven by lower than expected claims reserve development.

Net favorable development for the three and nine months ended September 30, 2021, included favorable development in homeowners and valuables, which experienced lower than expected loss development.

Overseas General Insurance. Net favorable development for the three months ended September 30, 2022, included lower than expected paid and reported loss activity of $82 million in casualty lines, including primary and excess lines in Continental Europe, the U.K., and Asia Pacific, and $34 million in environmental lines. The favorable development was partially offset by net adverse development of $114 million from financial lines, including Directors and Officers (D&O) due to a combination of higher than expected development on specific claims and increased expected future development in the U.K., Continental Europe, Asia Pacific, and London wholesale business. Net favorable development for the nine months ended September 30, 2022, also included net favorable development of $75 million in A&H lines, $67 million in property lines, and $53 million in personal lines.

Net favorable development for the three months ended September 30, 2021, included favorable development in casualty lines partially offset by adverse development in financial lines, primarily D&O. Net favorable development for the nine months ended September 30, 2021, also included favorable development in A&H and property lines, the latter of which included a $21 million favorable reduction in COVID-19 estimates.

Corporate. Net adverse development for the three months ended September 30, 2022 and 2021, included adverse development for environmental liabilities. Net adverse development for the nine months ended September 30, 2022 and 2021, also included adverse development for molestation claims of $155 million and $68 million, respectively.

Molestation claims
In the third quarter of 2022, the bankruptcy court approved the agreement-in-principle regarding the bankruptcy of the Boy Scouts of America (BSA), which will proceed to further approval before the U.S. District Court. The terms of the agreement are consistent with the 2021 10-K disclosure. Of the $800 million that will be paid per the agreement, we paid $200 million during the third quarter and expect to pay the remaining $600 million liability within the next twelve months. Refer to the 2021 10-K for additional information on molestation claims.

7. Value of business acquired, Goodwill, and Other intangible assets

Value of business acquired
Value of business acquired (VOBA) represents the fair value of the future profits of in-force long duration contracts, and is amortized in relation to the profit emergence of the underlying contracts, in a manner similar to deferred acquisition costs. The VOBA calculation is based on many factors including mortality, morbidity, persistency, investment yields, expenses, and the discount rate, with the discount rate being the most significant factor.

The following table presents a roll-forward of VOBA:

	Nine months ended September 30
(in millions of U.S. dollars)	**2022**
Balance, beginning of period	**$ 236**
Acquisition of Cigna's business in Asia	**3,379**
Amortization of VOBA [(1)]	**(107)**
Foreign exchange revaluation and other	**(184)**
Balance, end of period	**$ 3,324**

(1) Recognized in Policy acquisition costs in the Consolidated statements of operations.

During the three months ended September 30, 2022, amortization of VOBA associated with the acquisition of Cigna's business in Asia was $93 million pre-tax. The expected pre-tax amortization expense related to VOBA associated with the acquisition of Cigna's business in Asia for the fourth quarter of 2022 at current exchange rates is approximately $100 million. Amortization of VOBA beyond next quarter will be determined in conjunction with the adoption of long-duration accounting guidance effective January 1, 2023. Refer to Note 1 for more information.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

Goodwill

The following table presents a roll-forward of Goodwill by segment:

(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	Chubb Consolidated
Balance at December 31, 2021	$ 6,972	$ 2,240	$ 134	$ 4,653	$ 371	$ 843	$ 15,213
Acquisition of Cigna's business in Asia	—	—	—	**103**	—	**1,237**	**1,340**
Foreign exchange revaluation and other	**(11)**	**(4)**	—	**(431)**	—	—	**(446)**
Balance at September 30, 2022	**$ 6,961**	**$ 2,236**	**$ 134**	**$ 4,325**	**$ 371**	**$ 2,080**	**$ 16,107**

Other intangible assets

Other intangible assets that are subject to amortization principally relate to agency distribution relationships, renewal rights, and patents, and other intangible assets that are not subject to amortization principally relate to trademarks.

(in millions of U.S. dollars)	**September 30 2022**	December 31 2021
Subject to amortization	**$ 2,417**	$ 2,508
Not subject to amortization	**2,966**	2,947
Total	**$ 5,383**	$ 5,455

The following table presents, as of September 30, 2022, the expected pre-tax amortization expense of purchased intangibles, at current foreign currency exchange rates, for the fourth quarter of 2022 and for the next five years:

For the Years Ending December 31 (in millions of U.S. dollars)	Associated with the Cigna acquisition in Asia [1]	Associated with the Chubb acquisition [2]	Other intangible assets [3]	Total amortization of purchased intangibles
Fourth quarter of 2022	**$ 1**	**$ 45**	**$ 25**	**$ 71**
2023	**2**	**170**	**96**	**268**
2024	**4**	**153**	**89**	**246**
2025	**5**	**137**	**87**	**229**
2026	**6**	**123**	**84**	**213**
2027	**9**	**108**	**81**	**198**
Total	**$ 27**	**$ 736**	**$ 462**	**$ 1,225**

(1) Recorded in Life Insurance segment.

(2) Recorded in Corporate.

(3) Recorded in applicable segment(s) that acquired the intangible assets.

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

8. Commitments, contingencies, and guarantees

a) Derivative instruments
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 and derivatives designated as hedges 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, from time to time, purchases to be announced mortgage-backed securities (TBAs) as part of its investing activities.

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. Some of Chubb's derivatives satisfy hedge accounting requirements, as discussed below. We also consider economic hedging for planned cross border transactions.

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.

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:

		September 30, 2022			December 31, 2021		
		Fair Value			Fair Value		
(in millions of U.S. dollars)	**Consolidated Balance Sheet Location**	**Derivative Asset**	**Derivative (Liability)**	**Notional Value/ Payment Provision**	Derivative Asset	Derivative (Liability)	Notional Value/ Payment Provision
Investment and embedded derivatives not designated as hedging instruments:							
Foreign currency forward contracts	**OA / (AP)**	**$ 72**	**$ (277)**	**$ 5,211**	$ 25	$ (139)	$ 6,182
Options/Futures contracts on notes, bonds, and equities	**OA / (AP)**	**57**	**(29)**	**1,366**	33	(27)	12,944
Convertible securities [1]	**FM AFS / ES**	**32**	**—**	**41**	11	—	12
		$ 161	**$ (306)**	**$ 6,618**	$ 69	$ (166)	$ 19,138
Other derivative instruments:							
Futures contracts on equities [2]	**OA / (AP)**	**$ 107**	**$ —**	**$ 952**	$ —	$ (16)	$ 905
Other	**OA / (AP)**	**2**	**—**	**301**	—	—	3
		$ 109	**$ —**	**$ 1,253**	$ —	$ (16)	$ 908
GLB [3]	**(AP)**	**$ —**	**$ (784)**	**$ 2,210**	$ —	$ (745)	$ 1,432
Derivatives designated as hedging instruments:							
Cross-currency swaps - fair value hedges	**OA / (AP)**	**$ —**	**$ (94)**	**$ 1,501**	$ —	$ —	$ —
Cross-currency swaps - net investment hedges	**OA / (AP)**	**71**	**(7)**	**1,501**	**—**	**—**	**—**
		$ 71	**$ (101)**	**$ 3,002**	**$ —**	**$ —**	**$ —**

(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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)
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At September 30, 2022, and December 31, 2021, net derivative liabilities of $98 million and $123 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.

b) Hedge accounting
We designated certain derivatives as fair value hedges and net investment hedges for accounting purposes to hedge for foreign currency exposure associated with portions of our Euro denominated debt and the net investment in certain foreign subsidiaries, respectively. These derivatives comprise cross-currency swaps, which are agreements under which two counterparties exchange interest payments and principal denominated in different currencies at a future date.

(i) Cross-currency swaps - fair value hedges
In September 2022, Chubb entered into certain cross-currency swaps designated as fair value hedges. The objective of these cross-currency swaps is to hedge the foreign currency risk on our Euro denominated debt by converting cash flows back into the U.S dollar.

These fair value hedges are carried at fair value. The hedges are expected to be highly effective, with gains or losses on the fair value hedges offsetting the foreign currency remeasurement on the hedged Euro denominated senior notes within Net realized gains (losses) on the Consolidated statements of operations. The remaining change in fair value is recorded in Other comprehensive income (OCI).

The carrying value of hedged Euro denominated senior notes, recorded within Long-term debt on the Consolidated balance sheets, was $1.5 billion as of September 30, 2022. This carrying value includes a $32 million gain from foreign currency remeasurement since the inception of the hedge. For the three and nine months ended September 30, 2022, $94 million of losses on fair value hedges were recognized in OCI, of which $32 million of losses were reclassified from OCI to Net realized gains (losses).

(ii) Cross-currency swaps - net investment hedges
In September 2022, Chubb entered into certain cross-currency swaps designated as net investment hedges. The objective of these cross-currency swaps is to hedge the foreign currency exposure in the net investments of certain foreign subsidiaries by converting cash flows from U.S. dollar to the British pound sterling, Japanese yen, and Swiss franc. The hedged risk is designated as the foreign currency exposure arising between the functional currency of the foreign subsidiary and the functional currency of its parent entity.

These net investment hedges are carried at fair value, with changes in fair value recorded in Cumulative translation adjustments (CTA) within OCI. The mark-to-market adjustments for foreign currency changes will remain until the underlying hedge subsidiary is deconsolidated or if hedge accounting is discontinued.

For the three and nine months ended September 30, 2022, $64 million of gains on net investment hedges were recognized in CTA.

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

c) Derivative instruments not designated as hedges
Derivative instruments which are not designated as hedges are carried at fair value with changes in fair value recorded in Net realized gains (losses) in the Consolidated statements of operations. The following table presents net realized gains (losses) related to derivative instrument activity in the Consolidated statements of operations:

	Three Months Ended September 30		Nine Months Ended September 30	
(in millions of U.S. dollars)	**2022**	2021	**2022**	2021
Investment and embedded derivative instruments:				
Foreign currency forward contracts	**$ (247)**	$ (15)	**$ (515)**	$ (37)
All other futures contracts, options, and equities	**49**	6	**285**	45
Convertible securities [1]	**—**	—	**(2)**	1
Total investment and embedded derivative instruments	**$ (198)**	$ (9)	**$ (232)**	$ 9
GLB and other derivative instruments:				
GLB	**$ 22**	$ (59)	**$ (86)**	$ 252
Futures contracts on equities [2]	**54**	(4)	**240**	(112)
Other	**(19)**	(10)	**(9)**	(8)
Total GLB and other derivative instruments	**$ 57**	$ (73)	**$ 145**	$ 132
	$ (141)	$ (82)	**$ (87)**	$ 141

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

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

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

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

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

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

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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.

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.

(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, from time to time, 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).

d) 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.

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

	Remaining contractual maturity	
	September 30, 2022	December 31, 2021
(in millions of U.S. dollars)	Overnight and Continuous	
Collateral held under securities lending agreements:		
Cash	**$ 857**	$ 931
U.S. Treasury / Agency	**93**	128
Non-U.S.	**641**	752
Corporate and asset-backed securities	**35**	12
Mortgage-backed securities	**—**	1
Equity securities	**—**	7
	$ 1,626	$ 1,831
Gross amount of recognized liability for securities lending payable	**$ 1,626**	$ 1,831

At September 30, 2022, and December 31, 2021, our repurchase agreement obligations of $2,417 million and $1,406 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.

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

	Remaining contractual maturity							
	September 30, 2022				December 31, 2021			
(in millions of U.S. dollars)	**Up to 30 Days**	**30-90 Days**	**Greater than 90 Days**	**Total**	30-90 Days	Greater than 90 Days	Total	
Collateral pledged under repurchase agreements:								
Cash	**$ 66**	**$ 10**	**$ —**	**$ 76**	$ —	$ 29	$ 29	
U.S. Treasury / Agency	**—**	**102**	**—**	**102**	103	—	103	
Mortgage-backed securities	**350**	**1,530**	**471**	**2,351**	—	1,288	1,288	
	$ 416	**$ 1,642**	**$ 471**	**$ 2,529**	$ 103	$ 1,317	$ 1,420	
Gross amount of recognized liabilities for repurchase agreements				**$ 2,417**			$ 1,406	
Difference [1]				**$ 112**			$ 14	

[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.

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e) Fixed maturities
At September 30, 2022, and December 31, 2021, commitments to purchase fixed income securities over the next several years were $630 million and $771 million, respectively.

f) Other investments
At September 30, 2022, included in Other investments in the Consolidated balance sheet are investments in limited partnerships and partially-owned investment companies with a carrying value of $12.0 billion. In connection with these investments, we have commitments that may require funding of up to $7.6 billion over the next several years. At December 31, 2021, these investments had a carrying value of $9.8 billion with a commitment that may require funding of up to $7.2 billion.

g) Income taxes
At September 30, 2022, $57 million of unrecognized tax benefits remain outstanding. It is reasonably possible that, over the next twelve months, 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.

h) 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.

i) Lease commitments
At September 30, 2022, and December 31, 2021, the right-of-use asset was $458 million and $445 million, respectively, recorded within Other assets and the lease liability was $486 million and $484 million, respectively, 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.

j) Letters of credit
In October 2022, Chubb entered into a new group syndicated credit facility through 2027 with capacity of $3.0 billion. This facility consolidated our three existing syndicated facilities with capacity of $2.7 billion.

9. 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, 2022, our Common Shares had a par value of CHF 24.15 per share.

At our May 2022 annual general meeting, our shareholders approved an annual dividend for the following year of up to $3.32 per share, expected to be paid in four quarterly installments of $0.83 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 2023 annual general meeting, and is authorized to abstain from distributing a dividend at its discretion.

At our May 2021 and 2020 annual general meetings, our shareholders approved annual dividends for the following year of up to $3.20 per share and $3.12 per share, respectively, which were paid in four quarterly installments of $0.80 per share and $0.78 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):

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	Three Months Ended September 30				Nine Months Ended September 30			
	2022		2021		**2022**		2021	
	CHF	USD	CHF	USD	CHF	USD	CHF	USD
Total dividend distributions per common share	**0.78**	**$ 0.83**	0.73	$ 0.80	**2.32**	**$ 2.46**	2.14	$ 2.38

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 the Chubb Limited Extraordinary General Meeting of Shareholders, held on November 3, 2021, shareholders approved the cancellation of 14,465,400 shares repurchased under our share repurchase program during the first six months of 2021. 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 on January 17, 2022. At our May 2022 annual general meeting, held on May 19, 2022, our shareholders approved the cancellation of 13,179,100 shares purchased under our share repurchase program during the last six months of 2021. 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 on August 4, 2022. During the nine months ended September 30, 2022, 14,022,728 shares were repurchased, 27,644,500 shares were canceled, and 2,470,600 net shares were issued under employee share-based compensation plans. At September 30, 2022, 31,356,130 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 19, 2020 through December 31, 2021;
- $1.0 billion increase to the November 2020 share repurchase program to a total of $2.5 billion in February 2021, effective through December 31, 2021;
- One-time incremental share repurchase program of $5.0 billion of Chubb Common Shares from July 19, 2021 through June 30, 2022; and
- $2.5 billion of Chubb Common Shares from May 19, 2022 through June 30, 2023.

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

	Three Months Ended September 30		Nine Months Ended September 30	
(in millions of U.S. dollars, except share data)	**2022**	2021	**2022**	2021
Number of shares repurchased	**3,676,528**	8,412,000	**14,022,728**	22,877,400
Cost of shares repurchased	**$ 685**	$ 1,516	**$ 2,815**	$ 3,956
Repurchase authorization remaining at end of period	**$ 1,816**	$ 3,551	**$ 1,816**	$ 3,551

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The following table presents changes in accumulated other comprehensive income (loss):

(in millions of U.S. dollars)	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	**2022**	2021
Accumulated other comprehensive income (loss) (AOCI)				
Net unrealized appreciation (depreciation) on investments				
Balance – beginning of period, net of tax	**$ (5,713)**	$ 3,342	**$ 2,256**	$ 4,673
Change in period, before reclassification from AOCI (before tax)	**(3,324)**	(564)	**(12,898)**	(2,151)
Amounts reclassified from AOCI (before tax)	**279**	10	**857**	(26)
Change in period, before tax	**(3,045)**	(554)	**(12,041)**	(2,177)
Income tax benefit	**147**	98	**1,174**	390
Balance – end of period, net of tax	**(8,611)**	2,886	**(8,611)**	2,886
Cumulative foreign currency translation adjustment				
Balance – beginning of period, net of tax	**(2,821)**	(1,323)	**(2,146)**	(1,637)
Change in period, before tax	**(966)**	(414)	**(1,676)**	(84)
Income tax benefit	**6**	23	**41**	7
Balance – end of period, net of tax	**(3,781)**	(1,714)	**(3,781)**	(1,714)
Fair value hedging instruments				
Balance – beginning of period, net of tax	**—**	—	**—**	—
Change in period, before reclassification from AOCI (before tax)	**(94)**	—	**(94)**	—
Amounts reclassified from AOCI (before tax)	**32**	—	**32**	—
Change in period, before tax	**(62)**	—	**(62)**	—
Income tax benefit	**13**	—	**13**	—
Balance – end of period, net of tax	**(49)**	—	**(49)**	—
Postretirement benefit liability adjustment				
Balance – beginning of period, net of tax	**259**	(197)	**240**	(167)
Change in period, before tax	**3**	4	**27**	(33)
Income tax (expense) benefit	**(1)**	(1)	**(6)**	6
Balance – end of period, net of tax	**261**	(194)	**261**	(194)
Accumulated other comprehensive income (loss)	**$ (12,180)**	$ 978	**$ (12,180)**	$ 978

The following table presents reclassifications from accumulated other comprehensive income (loss) to the consolidated statements of operations:

(in millions of U.S. dollars)	Three Months Ended September 30		Nine Months Ended September 30		Consolidated Statement of Operations Location
	2022	2021	**2022**	2021	
Fixed maturities available for sale	**$ (279)**	$ (10)	**$ (857)**	$ 26	**Net realized gains (losses)**
Income tax (expense) benefit	**39**	3	**138**	5	**Income tax expense**
	$ (240)	$ (7)	**$ (719)**	$ 31	**Net income**
Net gains (losses) of fair value hedging instruments					
Cross-currency swaps	**$ (32)**	$ —	**$ (32)**	$ —	**Net realized gains (losses)**
Income tax (expense) benefit	**7**	—	**7**	—	**Income tax expense**
	$ (25)	$ —	**$ (25)**	$ —	**Net income**
Total amounts reclassified from AOCI	**$ (265)**	$ (7)	**$ (744)**	$ 31	

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10. Share-based compensation

The Chubb Limited 2016 Long-Term Incentive Plan, as amended and restated (the Amended 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 24, 2022, Chubb granted 1,699,554 stock options with a weighted-average grant date fair value of $35.21 each. The fair value of the options issued is estimated on the grant date using the Black-Scholes option pricing model.

The Amended 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. 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 principally granted at market close price on the grant date. On February 24, 2022, Chubb granted 807,194 service-based restricted stock awards, 295,301 service-based restricted stock units, and 294,229 performance-based stock awards to employees and officers with a grant date fair value of $199.03 each. Each restricted stock unit represents our obligation to deliver to the holder one Common Share upon vesting.

11. 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:

	Pension Benefit Plans				Other Postretirement Benefit Plans	
	2022		2021		**2022**	2021
Three Months Ended September 30 (in millions of U.S. dollars)	**U.S. Plans**	**Non-U.S. Plans**	U.S. Plans	Non-U.S. Plans		
Service cost	**$ —**	**$ 1**	$ —	$ 1	**$ —**	$ 1
Non-service cost (benefit):						
Interest cost	**21**	**5**	18	5	**—**	1
Expected return on plan assets	**(70)**	**(11)**	(64)	(10)	**—**	(1)
Amortization of net actuarial loss	**—**	**—**	—	—	**—**	—
Amortization of prior service cost	**—**	**—**	—	—	**—**	—
Settlements	**—**	**—**	1	—	**—**	—
Total non-service cost (benefit)	**(49)**	**(6)**	(45)	(5)	**—**	—
Net periodic benefit cost (benefit)	**$ (49)**	**$ (5)**	$ (45)	$ (4)	**$ —**	$ 1

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Nine Months Ended September 30 (in millions of U.S. dollars)	Pension Benefit Plans				Other Postretirement Benefit Plans	
	2022		2021		**2022**	2021
	U.S. Plans	**Non-U.S. Plans**	U.S. Plans	Non-U.S. Plans		
Service cost	**$ —**	**$ 3**	$ —	$ 3	**$ —**	$ 1
Non-service cost (benefit):						
Interest cost	**64**	**17**	53	14	**1**	1
Expected return on plan assets	**(212)**	**(33)**	(191)	(32)	**(1)**	(1)
Amortization of net actuarial loss	**—**	**—**	—	2	**—**	—
Amortization of prior service cost	**—**	**—**	—	—	**—**	(26)
Settlements	**—**	**—**	1	—	**—**	—
Total non-service cost (benefit)	**(148)**	**(16)**	(137)	(16)	**—**	(26)
Net periodic benefit cost (benefit)	**$ (148)**	**$ (13)**	$ (137)	$ (13)	**$ —**	$ (25)

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:

	Pension Benefit Plans		Other Postretirement Benefit Plans	
Three Months Ended September 30 (in millions of U.S. dollars)	**2022**	2021	**2022**	2021
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)**	(5)	**—**	—
Administrative expenses	**(50)**	(45)	**—**	—
Total non-service cost (benefit)	**(55)**	(50)	**—**	—
Net periodic benefit cost (benefit)	**$ (54)**	$ (49)	**$ —**	$ 1

	Pension Benefit Plans		Other Postretirement Benefit Plans	
Nine Months Ended September 30 (in millions of U.S. dollars)	**2022**	2021	**2022**	2021
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	**(15)**	(14)	**—**	(3)
Administrative expenses	**(149)**	(139)	**—**	(23)
Total non-service cost (benefit)	**(164)**	(153)	**—**	(26)
Net periodic benefit cost (benefit)	**$ (161)**	$ (150)	**$ —**	$ (25)

12. Other income and expense

	Three Months Ended September 30		Nine Months Ended September 30	
(in millions of U.S. dollars)	**2022**	2021	**2022**	2021
Equity in net income (loss) of partially-owned entities [1]	**$ (98)**	$ 802	**$ 192**	$ 2,073
Gains (losses) from fair value changes in separate account assets [2]	**(67)**	(24)	**(116)**	(5)
Federal excise and capital taxes	**(6)**	(5)	**(15)**	(15)
Other	**(17)**	(10)	**(40)**	(23)
Total	**$ (188)**	$ 763	**$ 21**	$ 2,030

(1) Equity in net income (loss) of partially-owned entities principally comprises mark-to-market gain (loss) on private equities where we own more than three percent of $(190) million and $(69) million for the three and nine months ended September 30, 2022, respectively, and $702 million and $1,776 million, respectively, for the prior year periods. This line item also includes net income of $28 million and $83 million attributable to our investments in Huatai (Huatai Group, Huatai P&C, and Huatai Life) for the three and nine months ended September 30, 2022, respectively, compared to $40 million and $144 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.

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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.

13. 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. Segment results for the three and nine months ended September 30, 2022, include the results of Cigna's business in Asia from July 1, 2022. Results from Cigna's business in Asia are included in our Life Insurance segment and, to a lesser extent, Overseas General Insurance segment according to the nature of the business written.

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. Segment income (loss) includes underwriting income (loss), net investment income (loss), and other operating income and expense items such as each segment's share of the operating income (loss) related to partially-owned entities and miscellaneous income and expense items for which the segments are held accountable. Our main measure of segment performance is Segment income (loss), which also includes 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.

Revenue and expenses managed at the corporate level, including net realized gains (losses), interest expense, Cigna integration expenses, and income tax are reported within Corporate. Cigna integration expenses are one-time costs that are directly attributable to third-party consulting fees, employee-related retention costs, and other professional and legal fees related to the acquisition of Cigna's A&H and Life insurance companies in six Asian markets. These items are not allocated to the segment level as they are one-time in nature and are not related to the ongoing business activities of the segment. The Chief Executive Officer does not manage segment results or allocate resources to segments when considering these costs, and therefore are excluded from our definition of segment income (loss).

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 fair value changes on separate accounts that do not qualify for separate accounting under GAAP. These gains and losses 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 for segment reporting purposes.

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Chubb Limited and Subsidiaries

The following tables present the Statement of Operations by segment:

For the Three Months Ended September 30, 2022 (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	$ 4,722	$ 1,392	$ 1,723	$ 2,645	$ 265	$ 1,273	$ —	$ —	$ 12,020
Net premiums earned	4,283	1,334	1,673	2,741	255	1,249	—	—	11,535
Losses and loss expenses	3,036	857	1,444	1,441	311	135	74	(19)	7,279
Policy benefits	—	—	—	—	—	553	—	(67)	486
Policy acquisition costs	583	274	68	720	59	271	—	—	1,975
Administrative expenses	272	71	3	264	8	174	91	—	883
Underwriting income (loss)	392	132	158	316	(123)	116	(165)	86	912
Net investment income	589	76	9	151	71	147	5	(69)	979
Other (income) expense	6	1	1	(2)	—	(10)	194	(2)	188
Amortization expense of purchased intangibles	—	2	7	12	—	2	46	—	69
Segment income (loss)	$ 975	$ 205	$ 159	$ 457	$ (52)	$ 271	$ (400)	$ 19	$ 1,634
Net realized gains (losses)							(365)	(19)	(384)
Interest expense							150	—	150
Cigna integration expenses							23	—	23
Income tax expense							265	—	265
Net income (loss)							$ (1,203)	$ —	$ 812

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	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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

For the Nine Months Ended September 30, 2022 (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	$ 13,426	$ 3,998	$ 2,523	$ 8,364	$ 780	$ 2,430	$ —	$ —	$ 31,521
Net premiums earned	12,645	3,852	2,217	8,065	712	2,347	—	—	29,838
Losses and loss expenses	7,979	2,343	1,830	4,054	565	437	275	(9)	17,474
Policy benefits	—	—	—	—	—	906	—	(116)	790
Policy acquisition costs	1,701	792	111	2,096	178	573	—	—	5,451
Administrative expenses	814	213	4	811	27	346	264	—	2,479
Underwriting income (loss)	2,151	504	272	1,104	(58)	85	(539)	125	3,644
Net investment income (loss)	1,600	199	23	460	232	359	(4)	(180)	2,689
Other (income) expense	12	3	1	3	1	(50)	73	(64)	(21)
Amortization expense of purchased intangibles	—	7	20	40	—	7	137	—	211
Segment income (loss)	$ 3,739	$ 693	$ 274	$ 1,521	$ 173	$ 487	$ (753)	$ 9	$ 6,143
Net realized gains (losses)							(778)	(9)	(787)
Interest expense							416	—	416
Cigna integration expenses							26	—	26
Income tax expense							913	—	913
Net income (loss)							$ (2,886)	$ —	$ 4,001

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

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

14. Earnings per share

	Three Months Ended September 30		Nine Months Ended September 30	
(in millions of U.S. dollars, except share and per share data)	**2022**	2021	**2022**	2021
Numerator:				
Net income	**$ 812**	$ 1,833	**$ 4,001**	$ 6,398
Denominator:				
Denominator for basic earnings per share:				
Weighted-average shares outstanding	**416,542,101**	435,318,088	**421,290,032**	443,595,026
Denominator for diluted earnings per share:				
Share-based compensation plans	**3,076,855**	3,123,550	**3,733,449**	3,032,989
Weighted-average shares outstanding and assumed conversions	**419,618,956**	438,441,638	**425,023,481**	446,628,015
Basic earnings per share	**$ 1.95**	$ 4.21	**$ 9.50**	$ 14.42
Diluted earnings per share	**$ 1.94**	$ 4.18	**$ 9.41**	$ 14.33
Potential anti-dilutive share conversions	**1,693,502**	1,758,853	**1,377,784**	1,439,882

Excluded from weighted-average shares outstanding and assumed conversions is the impact of securities that would have been anti-dilutive during the respective periods. These securities consisted of stock options in which the underlying exercise prices were greater than the average market prices of our Common Shares. Refer to Note 12 to the Consolidated Financial Statements of our 2021 Form 10-K for additional information on stock options.

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, 2022.

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, 2021 (2021 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, including with respect to our 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, 2022, we had total assets of $198 billion and shareholders' equity of $48 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 2021 Form 10-K.

On July 1, 2022, we completed the acquisition of the life and non-life insurance companies that house the personal accident, supplemental health, and life insurance business of Cigna in six Asian markets. Our results for the three and nine months ended September 30, 2022, include the results of these acquired businesses from July 1, 2022, and are included in our Life Insurance segment and, to a lesser extent, Overseas General Insurance segment according to the nature of the business written. Refer to Note 2 to the Consolidated Financial Statements for additional information on our acquisition.

Consolidated Operating Results – Three and Nine Months Ended September 30, 2022 and 2021

(in millions of U.S. dollars, except for percentages)	Three Months Ended September 30		% Change	Nine Months Ended September 30		% Change
	2022	2021	Q-22 vs. Q-21	**2022**	2021	YTD-22 vs. YTD-21
Net premiums written	**$ 12,020**	$ 10,510	14.4 %	**$ 31,521**	$ 28,718	9.8 %
Net premiums written - constant dollars [1]			17.3 %			12.1 %
Net premiums earned	**11,535**	10,000	15.3 %	**29,838**	27,034	10.4 %
Net investment income	**979**	866	13.1 %	**2,689**	2,613	2.9 %
Net realized gains (losses)	**(384)**	(21)	NM	**(787)**	833	NM
Total revenues	**12,130**	10,845	11.9 %	**31,740**	30,480	4.1 %
Losses and loss expenses	**7,279**	6,629	9.8 %	**17,474**	16,688	4.7 %
Policy benefits	**486**	151	221.1 %	**790**	503	57.1 %
Policy acquisition costs	**1,975**	1,778	11.1 %	**5,451**	5,141	6.0 %
Administrative expenses	**883**	806	9.6 %	**2,479**	2,325	6.6 %
Interest expense	**150**	122	23.3 %	**416**	366	13.8 %
Other (income) expense	**188**	(763)	NM	**(21)**	(2,030)	(99.0)%
Amortization of purchased intangibles	**69**	71	(3.2)%	**211**	216	(2.3)%
Cigna integration expenses	**23**	—	NM	**26**	—	NM
Total expenses	**11,053**	8,794	25.7 %	**26,826**	23,209	15.6 %
Income before income tax	**1,077**	2,051	(47.5)%	**4,914**	7,271	(32.4)%
Income tax expense	**265**	218	21.2 %	**913**	873	4.5 %
Net income	**$ 812**	$ 1,833	(55.7)%	**$ 4,001**	$ 6,398	(37.5)%

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, 2022

- Net income was $812 million compared with $1.8 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 improvement in our combined ratios. Net income is lower compared to prior year, reflecting the after-tax mark-to-market losses on private equities of $231 million, compared to gains of $705 million in the prior year.

- Consolidated net premiums written were $12.0 billion, up 14.4 percent, or 17.3 percent in constant dollars. The acquisition of Cigna's business in Asia added 7.1 percentage points, or 7.2 percentage points in constant dollars, to the growth in net premiums written.

- Consolidated net premiums earned were $11.5 billion, up 15.3 percent, or 18.6 percent in constant dollars. The acquisition of Cigna's business in Asia added 7.3 percentage points, or 7.5 percentage points in constant dollars, to the growth in net premiums earned.

- Total pre-tax and after-tax catastrophe losses were $1.2 billion (11.3 percentage points of the P&C combined ratio) and $949 million, respectively, compared with $1.1 billion (12.2 percentage points of the P&C combined ratio) and $943 million, respectively, in the prior year period. Catastrophe losses in the current quarter were primarily from Hurricane Ian losses of $975 million pre-tax and global weather-related events.

- Total pre-tax and after-tax favorable prior period development were $222 million (2.2 percentage points of the P&C combined ratio) and $162 million, respectively, including pre-tax adverse development of $52 million related to legacy environmental exposures. Excluding the adverse development, we had pre-tax favorable development of $274 million, with 5 percent in long-tail lines, and 95 percent in short-tail lines. This compares with pre-tax and after-tax favorable prior

period development of $321 million (3.6 percentage points of the P&C combined ratio) and $227 million, respectively, in the prior year period.

- The P&C combined ratio was 93.1 percent compared with 93.4 percent in the prior year period. The P&C current accident year (CAY) combined ratio excluding catastrophe losses was 84.0 percent compared with 84.8 percent in the prior year period. The current year ratios decreased due to the favorable impact of higher net premiums earned on the expense ratio.
- Net investment income was a record $979 million compared with $866 million in the prior year period.
- Operating cash flow was $3.4 billion compared with $3.3 billion in the prior year period.
- Shareholders' equity decreased by $4.0 billion in the quarter, as net income of $812 million was more than offset by net unrealized losses on investments of $2.9 billion after-tax from rising interest rates and $1.0 billion related to cumulative foreign exchange translation. In addition, shareholders' equity reflected total capital returned to shareholders in the quarter of $1.0 billion, including share repurchases of $685 million, at an average purchase price of $186.22 per share, and dividends of $346 million.

Net Premiums Written	Three Months Ended September 30		% Change		Nine Months Ended September 30		% Change	
(in millions of U.S. dollars, except for percentages)	**2022**	2021	Q-22 vs. Q-21	C$ Q-22 vs. Q-21	**2022**	2021	YTD-22 vs. YTD-21	C$ YTD-22 vs. YTD-21
Commercial casualty	**$ 2,167**	$ 1,957	10.7 %	12.8 %	**$ 5,777**	$ 5,215	10.8 %	12.5 %
Workers' compensation	**476**	488	(2.5)%	(2.5)%	**1,625**	1,597	1.7 %	1.7 %
Financial lines	**1,270**	1,328	(4.4)%	(1.9)%	**3,727**	3,681	1.2 %	3.2 %
Surety	**152**	139	9.9 %	11.8 %	**477**	435	9.7 %	11.1 %
Commercial multiple peril [1]	**341**	310	10.1 %	10.1 %	**972**	889	9.4 %	9.4 %
Property and other short-tail lines	**1,756**	1,572	11.8 %	15.8 %	**5,503**	4,906	12.2 %	15.3 %
Total Commercial P&C lines	**6,162**	5,794	6.4 %	8.8 %	**18,081**	16,723	8.1 %	10.0 %
Agriculture	**1,723**	1,415	21.8 %	21.8 %	**2,523**	2,110	19.6 %	19.6 %
Personal automobile	**404**	383	5.4 %	7.9 %	**1,239**	1,134	9.2 %	11.4 %
Personal homeowners	**1,023**	978	4.5 %	5.6 %	**2,910**	2,778	4.7 %	5.6 %
Personal other	**451**	454	(0.7)%	7.8 %	**1,406**	1,386	1.4 %	6.8 %
Total Personal lines	**1,878**	1,815	3.4 %	6.6 %	**5,555**	5,298	4.8 %	7.2 %
Total Property and Casualty lines	**9,763**	9,024	8.2 %	10.4 %	**26,159**	24,131	8.4 %	10.3 %
Global A&H lines [2]	**1,518**	922	64.7 %	75.3 %	**3,451**	2,855	20.9 %	26.7 %
Reinsurance lines	**265**	221	19.5 %	21.8 %	**780**	702	11.1 %	12.2 %
Life	**474**	343	38.6 %	48.0 %	**1,131**	1,030	9.9 %	15.3 %
Total consolidated	**$ 12,020**	$ 10,510	14.4 %	17.3 %	**$ 31,521**	$ 28,718	9.8 %	12.1 %

(1) Commercial multiple peril represents retail package business (property and general liability).
(2) For purposes of this schedule only, A&H results include Combined North America and International businesses, which are 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, 2022, reflects growth across most lines of business driven by positive rate increases, new business, and strong renewal retention. The acquisition of Cigna's business in Asia contributed $738 million for the three and nine months ended September 30, 2022.

- Commercial casualty grew primarily in North America, Europe, and Asia, driven by strong new business and retention, including exposure and rate increases.

- Workers' compensation decreased for the quarter due to a favorable COVID-related exposure adjustment in the prior year. Growth for the nine months ended September 30, 2022, was due to exposure increases in North America.
- Financial lines decreased for the quarter as growth in Asia and Latin America was more than offset by lower retention and lower new business in North America. The year-to-date increase reflects growth across most regions from strong new business and retention, and rate increases.
- Surety increased due to strong new business in North America.
- Commercial multiple peril increased due to strong new business and renewal retention, including exposure and positive rate increases in North America.
- Property and other short-tail lines grew globally due to strong new business and renewal retention, including positive rate increases and increased exposure.
- Agriculture increased due to underlying growth in crop insurance, reflecting higher commodity prices, higher reported acreage from policyholders, and policy count growth. Partially offsetting growth for the nine months was a return of premium to the U.S. government in the first quarter of 2022 of $161 million.
- Personal lines grew in most regions reflecting new business and strong renewal retention, from both rate and exposure increases, primarily in homeowners and automobile in North America, high net worth and specialty lines in Asia, and specialty lines and automobile in Latin America. Partially offsetting growth in North America were additional cancellations in parts of California exposed to wildfires.
- Global A&H lines increased due to the acquisition of Cigna's business in Asia in the third quarter of 2022, which contributed $593 million. Additionally, growth in Asia, Latin America, Europe, and Japan on a constant dollar basis, was driven by higher new business and increased travel volume and consumer activity. Our North American Combined Insurance supplemental A&H business decreased primarily due to the non-renewal of a large program.
- Reinsurance lines increased for the quarter primarily due to higher catastrophe reinstatement premiums. Growth for the nine months ended September 30, 2022, was driven by new business and favorable premium adjustments; partially offset by a one-time portfolio transfer in the prior year.
- International life operations increased due to the acquisition of Cigna's business in Asia in the third quarter of 2022, which contributed $145 million. Growth from new business in Asia, primarily in Thailand, Indonesia and Vietnam, was more than offset by lower business in Latin America, principally reflecting the non-renewal of certain large account business in Chile.

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, 2022, net premiums earned increased $1,535 million, or 15.3 percent. For the nine months ended September 30, 2022, net premiums earned increased $2,804 million, or 10.4 percent.

Catastrophe Losses and Prior Period Development

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

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

	Three Months Ended September 30		Nine Months Ended September 30	
(in millions of U.S. dollars)	**2022**	2021	**2022**	2021
Catastrophe losses	**$ 1,158**	$ 1,146	**$ 1,782**	$ 2,126
Favorable prior period development	**$ 222**	$ 321	**$ 709**	$ 781

Catastrophe losses through September 30, 2022 and 2021, were primarily from the following events:

- 2022: Hurricane Ian losses of $975 million, severe weather-related events in the U.S. and internationally, Australia storms, and Colorado wildfires.
- 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.

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, 2022, was $222 million, including adverse development of $52 million related to legacy environmental exposures. Excluding the adverse development, we had favorable development of $274 million, with 5 percent in long-tail lines, principally from accident years 2018 and prior, and 95 percent in short-tail lines, primarily in property lines.

Pre-tax net favorable PPD for the nine months ended September 30, 2022, was $709 million, including adverse development of $155 million for molestation claims, predominantly reviver statute-related, and adverse development of $52 million related to legacy environmental exposures. The molestation adverse development includes no change to the previously established reserve for the Boy Scouts of America settlement. Excluding the adverse development, we had favorable development of $916 million with 29 percent in long-tail lines, principally from accident years 2018 and prior, and 71 percent in short-tail lines, primarily in property and A&H lines.

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, A&H, property, and surety lines.

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	
	2022	2021	**2022**	2021
Loss and loss expense ratio				
CAY loss ratio excluding catastrophe losses	**60.6 %**	60.1 %	**58.4 %**	58.7 %
Catastrophe losses	**11.4 %**	12.2 %	**6.6 %**	8.4 %
Prior period development	**(2.4)%**	(3.7)%	**(3.0)%**	(3.2)%
Loss and loss expense ratio	**69.6 %**	68.6 %	**62.0 %**	63.9 %
Policy acquisition cost ratio	**16.6 %**	17.1 %	**17.7 %**	18.3 %
Administrative expense ratio	**6.9 %**	7.7 %	**7.8 %**	8.2 %
P&C Combined ratio	**93.1 %**	93.4 %	**87.5 %**	90.4 %

The loss and loss expense ratio and the CAY loss ratio excluding catastrophe losses increased for the three months ended September 30, 2022, reflecting the impact of a current accident year benefit recorded in the prior year partially offset by earned rate exceeding loss cost trends. The loss and loss expense ratio and the CAY loss ratio excluding catastrophe losses decreased for the nine months ended September 30, 2022, primarily from earned rate exceeding loss cost trends. The loss and loss expense ratio for the nine months ended September 30, 2022, also benefited from higher net premiums earned and lower catastrophe losses, partially offset by lower favorable prior period development.

The policy acquisition cost ratio decreased for the three and nine months ended September 30, 2022, primarily due to a higher percentage of net premiums earned from lines that have a lower acquisition cost ratio.

The administrative expense ratio decreased for the three and nine months ended September 30, 2022, primarily due to the favorable impact of higher net premiums earned, partially offset by higher employee-related expenses and increased investment to support growth.

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, 2022 and 2021, Policy benefits were $486 million and $151 million, respectively, which included (gains) losses from fair value changes in separate account liabilities that do not qualify for separate account reporting under GAAP of $(67) 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 $553 million and $175 million for the three months ended September 30, 2022 and 2021, respectively.

For the nine months ended September 30, 2022 and 2021, Policy benefits were $790 million and $503 million, respectively, which included (gains) losses from fair value changes in separate account liabilities that do not qualify for separate account reporting under GAAP of $(116) million and $(5) 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 $906 million and $508 million for the nine months ended September 30, 2022 and 2021, respectively.

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, 2022 and 2021

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 2021 Form 10-K.

North America Commercial P&C Insurance

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

	Three Months Ended September 30		% Change	Nine Months Ended September 30		% Change
(in millions of U.S. dollars, except for percentages)	**2022**	2021	Q-22 vs. Q-21	**2022**	2021	YTD-22 vs. YTD-21
Net premiums written	**$ 4,722**	$ 4,369	8.1 %	**$ 13,426**	$ 12,318	9.0 %
Net premiums earned	**4,283**	3,954	8.3 %	**12,645**	11,431	10.6 %
Losses and loss expenses	**3,036**	2,754	10.3 %	**7,979**	7,740	3.1 %
Policy acquisition costs	**583**	537	8.5 %	**1,701**	1,540	10.5 %
Administrative expenses	**272**	273	(0.2)%	**814**	772	5.5 %
Underwriting income	**392**	390	0.2 %	**2,151**	1,379	55.9 %
Net investment income	**589**	507	16.4 %	**1,600**	1,582	1.2 %
Other (income) expense	**6**	8	(17.8)%	**12**	24	(48.4)%
Segment income	**$ 975**	$ 889	9.6 %	**$ 3,739**	$ 2,937	27.3 %
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	**61.5 %**	62.3 %	(0.8) pts	**61.5 %**	63.1 %	(1.6) pts
Catastrophe losses	**14.0 %**	11.9 %	2.1 pts	**6.3 %**	8.7 %	(2.4) pts
Prior period development	**(4.6)%**	(4.5)%	(0.1) pts	**(4.7)%**	(4.1)%	(0.6) pts
Loss and loss expense ratio	**70.9 %**	69.7 %	1.2 pts	**63.1 %**	67.7 %	(4.6) pts
Policy acquisition cost ratio	**13.6 %**	13.5 %	0.1 pts	**13.5 %**	13.5 %	— pts
Administrative expense ratio	**6.4 %**	6.9 %	(0.5) pts	**6.4 %**	6.7 %	(0.3) pts
Combined ratio	**90.9 %**	90.1 %	0.8 pts	**83.0 %**	87.9 %	(4.9) pts

Catastrophe Losses and Prior Period Development

	Three Months Ended September 30		Nine Months Ended September 30	
(in millions of U.S. dollars)	**2022**	2021	**2022**	2021
Catastrophe losses	**$ 598**	$ 472	**$ 803**	$ 999
Favorable prior period development	**$ 166**	$ 157	**$ 561**	$ 440

Catastrophe losses through September 30, 2022 and 2021, were primarily from the following events:

- 2022: Hurricane Ian losses, severe weather-related events and winter storm losses in the U.S.
- 2021: Hurricane Ida losses, winter storm losses 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 $353 million, or 8.1 percent, and $1,108 million, or 9.0 percent, for the three and nine months ended September 30, 2022, respectively, reflecting strong premium retention, including both rate and exposure increases. Additionally, there was new business across a number of retail and wholesale lines, including property, primary and excess casualty, commercial multiple peril, and surety. A&H growth reflects recovery in A&H lines from exposure declines in the prior year and strong new business. Growth for the nine months ended September 30, 2022 also reflects strong premium retention, including rate and exposure increases, from financial lines and workers' compensation.

Net premiums earned increased $329 million, or 8.3 percent, and $1,214 million, or 10.6 percent for the three and nine months ended September 30, 2022, respectively, reflecting the growth in net premiums written described above.

Combined Ratio

The loss and loss expense ratio increased for the three months ended September 30, 2022, primarily from higher catastrophe losses. The loss and loss expense ratio decreased for the nine months ended September 30, 2022, primarily from lower catastrophe losses and higher favorable prior period development. The CAY loss ratio excluding catastrophe losses decreased for the three and nine months ended September 30, 2022, primarily from earned rate exceeding loss cost trends.

The administrative expense ratio decreased for the three and nine months ended September 30, 2022, primarily due to a one-time expense accrual release and the favorable impact of higher net premiums earned, partially offset by higher employee-related expenses.

North America Personal P&C Insurance

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

	Three Months Ended September 30		% Change	Nine Months Ended September 30		% Change
(in millions of U.S. dollars, except for percentages)	**2022**	2021	Q-22 vs. Q-21	**2022**	2021	YTD-22 vs. YTD-21
Net premiums written	**$ 1,392**	$ 1,300	7.1 %	**$ 3,998**	$ 3,761	6.3 %
Net premiums earned	**1,334**	1,244	7.2 %	**3,852**	3,652	5.5 %
Losses and loss expenses	**857**	846	1.1 %	**2,343**	2,341	0.1 %
Policy acquisition costs	**274**	254	8.3 %	**792**	746	6.2 %
Administrative expenses	**71**	73	(3.2)%	**213**	200	6.5 %
Underwriting income	**132**	71	86.8 %	**504**	365	38.4 %
Net investment income	**76**	60	26.6 %	**199**	189	5.3 %
Other (income) expense	**1**	1	—	**3**	(3)	NM
Amortization of purchased intangibles	**2**	2	—	**7**	8	(5.2)%
Segment income	**$ 205**	$ 128	61.1 %	**$ 693**	$ 549	26.3 %
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	**53.6 %**	50.7 %	2.9 pts	**53.5 %**	52.5 %	1.0 pts
Catastrophe losses	**20.6 %**	31.9 %	(11.3) pts	**12.2 %**	18.9 %	(6.7) pts
Prior period development	**(10.0)%**	(14.6)%	4.6 pts	**(4.9)%**	(7.3)%	2.4 pts
Loss and loss expense ratio	**64.2 %**	68.0 %	(3.8) pts	**60.8 %**	64.1 %	(3.3) pts
Policy acquisition cost ratio	**20.6 %**	20.4 %	0.2 pts	**20.6 %**	20.4 %	0.2 pts
Administrative expense ratio	**5.3 %**	5.9 %	(0.6) pts	**5.5 %**	5.5 %	— pts
Combined ratio	**90.1 %**	94.3 %	(4.2) pts	**86.9 %**	90.0 %	(3.1) pts

NM - not meaningful

Catastrophe Losses and Prior Period Development

	Three Months Ended September 30		Nine Months Ended September 30	
(in millions of U.S. dollars)	**2022**	2021	**2022**	2021
Catastrophe losses	**$ 274**	$ 397	**$ 469**	$ 698
Favorable prior period development	**$ 133**	$ 182	**$ 187**	$ 266

Catastrophe losses through September 30, 2022 and 2021, were primarily from the following events:

- 2022: Hurricane Ian losses, severe weather-related events in the U.S. and Colorado wildfires.
- 2021: Hurricane Ida losses, winter storm losses 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 $92 million, or 7.1 percent, and $237 million, or 6.3 percent for the three and nine months ended September 30, 2022, respectively, primarily driven by strong new business and renewal retention, from both rate and exposure increases, primarily in homeowners and automobile; partially offset by additional cancellations in parts of California exposed to wildfires.

Net premiums earned increased $90 million, or 7.2 percent, and $200 million, or 5.5 percent for the three and nine months ended September 30, 2022, 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, 2022, primarily from lower catastrophe losses, partially offset by lower favorable prior period development. The CAY loss ratio excluding catastrophe losses increased for the three and nine months ended September 30, 2022, reflecting higher losses in automobile and, to a lesser extent, homeowners.

The policy acquisition cost ratio was relatively flat for the three and nine months ended September 30, 2022.

The administrative expense ratio decreased for the three months ended September 30, 2022, primarily due to a one-time expense accrual release, the favorable impact of higher net premiums earned and strong expense management. The administrative expense ratio was flat for the nine months ended September 30, 2022.

North America Agricultural Insurance

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

	Three Months Ended September 30		% Change	Nine Months Ended September 30		% Change
(in millions of U.S. dollars, except for percentages)	**2022**	2021	Q-22 vs. Q-21	**2022**	2021	YTD-22 vs. YTD-21
Net premiums written	**$ 1,723**	$ 1,415	21.8 %	**$ 2,523**	$ 2,110	19.6 %
Net premiums earned	**1,673**	1,338	25.0 %	**2,217**	1,858	19.3 %
Losses and loss expenses	**1,444**	1,138	27.0 %	**1,830**	1,554	17.8 %
Policy acquisition costs	**68**	61	11.4 %	**111**	100	11.0 %
Administrative expenses	**3**	4	(21.4)%	**4**	10	(58.1)%
Underwriting income	**158**	135	16.3 %	**272**	194	39.9 %
Net investment income	**9**	6	28.9 %	**23**	21	5.6 %
Other (income) expense	**1**	—	NM	**1**	—	NM
Amortization of purchased intangibles	**7**	7	—	**20**	20	—
Segment income	**$ 159**	$ 134	17.9 %	**$ 274**	$ 195	40.2 %
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	**84.0 %**	84.0 %	— pts	**82.2 %**	82.3 %	(0.1) pts
Catastrophe losses	**1.8 %**	0.6 %	1.2 pts	**2.3 %**	1.1 %	1.2 pts
Prior period development	**0.5 %**	0.4 %	0.1 pts	**(2.0)%**	0.2 %	(2.2) pts
Loss and loss expense ratio	**86.3 %**	85.0 %	1.3 pts	**82.5 %**	83.6 %	(1.1) pts
Policy acquisition cost ratio	**4.1 %**	4.6 %	(0.5) pts	**5.1 %**	5.4 %	(0.3) pts
Administrative expense ratio	**0.2 %**	0.3 %	(0.1) pts	**0.2 %**	0.6 %	(0.4) pts
Combined ratio	**90.6 %**	89.9 %	0.7 pts	**87.8 %**	89.6 %	(1.8) pts

NM - not meaningful

Catastrophe Losses and Prior Period Development

	Three Months Ended September 30		Nine Months Ended September 30	
(in millions of U.S. dollars)	**2022**	2021	**2022**	2021
Catastrophe losses	**$ 31**	$ 8	**$ 52**	$ 20
(Unfavorable) favorable prior period development	**$ (9)**	$ (7)	**$ 17**	$ (5)

Catastrophe losses through September 30, 2022 and 2021, were primarily from the following events:

- 2022: Hurricane Ian losses, severe weather-related events in the Chubb Agribusiness, and winter storm losses in the U.S.
- 2021: Severe weather-related events in Chubb Agribusiness and winter storm losses 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 $308 million, or 21.8 percent for the three months ended September 30, 2022, primarily due to an increase in MPCI, primarily reflecting higher commodity prices, higher reported acreage from policyholders, and policy count growth. Net premiums written increased $413 million, or 19.6 percent for the nine months ended September 30, 2022, primarily due to an increase in MPCI reflecting the factors noted above, partly offset by a return of premium to the U.S. government in the first quarter of 2022 of $161 million. Under the profit-sharing agreement, we returned additional premiums to the government because of the lower losses experienced in certain states in 2021. This return of premium reduced net premiums written growth for the nine months ended September 30, 2022, by 7.6 percentage points.

Net premiums earned increased $335 million, or 25.0 percent, and $359 million, or 19.3 percent for the three and nine months ended September 30, 2022, respectively, reflecting the growth in net premiums written described above.

Combined Ratio

The combined ratio for the nine months ended September 30, 2022, was impacted by the return of premium to the U.S. government under the profit-sharing agreement related to the profitable 2021 crop year described above. This prior period development resulted in a reduction to net premiums earned of $161 million and a corresponding reduction to incurred losses, with no net impact to underwriting income.

The loss and loss expense ratio increased for the three months ended September 30, 2022, primarily from higher catastrophe losses. The loss and loss expense ratio decreased for the nine months ended September 30, 2022, primarily due to favorable prior period development compared with unfavorable prior period development in the prior year, partially offset by higher catastrophe losses. The CAY loss ratio excluding catastrophe losses was relatively flat for the three and nine months ended September 30, 2022.

The policy acquisition cost ratio decreased for the three and nine months ended September 30, 2022, primarily due to the favorable impact of higher net premiums earned from MPCI.

The administrative expense ratio decreased for the three and nine months ended September 30, 2022, reflecting the favorable impact of higher net premiums earned from MPCI, higher Administrative and Operating (A&O) reimbursements on the MPCI business, and strong expense management.

Overseas General Insurance

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

	Three Months Ended September 30		% Change	Nine Months Ended September 30		% Change
(in millions of U.S. dollars, except for percentages)	**2022**	2021	Q-22 vs. Q-21	**2022**	2021	YTD-22 vs. YTD-21
Net premiums written	**$ 2,645**	$ 2,596	1.9 %	**$ 8,364**	$ 7,983	4.8 %
Net premiums written - constant dollars			11.7 %			12.0 %
Net premiums earned	**2,741**	2,664	2.9 %	**8,065**	7,721	4.5 %
Losses and loss expenses	**1,441**	1,487	(3.1)%	**4,054**	3,936	3.0 %
Policy acquisition costs	**720**	703	2.5 %	**2,096**	2,070	1.3 %
Administrative expenses	**264**	266	(0.9)%	**811**	811	—
Underwriting income	**316**	208	51.7 %	**1,104**	904	22.1 %
Net investment income	**151**	157	(3.2)%	**460**	447	3.1 %
Other (income) expense	**(2)**	—	NM	**3**	3	— %
Amortization of purchased intangibles	**12**	11	8.0 %	**40**	36	11.9 %
Segment income	**$ 457**	$ 354	29.1 %	**$ 1,521**	$ 1,312	15.9 %
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	**49.2 %**	49.8 %	(0.6) pts	**49.5 %**	50.1 %	(0.6) pts
Catastrophe losses	**3.6 %**	7.0 %	(3.4) pts	**3.7 %**	3.6 %	0.1 pts
Prior period development	**(0.2)%**	(1.0)%	0.8 pts	**(2.9)%**	(2.7)%	(0.2) pts
Loss and loss expense ratio	**52.6 %**	55.8 %	(3.2) pts	**50.3 %**	51.0 %	(0.7) pts
Policy acquisition cost ratio	**26.3 %**	26.4 %	(0.1) pts	**26.0 %**	26.8 %	(0.8) pts
Administrative expense ratio	**9.6 %**	10.0 %	(0.4) pts	**10.0 %**	10.5 %	(0.5) pts
Combined ratio	**88.5 %**	92.2 %	(3.7) pts	**86.3 %**	88.3 %	(2.0) pts

NM- Not meaningful

Catastrophe Losses and Prior Period Development

	Three Months Ended September 30		Nine Months Ended September 30	
(in millions of U.S. dollars)	**2022**	2021	**2022**	2021
Catastrophe losses	**$ 98**	$ 188	**$ 298**	$ 278
Favorable prior period development	**$ 5**	$ 28	**$ 238**	$ 209

Catastrophe losses through September 30, 2022 and 2021, were primarily from the following events:

- 2022: Hurricane Ian losses, International weather-related events, and storms in Australia.
- 2021: Flooding in Europe, Hurricane Ida, winter storm losses and 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

(in millions of U.S. dollars, except for percentages)	Three months ended September 30						
Region	**2022**	**2022 % of Total**	2021	2021 % of Total	C$ 2021	Q-22 vs. Q-21	C$ Q-22 vs. Q-21
Europe, Middle East, and Africa	**$ 1,133**	**43 %**	$ 1,173	45 %	$ 1,055	(3.4)%	7.4 %
Latin America	**565**	**21 %**	501	20 %	476	12.9 %	18.6 %
Asia Pacific	**801**	**30 %**	732	28 %	673	9.5 %	19.1 %
Japan	**101**	**4 %**	116	4 %	94	(12.8)%	7.0 %
Other [1]	**45**	**2 %**	74	3 %	71	(39.8)%	(37.1)%
Net premiums written	**$ 2,645**	**100 %**	$ 2,596	100 %	$ 2,369	1.9 %	11.7 %

(in millions of U.S. dollars, except for percentages)	Nine months ended September 30						
Region	**2022**	**2022 % of Total**	2021	2021 % of Total	C$ 2021	Y-22 vs. Y-21	C$ Y-22 vs. Y-21
Europe, Middle East, and Africa	**$ 3,990**	**48 %**	$ 3,912	49 %	$ 3,643	2.0 %	9.5 %
Latin America	**1,719**	**21 %**	1,489	18 %	1,434	15.5 %	19.9 %
Asia Pacific	**2,134**	**25 %**	1,987	25 %	1,857	7.4 %	15.0 %
Japan	**359**	**4 %**	402	6 %	349	(10.7)%	2.7 %
Other [1]	**162**	**2 %**	193	2 %	186	(16.3)%	(13.1)%
Net premiums written	**$ 8,364**	**100 %**	$ 7,983	100 %	$ 7,469	4.8 %	12.0 %

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

Premiums

Overall, net premiums written increased $49 million and $381 million, or $276 million and $895 million on a constant dollar basis, for the three and nine months ended September 30, 2022, respectively, reflecting growth in both commercial and consumer lines. For the three and nine months ended September 30, 2022, commercial lines grew 2.5 percent and 6.1 percent, or 11.0 percent and 12.6 percent on a constant-dollar basis, respectively, and consumer lines grew 1.1 percent and 2.7 percent, or 12.7 percent and 11.0 percent on a constant-dollar basis, respectively. The acquisition of Cigna's business in Asia contributed $39 million for the three and nine months ended September 30, 2022.

Our European division increased for the three and nine months ended September 30, 2022 on a constant dollar basis, supported by both our wholesale and retail divisions. This growth was primarily driven by higher new business, and positive rate increases in commercial lines, including commercial property and casualty lines. Consumer lines increased primarily due to A&H, reflecting increased travel volume. Additionally, A&H in the prior year was adversely impacted by restrictions resulting from the COVID-19 pandemic.

Latin America increased for the three and nine months ended September 30, 2022 driven by growth in consumer lines, including automobile in personal and travel in A&H. Commercial lines also grew due to exposure increases, positive rate increases, and new business, primarily property.

Asia Pacific increased for the three and nine months ended September 30, 2022 driven by higher new business, higher retention and positive rate increases in commercial lines, including property and casualty, and financial lines, and growth in consumer lines, primarily specialty and high net worth in personal, and travel in A&H. The acquisition of Cigna's business in Thailand also contributed to the increase, as described above.

Japan increased for the three and nine months ended September 30, 2022 on a constant-dollar basis primarily from new business in A&H.

Net premiums earned increased $77 million and $344 million, or $317 million and $848 million on a constant-dollar basis, for the three and nine months ended September 30, 2022, respectively, reflecting the increase in net premiums written described above.

Combined Ratio

The loss and loss expense ratio decreased for the three months ended September 30, 2022, due to lower catastrophe losses, partially offset by lower favorable prior period development. The loss and loss expense ratio decreased for the nine months ended September 30, 2022, due to higher favorable prior period development. The CAY loss ratio excluding catastrophe losses decreased for the three and nine months ended September 30, 2022, primarily reflecting underlying loss ratio improvement, including earned rate exceeding loss cost trends.

The policy acquisition cost ratio decreased for the three and nine months ended September 30, 2022, primarily due to a change in the mix of business, including higher premiums earned from commercial lines that have a lower acquisition cost ratio than consumer lines.

The administrative expense ratio decreased for the three and nine months ended September 30, 2022, reflecting continued expense management control and the favorable impact of higher net premiums earned.

Global Reinsurance

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

	Three Months Ended September 30		% Change	Nine Months Ended September 30		% Change
(in millions of U.S. dollars, except for percentages)	**2022**	2021	Q-22 vs. Q-21	**2022**	2021	YTD-22 vs. YTD-21
Net premiums written	**$ 265**	$ 221	19.5 %	**$ 780**	$ 702	11.1 %
Net premiums written - constant dollars			21.8 %			12.2 %
Net premiums earned	**255**	211	20.9 %	**712**	583	22.0 %
Losses and loss expenses	**311**	192	61.8 %	**565**	422	33.9 %
Policy acquisition costs	**59**	55	6.5 %	**178**	147	20.7 %
Administrative expenses	**8**	9	(4.0)%	**27**	27	1.8 %
Underwriting loss	**(123)**	(45)	172.5 %	**(58)**	(13)	NM
Net investment income	**71**	99	(28.5)%	**232**	250	(7.3)%
Other (income) expense	**—**	—	—	**1**	—	NM
Segment income (loss)	**$ (52)**	$ 54	NM	**$ 173**	$ 237	(27.2)%
Loss and loss expense ratio:						
CAY loss ratio excluding catastrophe losses	**49.6 %**	52.0 %	(2.4) pts	**49.8 %**	50.5 %	(0.7) pts
Catastrophe losses	**72.6 %**	41.7 %	30.9 pts	**26.1 %**	24.2 %	1.9 pts
Prior period development	**(0.1)%**	(2.5)%	2.4 pts	**3.5 %**	(2.3)%	5.8 pts
Loss and loss expense ratio	**122.1 %**	91.2 %	30.9 pts	**79.4 %**	72.4 %	7.0 pts
Policy acquisition cost ratio	**22.9 %**	26.0 %	(3.1) pts	**25.0 %**	25.2 %	(0.2) pts
Administrative expense ratio	**3.4 %**	4.2 %	(0.8) pts	**3.8 %**	4.6 %	(0.8) pts
Combined ratio	**148.4 %**	121.4 %	27.0 pts	**108.2 %**	102.2 %	6.0 pts

NM - not meaningful

Catastrophe Losses and Prior Period Development

	Three Months Ended September 30		Nine Months Ended September 30	
(in millions of U.S dollars)	**2022**	2021	**2022**	2021
Catastrophe losses	**$ 157**	$ 81	**$ 160**	$ 131
Favorable (Unfavorable) prior period development	**$ —**	$ 4	**$ (22)**	$ 11

Catastrophe losses through September 30, 2022, were primarily from Hurricane Ian, and storms in Australia and Canada. Catastrophe losses through September 30, 2021, were primarily from severe weather-related events in the U.S. and Canada, including Hurricane Ida.

Premiums

Net premiums written increased $44 million and $78 million for the three and nine months ended September 30, 2022, respectively, primarily due to higher catastrophe reinstatement premiums, continued growth in the portfolio from new business and favorable premium adjustments. Growth for the nine months ended September 30, 2022 was partially offset by a one-time portfolio transfer in the prior year.

Net premiums earned increased $44 million and $129 million for the three and nine months ended September 30, 2022, respectively, primarily reflecting the factors described above. The increase for the nine months ended September 30, 2022 was also due to the impact of higher new business written in the prior year for which premiums are earned in the current year.

Combined Ratio
The loss and loss expense ratio increased for the three and nine months ended September 30, 2022, primarily due to higher catastrophe losses and the unfavorable impact of prior period development. The CAY loss ratio excluding catastrophe losses decreased for the three and nine months ended September 30, 2022 primarily due to a shift in the mix of business.

The policy acquisition cost ratio decreased for the three and nine months ended September 30, 2022, primarily due to catastrophe reinstatement premiums, which were fully earned in the three months ended September 30, 2022 and more than offset the impact of a shift in the mix of business.

The administrative expense ratio decreased for the three and nine months ended September 30, 2022, primarily from the favorable impact of higher net premiums earned.

Life Insurance

The Life Insurance segment comprises our international life operations, which commencing this quarter, includes Cigna's A&H and life business in six Asian markets acquired on July 1, 2022. The Life Insurance segment also includes Chubb Tempest Life Re (Chubb Life Re), and the North American supplemental A&H and life business of Combined Insurance. We assess the performance of our life business based on Life Insurance underwriting income, which includes Net investment income and (Gains) losses from fair value changes in separate account assets that do not qualify for separate account reporting under GAAP.

	Three Months Ended September 30		% Change	Nine Months Ended September 30		% Change
(in millions of U.S. dollars, except for percentages)	**2022**	2021	Q-22 vs. Q-21	**2022**	2021	YTD-22 vs. YTD-21
Net premiums written	**$ 1,273**	$ 609	108.8 %	**$ 2,430**	$ 1,844	31.7 %
Net premiums written - constant dollars			117.4 %			35.5 %
Net premiums earned	**1,249**	589	112.0 %	**2,347**	1,789	31.1 %
Losses and loss expenses	**135**	179	(23.7)%	**437**	562	(22.2)%
Policy benefits	**553**	175	NM	**906**	508	78.4 %
Policy acquisition costs	**271**	168	60.5 %	**573**	538	6.5 %
Administrative expenses	**174**	82	113.9 %	**346**	247	40.0 %
Net investment income	**147**	102	44.8 %	**359**	301	19.3 %
Life Insurance underwriting income	**263**	87	197.7 %	**444**	235	88.3 %
Other (income) expense	**(10)**	(19)	(41.3)%	**(50)**	(79)	(35.7)%
Amortization of purchased intangibles	**2**	2	—	**7**	4	87.2 %
Segment income	**$ 271**	$ 104	158.3 %	**$ 487**	$ 310	57.0 %

NM- Not meaningful

Premiums
Net premiums written increased $664 million and $586 million, or $687 million and $637 million on a constant-dollar basis, for the three and nine months ended September 30, 2022, respectively. For our international life operations, net premiums written increased 214.1 percent and 67.9 percent for the three and nine months ended September 30, 2022, respectively, primarily due to the acquisition of Cigna's business in Asia, which contributed $699 million. In addition, there was growth in Asia from new business, principally in Thailand, Indonesia and Vietnam, which was more than offset by lower business in Latin America, principally reflecting non-renewals of certain large account business in Chile. Net premiums written in our North American Combined Insurance business declined 8.6 percent and 8.7 percent, for the three and nine months ended September 30, 2022, respectively, primarily due to the non-renewal of a large program.

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 September 30			% Change		Nine Months Ended September 30			% Change	
	2022	2021	C$ 2021	Q-22 vs. Q-21	C$ Q-22 vs. Q-21	**2022**	2021	C$ 2021	Y-22 vs. Y-21	C$ Y-22 vs. Y-21
Deposits collected on universal life and investment contracts	**$ 449**	$ 658	$ 615	(31.8)%	(27.1)%	**$1,433**	$1,814	$1,760	(21.0)%	(18.6)%

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 decreased $209 million and $381 million for the three and nine months ended September 30, 2022, respectively, primarily in Taiwan, reflecting challenging market conditions for deposit products. Additionally, the prior year benefited from successful sales campaigns in broker and bank channels in Taiwan. Partially offsetting the decline is $36 million from deposits collected through the acquired Cigna businesses in Asia, primarily in Korea.

Life Insurance underwriting income and Segment income

Life Insurance underwriting income increased $176 million and $209 million for the three and nine months ended September 30, 2022, respectively, with $159 million of growth from the acquisition of Cigna's business in Asia, and lower year-over-year COVID-related losses. Segment income increased $167 million and $177 million for the three and nine months ended September 30, 2022, respectively, reflecting the increase in underwriting income described above.

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, including molestation.

(in millions of U.S. dollars, except for percentages)	Three Months Ended September 30		% Change	Nine Months Ended September 30		% Change
	2022	2021	Q-22 vs. Q-21	**2022**	2021	YTD-22 vs. YTD-21
Losses and loss expenses	**$ 74**	$ 43	71.1 %	**$ 275**	$ 141	95.3 %
Administrative expenses	**91**	99	(8.8)%	**264**	258	2.1 %
Underwriting loss	**165**	142	15.2 %	**539**	399	34.9 %
Net investment income (loss)	**5**	(10)	NM	**(4)**	(42)	(87.9)%
Interest expense	**150**	122	23.3 %	**416**	366	13.8 %
Net realized gains (losses)	**(365)**	(11)	NM	**(778)**	841	NM
Other (income) expense	**194**	(722)	NM	**73**	(1,845)	NM
Amortization of purchased intangibles	**46**	49	(7.6)%	**137**	148	(7.7)%
Cigna integration expenses	**23**	—	NM	**26**	—	NM
Income tax expense	**265**	218	21.2 %	**913**	873	4.5 %
Net income (loss)	**$ (1,203)**	$ 170	NM	**$ (2,886)**	$ 858	NM

NM - not meaningful

Losses and loss expenses for the three months ended September 30, 2022 and 2021 were primarily from adverse development relating to our Brandywine environmental exposures of $52 million and $33 million, respectively. Losses and loss expenses for the nine months ended September 30, 2022 also includes unfavorable prior period development for molestation claims.

Administrative expenses decreased $8 million for the three months ended September 30, 2022, primarily due to lower employee-related expenses. Administrative expenses increased $6 million for the nine months ended September 30, 2022, primarily due to increased spending to support digital growth initiatives.

Cigna integration expenses of $23 million and $26 million for the three and nine months ended September 30, 2022, respectively, principally comprised transfer taxes and employee-related expenses. These expenses are one-time in nature and are not related to the on-going business activities of the segments. The Chief Executive Officer does not manage segment results or allocate resources to segments when considering these costs and they are therefore excluded from our definition of segment income.

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 12 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 2021 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 present our net realized and unrealized gains (losses):

	Three Months Ended September 30					
	2022			2021		
(in millions of U.S. dollars)	**Net Realized Gains (Losses)**	**Net Unrealized Gains (Losses)**	**Net Impact**	Net Realized Gains (Losses)	Net Unrealized Gains (Losses)	Net Impact
Fixed maturities	**$ (279)**	**$ (3,045)**	**$ (3,324)**	$ (10)	$ (554)	$ (564)
Fixed income and investment derivatives	**(198)**	**—**	**(198)**	(9)	—	(9)
Public equity						
Sales	**(12)**	**—**	**(12)**	19	—	19
Mark-to-market	**(68)**	**—**	**(68)**	(61)	—	(61)
Private equity (less than 3 percent ownership)						
Mark-to-market	**(42)**	**—**	**(42)**	11	—	11
Total investment portfolio	**(599)**	**(3,045)**	**(3,644)**	(50)	(554)	(604)
Mark-to-market from variable annuity reinsurance derivative transactions, net of applicable hedges	**76**	**—**	**76**	(63)	—	(63)
Other derivatives	**(19)**	**—**	**(19)**	(10)	—	(10)
Foreign exchange	**198**	**(966)**	**(768)**	106	(414)	(308)
Other [1]	**(40)**	**(59)**	**(99)**	(4)	4	—
Net losses, pre-tax	**$ (384)**	**$ (4,070)**	**$ (4,454)**	$ (21)	$ (964)	$ (985)

[1] Other realized losses includes $36 million related to impairment of fixed assets.

(in millions of U.S. dollars)	Nine Months Ended September 30					
	2022			2021		
	Net Realized Gains (Losses)	**Net Unrealized Gains (Losses)**	**Net Impact**	Net Realized Gains (Losses)	Net Unrealized Gains (Losses)	Net Impact
Fixed maturities	**$ (857)**	**$ (12,041)**	**$ (12,898)**	$ 26	$ (2,177)	$ (2,151)
Fixed income and investment derivatives	**(232)**	**—**	**(232)**	9	—	9
Public equity						
Sales	**406**	**—**	**406**	109	—	109
Mark-to-market	**(693)**	**—**	**(693)**	366	—	366
Private equity (less than 3 percent ownership)						
Mark-to-market	**17**	**—**	**17**	111	—	111
Total investment portfolio	**(1,359)**	**(12,041)**	**(13,400)**	621	(2,177)	(1,556)
Mark-to-market from variable annuity reinsurance derivative transactions, net of applicable hedges	**154**	**—**	**154**	140	—	140
Other derivatives	**(9)**	**—**	**(9)**	(8)	—	(8)
Foreign exchange	**541**	**(1,676)**	**(1,135)**	85	(84)	1
Other [1]	**(114)**	**(35)**	**(149)**	(5)	(33)	(38)
Net gains (losses), pre-tax	**$ (787)**	**$ (13,752)**	**$ (14,539)**	$ 833	$ (2,294)	$ (1,461)

[1] Other realized losses includes $36 million related to impairment of fixed assets.

Pre-tax net unrealized losses of $3,045 million and $12,041 million in our investment portfolio for the three and nine months ended September 30, 2022, respectively, were principally the result of an increase in interest rates. In addition, there were realized losses of $599 million and $1,359 million for the three and nine months ended September 30, 2022, respectively, primarily from mark-to-market losses on public equities and sales in fixed income securities.

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 gains of $76 million for the three months ended September 30, 2022, reflecting a net gain of $22 million, primarily from a decrease in the fair value of the GLB liabilities due to higher interest rates, partially offset by lower global equity markets and changes made to our valuation model relating to policyholder behavior, and a net realized gain of $54 million related to these other derivative instruments. The variable annuity reinsurance derivative transactions resulted in realized gains of $154 million for the nine months ended September 30, 2022, reflecting a net loss of $86 million, primarily from an increase in the fair value of the GLB liabilities due to lower global equity markets and changes to our valuation model relating to policyholder behavior, partially offset by higher interest rates, and a net realized gain of $240 million related to these other derivative instruments.

For the three months ended September 30, 2021, the variable annuity reinsurance derivative transactions resulted in realized losses of $63 million, 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.

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 GAAP and local tax laws, and the impact of discrete items. A change in the geographic mix of earnings could impact our ETR.

For the three and nine months ended September 30, 2022 our ETR was 24.6 percent and 18.6 percent, respectively. This compares to an ETR of 10.7 percent and 12.0 percent for the three and nine months ended September 30, 2021, respectively. The ETR for each period in 2022 was impacted by the acquisition of Cigna's business in Asia, 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 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 book value comparisons to less acquisitive peer companies are more meaningful when adjusted for goodwill and other intangible assets. 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 consolidate.

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

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

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

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

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

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

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

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

Three Months Ended September 30, 2022 (in millions of U.S. dollars except for ratios)		North America Commercial P&C Insurance	North America Personal P&C Insurance	North America Agricultural Insurance	Overseas General Insurance	Global Reinsurance	Corporate	Total P&C
Numerator								
Losses and loss expenses	**A**	**$ 3,036**	**$ 857**	**$ 1,444**	**$ 1,441**	**$ 311**	**$ 74**	**$ 7,163**
Catastrophe losses and related adjustments								
Catastrophe losses, net of related adjustments		**(598)**	**(274)**	**(31)**	**(98)**	**(157)**	**—**	**(1,158)**
Reinstatement premiums collected (expensed) on catastrophe losses		**—**	**—**	**—**	**—**	**55**	**—**	**55**
Catastrophe losses, gross of related adjustments		**(598)**	**(274)**	**(31)**	**(98)**	**(212)**	**—**	**(1,213)**
PPD and related adjustments								
PPD, net of related adjustments - favorable (unfavorable)		**166**	**133**	**(9)**	**5**	**—**	**(73)**	**222**
Net premiums earned adjustments on PPD - unfavorable (favorable)		**80**	**—**	**—**	**—**	**—**	**—**	**80**
Expense adjustments - unfavorable (favorable)		**(1)**	**—**	**—**	**—**	**—**	**—**	**(1)**
PPD, gross of related adjustments - favorable (unfavorable)		**245**	**133**	**(9)**	**5**	**—**	**(73)**	**301**
CAY loss and loss expense ex CATs	**B**	**$ 2,683**	**$ 716**	**$ 1,404**	**$ 1,348**	**$ 99**	**$ 1**	**$ 6,251**
Policy acquisition costs and administrative expenses								
Policy acquisition costs and administrative expenses	**C**	**$ 855**	**$ 345**	**$ 71**	**$ 984**	**$ 67**	**$ 91**	**$ 2,413**
Expense adjustments - favorable (unfavorable)		**1**	**—**	**—**	**—**	**—**	**—**	**1**
Policy acquisition costs and administrative expenses, adjusted	**D**	**$ 856**	**$ 345**	**$ 71**	**$ 984**	**$ 67**	**$ 91**	**$ 2,414**
Denominator								
Net premiums earned	**E**	**$ 4,283**	**$ 1,334**	**$ 1,673**	**$ 2,741**	**$ 255**		**$ 10,286**
Reinstatement premiums (collected) expensed on catastrophe losses		**—**	**—**	**—**	**—**	**(55)**		**(55)**
Net premiums earned adjustments on PPD - unfavorable (favorable)		**80**	**—**	**—**	**—**	**—**		**80**
Net premiums earned excluding adjustments	**F**	**$ 4,363**	**$ 1,334**	**$ 1,673**	**$ 2,741**	**$ 200**		**$ 10,311**
P&C Combined ratio								
Loss and loss expense ratio	**A/E**	**70.9 %**	**64.2 %**	**86.3 %**	**52.6 %**	**122.1 %**		**69.6 %**
Policy acquisition cost and administrative expense ratio	**C/E**	**20.0 %**	**25.9 %**	**4.3 %**	**35.9 %**	**26.3 %**		**23.5 %**
P&C Combined ratio		**90.9 %**	**90.1 %**	**90.6 %**	**88.5 %**	**148.4 %**		**93.1 %**
CAY P&C Combined ratio ex CATs								
Loss and loss expense ratio, adjusted	**B/F**	**61.5 %**	**53.6 %**	**84.0 %**	**49.2 %**	**49.6 %**		**60.6 %**
Policy acquisition cost and administrative expense ratio, adjusted	**D/F**	**19.6 %**	**25.9 %**	**4.2 %**	**35.9 %**	**33.4 %**		**23.4 %**
CAY P&C Combined ratio ex CATs		**81.1 %**	**79.5 %**	**88.2 %**	**85.1 %**	**83.0 %**		**84.0 %**
Combined ratio								
Combined ratio								**92.9 %**
Add: impact of gains and losses on crop derivatives								**0.2 %**
P&C Combined ratio								**93.1 %**

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

Three Months Ended 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.

Nine Months Ended September 30, 2022 (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**	**$ 7,979**	**$ 2,343**	**$ 1,830**	**$ 4,054**	**$ 565**	**$ 275**	**$ 17,046**
Catastrophe losses and related adjustments								
Catastrophe losses, net of related adjustments		**(803)**	**(469)**	**(52)**	**(298)**	**(160)**	**—**	**(1,782)**
Reinstatement premiums collected (expensed) on catastrophe losses		**—**	**—**	**—**	**—**	**55**	**—**	**55**
Catastrophe losses, gross of related adjustments		**(803)**	**(469)**	**(52)**	**(298)**	**(215)**	**—**	**(1,837)**
PPD and related adjustments								
PPD, net of related adjustments - favorable (unfavorable)		**561**	**187**	**17**	**238**	**(22)**	**(272)**	**709**
Net premiums earned adjustments on PPD - unfavorable (favorable)		**83**	**—**	**159**	**—**	**—**	**—**	**242**
Expense adjustments - unfavorable (favorable)		**4**	**—**	**(1)**	**—**	**—**	**—**	**3**
PPD reinstatement premiums - unfavorable (favorable)		**—**	**—**	**—**	**—**	**(2)**	**—**	**(2)**
PPD, gross of related adjustments - favorable (unfavorable)		**648**	**187**	**175**	**238**	**(24)**	**(272)**	**952**
CAY loss and loss expense ex CATs	**B**	**$ 7,824**	**$ 2,061**	**$ 1,953**	**$ 3,994**	**$ 326**	**$ 3**	**$ 16,161**
Policy acquisition costs and administrative expenses								
Policy acquisition costs and administrative expenses	**C**	**$ 2,515**	**$ 1,005**	**$ 115**	**$ 2,907**	**$ 205**	**$ 264**	**$ 7,011**
Expense adjustments - favorable (unfavorable)		**(4)**	**—**	**1**	**—**	**—**	**—**	**(3)**
Policy acquisition costs and administrative expenses, adjusted	**D**	**$ 2,511**	**$ 1,005**	**$ 116**	**$ 2,907**	**$ 205**	**$ 264**	**$ 7,008**
Denominator								
Net premiums earned	**E**	**$ 12,645**	**$ 3,852**	**$ 2,217**	**$ 8,065**	**$ 712**		**$ 27,491**
Reinstatement premiums (collected) expensed on catastrophe losses		**—**	**—**	**—**	**—**	**(55)**		**(55)**
Net premiums earned adjustments on PPD - unfavorable (favorable)		**83**	**—**	**159**	**—**	**—**		**242**
PPD reinstatement premiums - unfavorable (favorable)		**—**	**—**	**—**	**—**	**(2)**		**(2)**
Net premiums earned excluding adjustments	**F**	**$ 12,728**	**$ 3,852**	**$ 2,376**	**$ 8,065**	**$ 655**		**$ 27,676**
P&C Combined ratio								
Loss and loss expense ratio	**A/E**	**63.1 %**	**60.8 %**	**82.5 %**	**50.3 %**	**79.4 %**		**62.0 %**
Policy acquisition cost and administrative expense ratio	**C/E**	**19.9 %**	**26.1 %**	**5.3 %**	**36.0 %**	**28.8 %**		**25.5 %**
P&C Combined ratio		**83.0 %**	**86.9 %**	**87.8 %**	**86.3 %**	**108.2 %**		**87.5 %**
CAY P&C Combined ratio ex CATs								
Loss and loss expense ratio, adjusted	**B/F**	**61.5 %**	**53.5 %**	**82.2 %**	**49.5 %**	**49.8 %**		**58.4 %**
Policy acquisition cost and administrative expense ratio, adjusted	**D/F**	**19.7 %**	**26.1 %**	**4.9 %**	**36.1 %**	**31.2 %**		**25.3 %**
CAY P&C Combined ratio ex CATs		**81.2 %**	**79.6 %**	**87.1 %**	**85.6 %**	**81.0 %**		**83.7 %**
Combined ratio								
Combined ratio								**87.5 %**
Add: impact of gains and losses on crop derivatives								**— %**
P&C Combined ratio								**87.5 %**

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

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.

Amortization of Purchased Intangibles and Other Amortization

Amortization expense related to purchased intangibles was $69 million and $211 million for the three and nine months ended September 30, 2022, respectively, compared with $71 million and $216 million for the prior year periods, respectively. The respective increases principally relate to purchased intangibles from the acquisition of Cigna's business in Asia. Refer to Note 7 to the Consolidated Financial Statements for more information on the expected pre-tax amortization expense (benefit) of purchased intangibles, at current foreign currency exchange rates, for the fourth quarter of 2022 and for the next five years.

Reduction of deferred tax liability associated with Other intangible assets

At September 30, 2022, the deferred tax liability associated with Other intangible assets (excluding the fair value adjustment on Unpaid losses and loss expense) was $1,206 million.

The following table presents, as of September 30, 2022, the expected reduction to the deferred tax liability associated with the amortization of Other intangible assets, at current foreign exchange rates, for the fourth quarter of 2022 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 other intangibles
Fourth quarter of 2022	**$ 17**
2023	**61**
2024	**56**
2025	**53**
2026	**49**
2027	**46**
Total	**$ 282**

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

The following table presents, as of September 30, 2022, the expected amortization expense of the fair value adjustment on acquired invested assets related to the acquisition of Cigna's business in Asia and prior acquisitions, at current foreign currency exchange rates, and the expected amortization benefit from the fair value adjustment on assumed long-term debt related to the Chubb Corp acquisition for the fourth quarter of 2022 and for the next five years:

	Amortization (expense) benefit of the fair value adjustment on			
For the Years Ending December 31 (in millions of U.S. dollars)	Acquired Cigna invested assets	Other acquired invested assets	Total invested assets [1]	Assumed long-term debt [2]
Fourth quarter of 2022	$ 6	$ (14)	$ (8)	$ 6
2023	35	(50)	(15)	21
2024	32	(13)	19	21
2025	30	—	30	21
2026	28	—	28	21
2027	27	—	27	21
Total	$ 158	$ (77)	$ 81	$ 111

(1) Recorded as an increase (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 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	
	2022	2021	**2022**	2021
Fixed maturities [1]	**$ 932**	$ 804	**$ 2,584**	$ 2,480
Short-term investments	**25**	9	**49**	26
Other interest income	**14**	3	**21**	8
Equity securities	**21**	40	**93**	117
Other investments	**32**	56	**78**	122
Gross investment income [1]	**1,024**	912	**2,825**	2,753
Investment expenses	**(45)**	(46)	**(136)**	(140)
Net investment income [1]	**$ 979**	$ 866	**$ 2,689**	$ 2,613
[1] Includes amortization expense related to fair value adjustment of acquired invested assets	**$ (6)**	$ (19)	**$ (36)**	$ (67)

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 13.1 percent and 2.9 percent for the three and nine months ended September 30, 2022, respectively, primarily due to higher reinvestment rates on fixed maturities.

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	
	2022	2021	**2022**	2021
Total mark-to-market gain (loss) on private equity, pre-tax	**$ (232)**	$ 713	**$ (52)**	$ 1,887

Investments

Our investment portfolio is invested primarily in publicly traded, investment grade, fixed income securities with an average credit quality of A/A as rated by the independent investment rating services Standard and Poor's (S&P)/Moody's Investors Service (Moody's) at September 30, 2022. 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 4.5 years and 4.1 years at September 30, 2022 and December 31, 2021, 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, 2022. 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, 2022 Fair Value	September 30, 2022 Cost/ Amortized Cost, Net	December 31, 2021 Fair Value	December 31, 2021 Cost/ Amortized Cost, Net
Fixed maturities available for sale	**$ 83,741**	**$ 93,169**	$ 93,108	$ 90,479
Fixed maturities held to maturity	**8,491**	**8,976**	10,647	10,118
Short-term investments	**4,534**	**4,536**	3,146	3,147
Fixed income securities	**96,766**	**106,681**	106,901	103,744
Equity securities	**844**	**844**	4,782	4,782
Other investments	**13,645**	**13,645**	11,169	11,169
Total investments	**$ 111,255**	**$ 121,170**	$ 122,852	$ 119,695

The fair value of our total investments decreased $11.6 billion during the nine months ended September 30, 2022 due to unrealized losses on fixed maturities, sales of equity securities, and share repurchases, partially offset by strong operating cash flows.

The following tables present the fair value of our fixed income securities at September 30, 2022 and December 31, 2021. 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, 2022 Fair Value	% of Total	December 31, 2021 Fair Value	% of Total
U.S. Treasury / Agency	**$ 3,785**	**4 %**	$ 3,458	3 %
Corporate and asset-backed securities	**37,965**	**39 %**	41,264	39 %
Mortgage-backed securities	**17,673**	**18 %**	22,292	21 %
Municipal	**7,670**	**8 %**	9,650	9 %
Non-U.S.	**25,139**	**26 %**	27,091	25 %
Short-term investments	**4,534**	**5 %**	3,146	3 %
Total	**$ 96,766**	**100 %**	$ 106,901	100 %
AAA	**$ 14,715**	**15 %**	$ 15,364	14 %
AA	**30,778**	**32 %**	35,179	33 %
A	**17,916**	**18 %**	20,171	19 %
BBB	**16,067**	**17 %**	17,362	16 %
BB	**8,621**	**9 %**	9,084	8 %
B	**8,265**	**9 %**	9,202	9 %
Other	**404**	**— %**	539	1 %
Total	**$ 96,766**	**100 %**	$ 106,901	100 %

Corporate and asset-backed securities

The following table presents our 10 largest global exposures to corporate bonds by fair value at September 30, 2022:

(in millions of U.S. dollars)	Fair Value
Bank of America Corp	**$ 713**
JP Morgan Chase & Co	**590**
Morgan Stanley	**587**
Wells Fargo & Co	**531**
Citigroup Inc	**482**
Goldman Sachs Group Inc	**458**
Verizon Communications Inc	**418**
Comcast Corp	**353**
HSBC Holdings Plc	**330**
AT&T Inc	**328**

Mortgage-backed securities

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

September 30, 2022 (in millions of U.S. dollars)	S&P Credit Rating AAA	AA	A	BBB	BB and below	Fair Value Total	Amortized Cost, Net Total
Agency residential mortgage-backed securities (RMBS)	**$ 8**	**$ 14,233**	**$ —**	**$ —**	**$ —**	**$ 14,241**	**$ 16,227**
Non-agency RMBS	**483**	**42**	**57**	**38**	**5**	**625**	**712**
Commercial mortgage-backed securities	**2,439**	**215**	**141**	**9**	**3**	**2,807**	**3,033**
Total mortgage-backed securities	**$ 2,930**	**$ 14,490**	**$ 198**	**$ 47**	**$ 8**	**$ 17,673**	**$ 19,972**

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 45 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, 2022:

(in millions of U.S. dollars)	Fair Value	Amortized Cost, Net
Republic of Korea	$ 1,416	$ 1,504
Canada	864	925
Taiwan	804	834
Federative Republic of Brazil	581	598
Province of Ontario	535	576
United Mexican States	486	533
Kingdom of Thailand	415	446
Province of Quebec	377	401
Commonwealth of Australia	365	429
Socialist Republic of Vietnam	357	341
Other Non-U.S. Government Securities	4,532	5,093
Total	$ 10,732	$ 11,680

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, 2022:

(in millions of U.S. dollars)	Fair Value	Amortized Cost, Net
United Kingdom	$ 2,029	$ 2,295
Canada	1,747	1,922
South Korea	1,106	1,151
France	1,060	1,179
United States [1]	1,022	1,184
Australia	848	948
Japan	707	773
Switzerland	496	571
Netherlands	474	530
Germany	443	510
Other Non-U.S. Corporate Securities	4,475	5,004
Total	$ 14,407	$ 16,067

[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, 2022, our corporate fixed income investment portfolio included below-investment grade and non-rated securities which, in total, comprised approximately 16 percent of our fixed income portfolio. Our below-investment grade and non-rated portfolio includes 1,763 issuers, with the greatest single exposure being $146 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. Sixteen 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 debt obligations) are not permitted in the high-yield portfolio.

Critical Accounting Estimates

As of September 30, 2022, 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 2021 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, 2021	$ 72,943	$ 16,184	$ 56,759
Losses and loss expenses incurred	22,857	5,383	17,474
Losses and loss expenses paid	(18,015)	(3,694)	(14,321)
Other (including foreign exchange translation)	(1,793)	(493)	(1,300)
Balance at September 30, 2022	**$ 75,992**	**$ 17,380**	**$ 58,612**

[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, 2022, we increased environmental net loss reserves for Brandywine managed operations by $52 million. A&E reserves are included in Corporate. Refer to our 2021 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 from natural perils, including setting risk limits based on probable maximum loss (PML) and purchasing catastrophe reinsurance, to ensure sufficient liquidity and capital to meet the expectations of regulators, rating agencies, and policyholders, and to provide shareholders with an appropriate risk-adjusted return. Chubb uses internal and external data together with sophisticated, analytical catastrophe loss and risk modeling techniques to ensure an appropriate understanding of risk, including diversification and correlation effects, across different product lines and territories. The table below presents our modeled pre-tax estimates of natural catastrophe PML, net of reinsurance, at September 30, 2022, and does not represent our expected catastrophe losses for any one year.

	Modeled Net Probable Maximum Loss (PML) Pre-tax					
	Worldwide [1]		U.S. Hurricane [2]		California Earthquake [3]	
	Annual Aggregate		Annual Aggregate		Single Occurrence	
(in millions of U.S. dollars, except for percentages)	Chubb	% of Total Shareholders' Equity	Chubb	% of Total Shareholders' Equity	Chubb	% of Total Shareholders' Equity
1-in-10	$ 2,142	4.5 %	$ 1,098	2.3 %	$ 146	0.3 %
1-in-100	$ 4,521	9.5 %	$ 2,869	6.0 %	$ 1,320	2.8 %
1-in-250	$ 7,506	15.8 %	$ 5,439	11.4 %	$ 1,517	3.2 %

(1) Worldwide aggregate is comprised of losses arising from tropical cyclones, convective storms, earthquakes, and U.S. wildfires and inland floods, and excludes "non-modeled" perils such as man-made and other catastrophe risks including pandemic.

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

(3) California earthquakes include the fire-following sub-peril.

The PML for worldwide and key U.S. peril regions are based on our in-force portfolio at July 1, 2022, and reflect the April 1, 2022, reinsurance program (see Global Property Catastrophe Reinsurance Program section) as well as inuring reinsurance protection coverages. These estimates assume that reinsurance recoverable is fully collectible.

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 $2,869 million (or 6.0 percent of our total shareholders' equity at September 30, 2022). Effective December 31, 2021, our worldwide PMLs include losses from U.S. wildfire and U.S. inland flood.

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

- While the use of third-party modeling packages to simulate potential catastrophe losses is prevalent within the insurance industry, the models are reliant upon significant meteorology, seismology, and engineering assumptions to estimate catastrophe losses. 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. Published studies by leading government, academic, and professional organizations combined with extensive research by Chubb climate scientists reveal the potential for increases in the frequency and severity of key natural perils such as tropical cyclones, inland flood, and wildfire. To understand the potential impacts on the Chubb portfolio, we have conducted stress tests on our peak exposure zone, namely in the U.S., using parameters outlined by the Intergovernmental Panel on Climate Change (IPCC) Climate Change 2021 report. These parameters consider the impacts of climate change and the resulting climate peril impacts over a timescale relevant to our business. The tests are conducted by adjusting our baseline view of risk for the perils of hurricane, inland flood, and wildfire in the U.S. to reflect increases in frequency and severity across the modeled domains for each of these perils. Based on these tests against the Chubb portfolio we do not expect material impacts to our baseline PMLs from climate change through December 31, 2022. These tests reflect current exposures only and exclude potentially mitigating factors such as changes to building codes, public or private risk mitigation, regulation, and public policy.

Refer to Item 7 in our 2021 Form 10-K for more information on man-made and other catastrophes.

Global Property Catastrophe 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, 2022, through March 31, 2023, with no material changes in coverage from the expiring program. The program consists of three layers in excess of losses retained by Chubb on a per occurrence basis. In addition, Chubb 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, 2022, through March 31, 2023, 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 Property Catastrophe Reinsurance Program and are fully placed with Reinsurers.

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

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 2022	December 31 2021
Short-term debt	**$ 1,475**	$ 999
Long-term debt	**14,044**	15,169
Total financial debt	**15,519**	16,168
Trust preferred securities	**308**	308
Total shareholders' equity	**47,639**	59,714
Total capitalization	**$ 63,466**	$ 76,190
Ratio of financial debt to total capitalization	**24.5 %**	21.2 %
Ratio of financial debt plus trust preferred securities to total capitalization	**25.0 %**	21.6 %

The ratios of financial debt to total capitalization in the table above are higher at September 30, 2022 compared to December 31, 2021 from the decline in shareholders' equity, principally reflecting net unrealized depreciation on investments in the current period compared to net unrealized appreciation in 2021.

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, 2022, we repurchased $2.8 billion of Common Shares in a series of open market transactions under the Board of Directors (Board) share repurchase authorization. At September 30, 2022, there were 31,356,130 Common Shares in treasury with a weighted-average cost of $158.76 per share, and $1.8 billion in share repurchase authorization remained through June 30, 2023.

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.

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 9 to the Consolidated Financial Statements for a discussion of our dividend methodology.

At our May 2022 annual general meeting, our shareholders approved an annual dividend for the following year of up to $3.32 per share, or CHF 3.22 per share, calculated using the USD/CHF exchange rate as published in the Wall Street Journal on May 19, 2022, expected to be paid in four quarterly installments of $0.83 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 2023 annual general meeting, and is authorized to abstain from distributing a dividend at its discretion. The annual dividend approved in May 2022 represented a $0.12 per share increase ($0.03 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 17, 2021	January 7, 2022	$0.80 (CHF 0.74)
March 18, 2022	April 8, 2022	$0.80 (CHF 0.74)
June 17, 2022	July 8, 2022	$0.83 (CHF 0.80)
September 16, 2022	October 7, 2022	$0.83 (CHF 0.78)

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 $2.0 billion for revolving credit. At September 30, 2022, 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, 2022. 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.

In October 2022, Chubb entered into a new group syndicated credit facility through 2027 with capacity of $3.0 billion. This facility consolidated our three existing syndicated facilities with capacity of $2.7 billion.

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, 2022, 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 $6.8 billion and $3.1 billion from its Bermuda subsidiaries during the nine months ended September 30, 2022 and 2021, respectively. Chubb Limited received cash dividends of $32 million and $21 million and non-cash dividends of $348 million and $536 million from a Swiss subsidiary during the nine months ended September 30, 2022 and 2021, respectively.

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 Chubb INA during the nine months ended September 30, 2022 and 2021. 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 $1.8 billion and $910 million from its subsidiaries during the nine months ended September 30, 2022 and 2021, 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, 2022 and 2021.

Operating cash flows were $8.6 billion in the nine months ended September 30, 2022, compared to $8.5 billion in the prior year period.

Cash used for investing was $5.2 billion in the nine months ended September 30, 2022, compared to $3.8 billion in the prior year period. Cash used for investing in the current year was primarily due to cash paid for the purchase of Cigna's business in Asia of $5.0 billion, which is net of cash acquired of $366 million. There were net sales, principally in equities securities and fixed maturities of $1.9 billion, in part to fund the acquisition of Cigna's business in Asia, compared to net purchases of $2.3 billion in the prior year. In addition, the current year included higher private equity contributions, net of distributions received, of $1.5 billion compared to $981 million in the prior year.

Cash used for financing was $2.7 billion in the nine months ended September 30, 2022, compared to $4.8 billion in the prior year period. This decrease of $2.1 billion reflects lower Common Shares repurchased of $1.2 billion and proceeds of $1.0 billion from repurchase agreements, which were used to finance a portion of the acquisition of Cigna's business in Asia. At September 30, 2022, there were $2.4 billion in repurchase agreements outstanding with various maturities over the next four months.

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.

Information provided in connection with outstanding debt of subsidiaries

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

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

	Chubb Limited (Parent Guarantor)		Chubb INA Holdings Inc. (Subsidiary Issuer)	
	September 30	December 31	**September 30**	December 31
(in millions of U.S. dollars)	**2022**	2021	**2022**	2021
Assets				
Investments	**$ 1**	$ —	**$ 137**	$ 149
Cash	**32**	1	**2**	580
Due from parent guarantor/subsidiary issuer	**2**	2	**897**	348
Due from subsidiaries that are not issuers or guarantors	**1,771**	1,805	**691**	526
Other assets	**10**	16	**2,317**	1,667
Total assets	**$ 1,816**	$ 1,824	**$ 4,044**	$ 3,270
Liabilities				
Due to parent guarantor/subsidiary issuer	**$ 897**	$ 348	**$ 2**	$ 2
Due to subsidiaries that are not issuers or guarantors	**230**	241	**1,726**	1,647
Affiliated notional cash pooling programs	**345**	8	**593**	—
Short-term debt	**—**	—	**1,475**	999
Long-term debt	**—**	—	**14,044**	15,169
Trust preferred securities	**—**	—	**308**	308
Other liabilities	**387**	363	**2,101**	1,803
Total liabilities	**1,859**	960	**20,249**	19,928
Total shareholders' equity	**(43)**	864	**(16,205)**	(16,658)
Total liabilities and shareholders' equity	**$ 1,816**	$ 1,824	**$ 4,044**	$ 3,270

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, 2022 (in millions of U.S. dollars)	Chubb Limited (Parent Guarantor)	Chubb INA Holdings Inc. (Subsidiary Issuer)
Net investment income (loss)	$ 3	$ (3)
Net realized gains (losses)	4	321
Administrative expenses	80	(72)
Interest (income) expense	(41)	405
Other (income) expense	(34)	32
Cigna integration expenses	10	—
Income tax expense (benefit)	2	(23)
Net income (loss)	$ (10)	$ (24)
Comprehensive income (loss)	$ (10)	$ (65)

ITEM 3. Quantitative and Qualitative Disclosures about Market Risk

Refer to Item 7A included in our 2021 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 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 2021 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, 2021, balances disclosed in the 2021 Form 10-K.

Effective April 1, 2022, Turkey was designated as a highly inflationary economy and therefore we changed the functional currency for our Turkish operations from the Turkish lira to the U.S. dollar. Our net assets denominated in the Turkish lira represented less than 0.1% of consolidated shareholders' equity. Therefore, this change in the functional currency of our Turkish operations did not have a material impact on our financial condition or results of operations.

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.) at September 30, 2022, 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 70 percent—80 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, 2022, market levels and only applicable to the equity and interest rate sensitivities table below.

- The sensitivities do not scale linearly and may be proportionally greater for larger movements in the market factors. Actual sensitivity of our net income may differ from those disclosed in the tables below due to fluctuations in short-term market movements.

Sensitivities to equity and interest rate movements

(in millions of U.S. dollars)		Worldwide Equity Shock					
Interest Rate Shock		+10%	Flat	-10%	-20%	-30%	-40%
+100 bps	(Increase)/decrease in FVL	$ 294	$ 200	$ 86	$ (59)	$ (232)	$ (438)
	Increase/(decrease) in hedge value	(84)	—	84	169	253	338
	Increase/(decrease) in net income	$ 210	$ 200	$ 170	$ 110	$ 21	$ (100)
Flat	(Increase)/decrease in FVL	$ 119	$ —	$ (144)	$ (313)	$ (513)	$ (744)
	Increase/(decrease) in hedge value	(84)	—	84	169	253	338
	Increase/(decrease) in net income	$ 35	$ —	$ (60)	$ (144)	$ (260)	$ (406)
-100 bps	(Increase)/decrease in FVL	$ (103)	$ (247)	$ (415)	$ (610)	$ (834)	$ (1,087)
	Increase/(decrease) in hedge value	(85)	—	84	169	253	338
	Increase/(decrease) in net income	$ (188)	$ (247)	$ (331)	$ (441)	$ (581)	$ (749)

Sensitivities to Other Economic Variables	AA-rated Credit Spreads		Interest Rate Volatility		Equity Volatility	
(in millions of U.S. dollars)	+100 bps	-100 bps	+2%	-2%	+2%	-2%
(Increase)/decrease in FVL	$ 53	$ (59)	$ (1)	$ 1	$ (14)	$ 13
Increase/(decrease) in net income	$ 53	$ (59)	$ (1)	$ 1	$ (14)	$ 13

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, 2022, following an immediate change in equity market levels, assuming all global equity markets are impacted equally.

a) Reinsurance covering the GMDB risk only

	Equity Shock					
(in millions of U.S. dollars)	+20 %	Flat	-20%	-40%	-60%	-80%
GMDB net amount at risk	$ 359	$ 610	$ 784	$ 829	$ 743	$ 618
Claims at 100% immediate mortality	159	162	153	142	129	117

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

b) Reinsurance covering the GLB risk only

	Equity Shock					
(in millions of U.S. dollars)	+20 %	Flat	-20%	-40%	-60%	-80%
GLB net amount at risk	$ 1,186	$ 1,625	$ 2,272	$ 2,630	$ 2,980	$ 3,154

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

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

	Equity Shock					
(in millions of U.S. dollars)	+20 %	Flat	-20%	-40%	-60%	-80%
GMDB net amount at risk	$ 56	$ 66	$ 76	$ 85	$ 92	$ 98
GLB net amount at risk	477	584	704	821	920	922
Claims at 100% immediate mortality	33	33	33	33	33	33

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, 2022. 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.

On July 1, 2022, we completed the acquisition of the life and non-life insurance companies that house the personal accident, supplemental health, and life insurance business of Cigna in six Asian markets. As of and for the three months ended September 30, 2022, Cigna's A&H and Life business in Asia represented approximately 6 percent of consolidated revenues, approximately 3 percent of pre-tax income, and approximately 5 percent of total assets. We currently exclude, and are in the process of working to incorporate, Cigna's A&H and Life business in Asia in our evaluation of internal controls over financial reporting, and related disclosure controls and procedures.

Other than the aforementioned acquisition, there have been no changes in Chubb's internal controls over financial reporting during the three months ended September 30, 2022, 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 8 h) 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 2021 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, 2022:

Period	Total Number of Shares Purchased [1]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan [2]	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plan
July 1 through July 31	1,715,842	$ 185.99	1,713,728	$ 2.18 billion
August 1 through August 31	1,393,391	$ 187.36	1,390,500	$ 1.92 billion
September 1 through September 30	578,345	$ 184.27	572,300	$ 1.82 billion
Total	3,687,578	$ 186.24	3,676,528	

[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, 2022 as part of the publicly announced plan was $685 million. In May 2022, the Board authorized the repurchase of up to $2.5 billion of Chubb's Common Shares effective through June 30, 2023. Refer to Note 9 to the Consolidated Financial Statements for more information on the Chubb Limited securities repurchase authorization.

ITEM 6. Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Original Number	Date Filed	
3.1	Articles of Association of the Company, as amended and restated	8-K	3.1	August 9, 2022	
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 and restated	8-K	4.1	August 9, 2022	
4.2	Organizational Regulations of the Company, as amended	8-K	3.1	November 21, 2016	
10.1*	Aircraft Time Sharing Agreement, dated as of September 19, 2022, between Chubb INA Holdings Inc. and Evan G. Greenberg [certain information omitted]				X
22.1	Guaranteed Securities	10-K	22.1	February 24, 2022	
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, 2022 formatted in Inline XBRL: (i) Consolidated Balance Sheets at September 30, 2022, and December 31, 2021; (ii) Consolidated Statements of Operations and Comprehensive Income for the three and nine months ended September 30, 2022 and 2021; (iii) Consolidated Statements of Shareholders' Equity for the three and nine months ended September 30, 2022 and 2021; (iv) Consolidated Statements of Cash Flows for the nine months ended September 30, 2022 and 2021; and (v) Notes to Consolidated Financial Statements				X
104.1	The Cover Page Interactive Data File formatted in Inline XBRL (The cover page XBRL tags are embedded in the Inline XBRL document and included in Exhibit 101.1)				

* Management contract, compensatory plan or arrangement

SIGNATURES

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

CHUBB LIMITED

(Registrant)

October 28, 2022 /s/ Evan G. Greenberg

Evan G. Greenberg

Chairman and Chief Executive Officer

October 28, 2022 /s/ Peter C. Enns

Peter C. Enns

Executive Vice President and Chief Financial Officer