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 March 31, 2020
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 April 17, 2020 was 451,357,210.

CHUBB LIMITED
INDEX TO FORM 10-Q

Part I.	FINANCIAL INFORMATION	Page
Item 1.	Financial Statements:	
	Consolidated Balance Sheets (Unaudited) March 31, 2020 and December 31, 2019	3
	Consolidated Statements of Operations and Comprehensive Income (Unaudited) Three Months Ended March 31, 2020 and 2019	4
	Consolidated Statements of Shareholders' Equity (Unaudited) Three Months Ended March 31, 2020 and 2019	5
	Consolidated Statements of Cash Flows (Unaudited) Three Months Ended March 31, 2020 and 2019	6
	Notes to Consolidated Financial Statements (Unaudited)	
	Note 1. General	7
	Note 2. Acquisitions	8
	Note 3. Investments	9
	Note 4. Fair value measurements	16
	Note 5. Reinsurance	22
	Note 6. Unpaid losses and loss expenses	23
	Note 7. Commitments, contingencies, and guarantees	25
	Note 8. Shareholders' equity	30
	Note 9. Share-based compensation	31
	Note 10. Postretirement benefits	31
	Note 11. Segment information	33
	Note 12. Earnings per share	34
	Note 13. Information provided in connection with outstanding debt of subsidiaries	35
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	40
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	75
Item 4.	Controls and Procedures	78
Part II.	**OTHER INFORMATION**	
Item 1.	Legal Proceedings	78
Item 1A.	Risk Factors	78
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds and Issuer Repurchases of Equity Securities	79
Item 6.	Exhibits	80

PART I FINANCIAL INFORMATION

ITEM 1. Financial Statements

CONSOLIDATED BALANCE SHEETS (Unaudited)
Chubb Limited and Subsidiaries

(in millions of U.S. dollars, except share and per share data)	March 31 2020	December 31 2019
Assets		
Investments		
Fixed maturities available for sale, at fair value, net of valuation allowance - $176 at March 31, 2020 (amortized cost – $80,959 and $82,580)	$ 81,530	$ 85,488
Fixed maturities held to maturity, at amortized cost, net of valuation allowance - $45 at March 31, 2020 (fair value – $12,471 and $13,005)	12,025	12,581
Equity securities, at fair value	2,068	812
Short-term investments, at fair value (amortized cost - $3,582 and $4,291)	3,586	4,291
Other investments, at fair value	6,075	6,062
Total investments	105,284	109,234
Cash	1,512	1,537
Restricted cash	146	109
Securities lending collateral	1,342	994
Accrued investment income	839	867
Insurance and reinsurance balances receivable	10,058	10,357
Reinsurance recoverable on losses and loss expenses, net of valuation allowance - $305 and $316	14,898	15,181
Reinsurance recoverable on policy benefits	196	197
Deferred policy acquisition costs	5,162	5,242
Value of business acquired	289	306
Goodwill	14,971	15,296
Other intangible assets	5,902	6,063
Prepaid reinsurance premiums	2,570	2,647
Investments in partially-owned insurance companies	1,346	1,332
Other assets	8,612	7,581
Total assets	$ 173,127	$ 176,943
Liabilities		
Unpaid losses and loss expenses	$ 62,214	$ 62,690
Unearned premiums	16,459	16,771
Future policy benefits	5,776	5,814
Insurance and reinsurance balances payable	6,084	6,184
Securities lending payable	1,342	994
Accounts payable, accrued expenses, and other liabilities	12,055	11,773
Deferred tax liabilities	474	804
Repurchase agreements	1,408	1,416
Short-term debt	1,300	1,299
Long-term debt	13,510	13,559
Trust preferred securities	308	308
Total liabilities	120,930	121,612
Commitments and contingencies (refer to Note 7)		
Shareholders' equity		
Common Shares (CHF 24.15 par value; 479,783,864 shares issued; 451,367,782 and 451,971,567 shares outstanding)	11,121	11,121
Common Shares in treasury (28,416,082 and 27,812,297 shares)	(3,872)	(3,754)
Additional paid-in capital	10,710	11,203
Retained earnings	36,331	36,142
Accumulated other comprehensive income (loss) (AOCI)	(2,093)	619
Total shareholders' equity	52,197	55,331
Total liabilities and shareholders' equity	$ 173,127	$ 176,943

See accompanying notes to the consolidated financial statements

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (Unaudited)

Chubb Limited and Subsidiaries

	Three Months Ended March 31	
(in millions of U.S. dollars, except per share data)	**2020**	2019
Revenues		
Net premiums written	**$ 7,977**	$ 7,313
Increase in unearned premiums	**(183)**	(176)
Net premiums earned	**7,794**	7,137
Net investment income	**861**	836
Net realized gains (losses):		
Other-than-temporary impairment (OTTI) losses gross	**—**	(13)
Portion of OTTI losses recognized in other comprehensive income (OCI)	**—**	—
Net OTTI losses recognized in income	**—**	(13)
Net realized gains (losses) excluding OTTI losses	**—**	(84)
Net realized gains (losses) (includes $(319) and $(44) reclassified from AOCI)	**(958)**	(97)
Total revenues	**7,697**	7,876
Expenses		
Losses and loss expenses	**4,485**	4,098
Policy benefits	**129**	196
Policy acquisition costs	**1,615**	1,464
Administrative expenses	**741**	710
Interest expense	**132**	140
Other (income) expense	**55**	(39)
Amortization of purchased intangibles	**73**	76
Chubb integration expenses	**—**	3
Total expenses	**7,230**	6,648
Income before income tax	**467**	1,228
Income tax expense (benefit) (includes $(40) and $(6) on reclassified unrealized gains and losses)	**215**	188
Net income	**$ 252**	$ 1,040
Other comprehensive income (loss)		
Unrealized appreciation (depreciation)	**$ (2,479)**	$ 1,845
Reclassification adjustment for net realized (gains) losses included in net income	**319**	44
	(2,160)	1,889
Change in:		
Cumulative foreign currency translation adjustment	**(859)**	147
Postretirement benefit liability adjustment	**(14)**	(27)
Other comprehensive income (loss), before income tax	**(3,033)**	2,009
Income tax (expense) benefit related to OCI items	**321**	(331)
Other comprehensive income (loss)	**(2,712)**	1,678
Comprehensive income (loss)	**$ (2,460)**	$ 2,718
Earnings per share		
Basic earnings per share	**$ 0.56**	$ 2.27
Diluted earnings per share	**$ 0.55**	$ 2.25

See accompanying notes to the consolidated financial statements

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (Unaudited)

Chubb Limited and Subsidiaries

	Three Months Ended March 31	
(in millions of U.S. dollars)	**2020**	2019
Common Shares		
Balance – beginning and end of period	**$ 11,121**	$ 11,121
Common Shares in treasury		
Balance – beginning of period	**(3,754)**	(2,618)
Common Shares repurchased	**(326)**	(367)
Net shares issued under employee share-based compensation plans	**208**	210
Balance – end of period	**(3,872)**	(2,775)
Additional paid-in capital		
Balance – beginning of period	**11,203**	12,557
Net shares issued under employee share-based compensation plans	**(196)**	(191)
Exercise of stock options	**(26)**	(34)
Share-based compensation expense	**69**	54
Funding of dividends declared to Retained earnings	**(340)**	(335)
Balance – end of period	**10,710**	12,051
Retained earnings		
Balance – beginning of period	**36,142**	31,700
Cumulative effect of adoption of accounting guidance (refer to Note 1)	**(63)**	(12)
Balance – beginning of period, as adjusted	**36,079**	31,688
Net income	**252**	1,040
Funding of dividends declared from Additional paid-in capital	**340**	335
Dividends declared on Common Shares	**(340)**	(335)
Balance – end of period	**36,331**	32,728
Accumulated other comprehensive income (loss)		
Net unrealized appreciation (depreciation) on investments		
Balance – beginning of period	**2,543**	(545)
Change in period, before reclassification from AOCI, net of income tax (expense) benefit of $324 and $(324)	**(2,155)**	1,521
Amounts reclassified from AOCI, net of income tax expense of $(40) and $(6)	**279**	38
Change in period, net of income tax (expense) benefit of $284 and $(330)	**(1,876)**	1,559
Balance – end of period	**667**	1,014
Cumulative foreign currency translation adjustment		
Balance – beginning of period	**(1,939)**	(1,976)
Change in period, net of income tax (expense) benefit of $34 and $(7)	**(825)**	140
Balance – end of period	**(2,764)**	(1,836)
Postretirement benefit liability adjustment		
Balance – beginning of period	**15**	73
Change in period, net of income tax benefit of $3 and $6	**(11)**	(21)
Balance – end of period	**4**	52
Accumulated other comprehensive income (loss)	**(2,093)**	(770)
Total shareholders' equity	**$ 52,197**	$ 52,355

See accompanying notes to the consolidated financial statements

CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

Chubb Limited and Subsidiaries

(in millions of U.S. dollars)	Three Months Ended March 31 2020	2019
Cash flows from operating activities		
Net income	**$ 252**	$ 1,040
Adjustments to reconcile net income to net cash flows from operating activities		
Net realized (gains) losses	**958**	97
Amortization of premiums/discounts on fixed maturities	**87**	118
Amortization of purchased intangibles	**73**	76
Deferred income taxes	**(13)**	(76)
Unpaid losses and loss expenses	**228**	62
Unearned premiums	**192**	274
Future policy benefits	**31**	41
Insurance and reinsurance balances payable	**2**	13
Accounts payable, accrued expenses, and other liabilities	**(392)**	(502)
Income taxes payable	**109**	266
Insurance and reinsurance balances receivable	**(6)**	278
Reinsurance recoverable	**116**	(97)
Deferred policy acquisition costs	**(65)**	(63)
Other	**140**	(205)
Net cash flows from operating activities	**1,712**	1,322
Cash flows from investing activities		
Purchases of fixed maturities available for sale	**(6,474)**	(5,561)
Purchases of fixed maturities held to maturity	**(6)**	(1)
Purchases of equity securities	**(1,380)**	(49)
Sales of fixed maturities available for sale	**4,687**	3,287
Sales of to be announced mortgage-backed securities	**—**	6
Sales of equity securities	**131**	60
Maturities and redemptions of fixed maturities available for sale	**2,756**	1,831
Maturities and redemptions of fixed maturities held to maturity	**440**	280
Net change in short-term investments	**552**	(39)
Net derivative instruments settlements	**109**	(358)
Private equity contributions	**(361)**	(410)
Private equity distributions	**211**	368
Deposit paid on share acquisition	**(1,550)**	—
Other	**(125)**	(87)
Net cash flows used for investing activities	**(1,010)**	(673)
Cash flows from financing activities		
Dividends paid on Common Shares	**(339)**	(336)
Common Shares repurchased	**(323)**	(367)
Proceeds from issuance of repurchase agreements	**952**	471
Repayment of repurchase agreements	**(952)**	(470)
Proceeds from share-based compensation plans	**47**	35
Policyholder contract deposits	**135**	115
Policyholder contract withdrawals	**(162)**	(78)
Other	**(3)**	—
Net cash flows used for financing activities	**(645)**	(630)
Effect of foreign currency rate changes on cash and restricted cash	**(45)**	34
Net increase in cash and restricted cash	**12**	53
Cash and restricted cash – beginning of period	**1,646**	1,340
Cash and restricted cash – end of period	**$ 1,658**	$ 1,393
Supplemental cash flow information		
Taxes paid	**$ 107**	$ 14
Interest paid	**$ 91**	$ 85

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 11 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 2019 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)	**March 31 2020**	December 31 2019
Cash	**$ 1,512**	$ 1,537
Restricted cash	**146**	109
Total cash and restricted cash shown in the Consolidated statements of cash flows	**$ 1,658**	$ 1,646

c) Goodwill

During the three months ended March 31, 2020, Goodwill decreased $325 million, primarily reflecting the impact of foreign exchange.

d) Accounting guidance adopted in 2020

Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments

Effective January 1, 2020, we adopted, on a modified retrospective basis, new guidance on the accounting for credit losses of financial instruments that are measured at amortized cost, including held to maturity securities, and reinsurance recoverables, by applying an approach based on the current expected credit losses (CECL). The estimate of expected credit losses considers historical information, current information, as well as reasonable and supportable forecasts, including estimates of prepayments. In addition, the guidance also replaced the current available for sale (AFS) security other-than-temporary impairment model by requiring an estimate of the expected credit loss (ECL) only when the fair value is below the amortized cost of the asset. The length of time the fair value of an AFS security has been below its amortized cost no longer impacts the determination of whether a potential credit loss exists. The AFS security model also requires the use of a valuation allowance as compared to the previous practice of writing down the asset.

During the first quarter of 2020, we established a valuation allowance for credit losses and recognized a cumulative effect adjustment and decreased beginning retained earnings by $69 million pre-tax, or $63 million after-tax. We also adopted the required disclosures within Note 3 Investments and Note 5 Reinsurance. Results for reporting periods prior to January 1, 2020 are presented in accordance with the previous guidance.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

Accounting guidance not yet adopted

Effects of Reference Rate Reform on Financial Reporting

In March 2020, the FASB issued guidance which provides optional expedients and exceptions for applying GAAP to investments, derivatives, or other transactions that reference the London Interbank Offered Rate (LIBOR) or another reference rate expected to be discontinued because of reference rate reform. Along with the optional expedients, the amendments include a general principle that permits an entity to consider contract modifications due to reference reform to be an event that does not require contract re-measurement at the modification date or reassessment of a previous accounting determination. Additionally, a company may make a one-time election to sell, transfer, or both sell and transfer debt securities classified as held to maturity that reference a rate affected by reference rate reform and that were classified as held to maturity before January 1, 2020. This standard may be elected over time through December 31, 2022 as reference rate reform activities occur. We are currently assessing the effect of adopting this guidance on our financial condition and results of operations.

Refer to the 2019 Form 10-K for information on additional accounting guidance not yet adopted.

2. Acquisitions

Huatai Group

Chubb maintains a direct investment in Huatai Insurance Group Company Limited (Huatai Group). Huatai Group is the parent company of, and owns 100 percent of, Huatai Property & Casualty Insurance Co., Ltd. (Huatai P&C) and approximately 80 percent of Huatai Life Insurance Co., Ltd. (Huatai Life). As of March 31, 2020 Chubb's aggregate ownership interest in Huatai Group was 30.9 percent. Chubb applies the equity method of accounting to its investment in Huatai Group by recording its share of net income or loss in Other (income) expense in the Consolidated statements of operations.

In 2019, Chubb entered into agreements to acquire an additional 22.4 percent ownership in Huatai Group for approximately $1.55 billion through two separate purchases, a 15.3 percent ownership interest for approximately $1.1 billion and a 7.1 percent ownership interest for approximately $493 million. These purchases are contingent upon Chinese insurance regulatory approval and other important conditions that are expected to be completed by the end of 2021. The purchase of the 7.1 percent ownership stake is also contingent upon the receipt of Chinese insurance regulatory approval of the 15.3 percent purchase.

In connection with these purchase agreements, in January 2020, we paid collateralized deposits totaling $1.55 billion to the selling shareholders. This transaction was recorded to Other assets on the Consolidated balance sheet and within investing activities on the Consolidated statement of cash flows.

Upon completion of the 7.1 percent purchase, which will result in majority ownership of Huatai Group at 53.3 percent, Chubb is expected to obtain control of Huatai Group, Huatai P&C and Huatai Life. At that time, Chubb is expected to apply consolidation accounting and discontinue the application of the equity method of accounting.

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

3. Investments

a) Fixed maturities

Effective January 1, 2020, we adopted new accounting guidance that requires a valuation allowance for credit losses to be established for fixed maturity securities classified as held to maturity (HTM) or available for sale (AFS). For information on accounting policies applicable to periods prior to January 1, 2020, refer to the 2019 Form 10-K.

March 31, 2020 (in millions of U.S. dollars)	Amortized Cost	Valuation Allowance	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value
Available for sale					
U.S. Treasury and agency	$ 2,773	$ —	$ 240	$ —	$ 3,013
Foreign	22,615	(44)	850	(577)	22,844
Corporate securities	31,530	(132)	644	(1,374)	30,668
Mortgage-backed securities	17,073	—	864	(52)	17,885
States, municipalities, and political subdivisions	6,968	—	169	(17)	7,120
	$ 80,959	$ (176)	$ 2,767	$ (2,020)	$ 81,530

	Amortized Cost	Valuation Allowance	Net Carrying Value	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value
Held to maturity						
U.S. Treasury and agency	$ 1,208	$ —	$ 1,208	$ 75	$ —	$ 1,283
Foreign	1,294	(7)	1,287	63	(7)	1,343
Corporate securities	2,272	(36)	2,236	113	(27)	2,322
Mortgage-backed securities	2,266	(1)	2,265	106	(4)	2,367
States, municipalities, and political subdivisions	5,030	(1)	5,029	130	(3)	5,156
	$ 12,070	$ (45)	$ 12,025	$ 487	$ (41)	$ 12,471

December 31, 2019 (in millions of U.S. dollars)	Amortized Cost	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Fair Value	OTTI Recognized in AOCI
Available for sale					
U.S. Treasury and agency	$ 3,188	$ 96	$ (1)	$ 3,283	$ —
Foreign	22,670	1,099	(62)	23,707	(25)
Corporate securities	30,689	1,180	(78)	31,791	(5)
Mortgage-backed securities	18,712	494	(14)	19,192	—
States, municipalities, and political subdivisions	7,321	205	(11)	7,515	—
	$ 82,580	$ 3,074	$ (166)	$ 85,488	$ (30)
Held to maturity					
U.S. Treasury and agency	$ 1,318	$ 29	$ —	$ 1,347	$ —
Foreign	1,423	62	—	1,485	—
Corporate securities	2,349	121	(2)	2,468	—
Mortgage-backed securities	2,331	65	—	2,396	—
States, municipalities, and political subdivisions	5,160	150	(1)	5,309	—
	$ 12,581	$ 427	$ (3)	$ 13,005	$ —

Management evaluates CECL for all HTM securities each quarter. U.S. Treasury and agency securities and U.S. government agency mortgage-backed securities are assumed to have no risk of non-payment and therefore are excluded from the CECL evaluation. The remaining HTM securities are evaluated for potential credit loss on a collective pool basis. We elected to pool

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

HTM securities by 1) external credit rating and 2) time to maturity (duration). These characteristics are the most representative of similar risk characteristics within our portfolio. Chubb will pool HTM securities and calculate an expected credit loss for each pool using Moody's corporate bond default average, corporate bond recovery rate, and an economic cycle multiplier. The multiplier is based on the leading economic index and will adjust the average default frequency for a forward-looking economic outlook. Prior to the adoption of this guidance, HTM securities were evaluated individually for other-than-temporary impairment.

Management monitors the credit quality of HTM securities through the review of external credit ratings on a quarterly basis. The following table presents the amortized cost of our HTM securities according to S&P rating:

	March 31, 2020	
(in millions of U.S. dollars)	Amortized cost	% of Total
AAA	$ 2,642	22%
AA	6,608	55%
A	2,371	20%
BBB	422	3%
BB	21	—%
Other	6	—%
Total	$ 12,070	100%

Management evaluates expected credit losses (ECL) for AFS securities when fair value is below amortized cost. AFS securities are evaluated for potential credit loss on an individual security level but the evaluation may use assumptions consistent with expectations of credit losses for a group of similar securities. If management has the intent to sell or will be required to sell the security before recovery, the entire impairment loss will be recorded through income to net realized gains and losses. If management does not have the intent to sell or will not be required to sell the security before recovery, an allowance for credit losses is established and the portion of loss that relates to credit losses is recorded in income to Net realized gains (losses) and the portion of loss that relates to non-credit loss is recorded in Other comprehensive income.

Examples of criteria that are collectively evaluated to determine if a credit loss has occurred include the following:

- The extent to which the fair value is less than amortized cost;
- Adverse conditions related to the security, industry, or geographic area;
- Downgrades in the security's credit rating by a rating agency; and
- Failure of the issuer to make scheduled principal or interest payments

AFS securities that meet any one of the criteria included above will be subject to a discounted cash flow analysis by comparing the present value of expected future cash flows with the amortized cost basis. If the present value of expected future cash flows is less than the amortized cost, a credit loss exists and an allowance for credit losses will be recognized. If the present value of expected future cash flows is equal to or greater than the amortized cost basis, management will conclude an expected credit loss does not exist.

We elected to not measure an allowance for accrued investment income as uncollectible balances are written off in a timely manner, typically 30 to 45 days after uncollected balances are due.

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

The following table presents fixed maturities by contractual maturity:

	March 31 2020		December 31 2019	
(in millions of U.S. dollars)	Net Carrying Value	Fair Value	Amortized Cost	Fair Value
Available for sale				
Due in 1 year or less	**$ 3,816**	**$ 3,816**	$ 3,951	$ 3,973
Due after 1 year through 5 years	**25,837**	**25,837**	27,142	27,720
Due after 5 years through 10 years	**23,712**	**23,712**	23,901	24,874
Due after 10 years	**10,280**	**10,280**	8,874	9,729
	63,645	**63,645**	63,868	66,296
Mortgage-backed securities	**17,885**	**17,885**	18,712	19,192
	$ 81,530	**$ 81,530**	$ 82,580	$ 85,488
Held to maturity				
Due in 1 year or less	**$ 614**	**$ 620**	$ 478	$ 479
Due after 1 year through 5 years	**3,695**	**3,775**	3,869	3,940
Due after 5 years through 10 years	**3,383**	**3,479**	3,756	3,883
Due after 10 years	**2,068**	**2,230**	2,147	2,307
	9,760	**10,104**	10,250	10,609
Mortgage-backed securities	**2,265**	**2,367**	2,331	2,396
	$ 12,025	**$ 12,471**	$ 12,581	$ 13,005

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 March 31, 2020 comprised both investment grade and below investment grade securities for which fair value declined primarily due to widening credit spreads since the date of purchase.

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

	0 – 12 Months		Over 12 Months		Total	
March 31, 2020 (in millions of U.S. dollars)	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss
Foreign	**$ 6,534**	**$ (376)**	**$ 132**	**$ (21)**	**$ 6,666**	**$ (397)**
Corporate securities	**13,492**	**(858)**	**448**	**(51)**	**13,940**	**(909)**
Mortgage-backed securities	**914**	**(48)**	**36**	**(4)**	**950**	**(52)**
States, municipalities, and political subdivisions	**637**	**(6)**	**130**	**(11)**	**767**	**(17)**
Total AFS fixed maturities	**$ 21,577**	**$ (1,288)**	**$ 746**	**$ (87)**	**$ 22,323**	**$ (1,375)**

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

The following table presents, for all securities in an unrealized loss position (including securities on loan), the aggregate fair value and gross unrealized loss by length of time the security has continuously been in an unrealized loss position:

	0 – 12 Months		Over 12 Months		Total	
December 31, 2019 (in millions of U.S. dollars)	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss
U.S. Treasury and agency	$ 234	$ (1)	$ 339	$ —	$ 573	$ (1)
Foreign	1,846	(34)	802	(28)	2,648	(62)
Corporate securities	2,121	(40)	988	(40)	3,109	(80)
Mortgage-backed securities	1,174	(6)	932	(8)	2,106	(14)
States, municipalities, and political subdivisions	188	—	276	(12)	464	(12)
Total fixed maturities	$ 5,563	$ (81)	$ 3,337	$ (88)	$ 8,900	$ (169)

c) Net realized gains (losses)

Management reviews credit losses and the valuation allowance for expected credit losses each quarter. When all or a portion of a fixed maturity security is identified to be uncollectible and written off, the valuation allowance for expected credit losses is reduced by the same amount. In general, a security is considered uncollectible no later than when all efforts to collect contractual cash flows have been exhausted. Below are considerations for when a security may be deemed uncollectible:

- We have sufficient information to determine that the issuer of the security is insolvent;
- We receive notice that the issuer of the security has filed for bankruptcy, and the collectability is expected to be adversely impacted by the bankruptcy;
- The issuer of a security has violated multiple debt covenants;
- Amounts have been past due for a specified period of time with no response from the issuer;
- A significant deterioration in the value of the collateral has occurred;
- We have received correspondence from the issuer of the security indicating that it doesn't intend to pay the contractual principal and interest.

Projected cash flows are driven primarily by assumptions regarding probability of default and also the timing and amount of recoveries associated with defaults. Chubb developed the projected cash flows using market data, issuer-specific information, and credit ratings. In combination with contractual cash flows and the use of historical default and recovery data by Moody's Investors Service (Moody's) rating category we generate expected cash flows using the average cumulative issuer-weighted global default rates by letter rating.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

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

	Three Months Ended March 31	
(in millions of U.S. dollars)	**2020**	2019
Fixed maturities:		
OTTI on fixed maturities, gross and net	**$ —**	$ (13)
Gross realized gains excluding OTTI	**77**	27
Gross realized losses excluding OTTI	**(125)**	(58)
Provision for expected credit losses	**(150)**	—
Impairment [1]	**(121)**	—
Total fixed maturities	**$ (319)**	$ (44)
Equity securities	**(29)**	58
Other investments	**5**	(44)
Foreign exchange gains (losses)	**(68)**	13
Investment and embedded derivative instruments	**15**	(130)
Fair value adjustments on insurance derivative	**(685)**	114
S&P futures	**125**	(63)
Other derivative instruments	**(2)**	(1)
Net realized gains (losses) (pre-tax)	**$ (958)**	$ (97)

[1] Related to our intent to sell certain securities.

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 March 31					
	2020			2019		
(in millions of U.S. dollars)	**Equity Securities**	**Other Investments**	**Total**	Equity Securities	Other Investments	Total
Net gains (losses) recognized during the period	**$ (29)**	**$ 5**	**$ (24)**	$ 58	$ (44)	$ 14
Less: Net gains (losses) recognized from sales of securities	**(24)**	**—**	**(24)**	1	(2)	(1)
Unrealized gains (losses) recognized for securities still held at reporting date	**$ (5)**	**$ 5**	**$ —**	$ 57	$ (42)	$ 15

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

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 March 31 2020
Available for sale	
Valuation allowance for expected credit losses - beginning of period	$ —
Impact of adoption of new accounting guidance	**25**
Provision for expected credit loss	**149**
Initial allowance for purchased securities with credit deterioration	**2**
Valuation allowance for expected credit losses - end of period	**$ 176**
Held to maturity	
Valuation allowance for expected credit losses - beginning of period	$ —
Impact of adoption of new accounting guidance	**44**
Provision for expected credit loss	**1**
Valuation allowance for expected credit losses - end of period	**$ 45**

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

(in millions of U.S. dollars)	Expected Liquidation Period of Underlying Assets	March 31 2020 Fair Value	March 31 2020 Maximum Future Funding Commitments	December 31 2019 Fair Value	December 31 2019 Maximum Future Funding Commitments
Financial	**2 to 10 Years**	**$ 590**	**$ 325**	$ 611	$ 329
Real Assets	**2 to 11 Years**	**721**	**414**	712	422
Distressed	**2 to 7 Years**	**262**	**67**	263	80
Private Credit	**3 to 8 Years**	**106**	**272**	104	272
Traditional	**2 to 14 Years**	**3,045**	**1,868**	2,844	2,160
Vintage	**1 to 2 Years**	**103**	**—**	116	—
Investment funds	**Not Applicable**	**264**	**—**	271	—
		$ 5,091	**$ 2,946**	$ 4,921	$ 3,263

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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

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

Investment funds employ various investment strategies, such as long/short equity and arbitrage/distressed. Included in this category are investments for which Chubb has the option to redeem at agreed upon value as described in each investment fund's subscription agreement. Depending on the terms of the various subscription agreements, investment fund investments may be redeemed monthly, quarterly, semi-annually, or annually. If Chubb wishes to redeem an investment fund investment, it must first determine if the investment fund is still in a lock-up period (a time when Chubb cannot redeem its investment so that the investment fund manager has time to build the portfolio). If the investment fund is no longer in its lock-up period, Chubb must then notify the investment fund manager of its intention to redeem by the notification date prescribed by the subscription agreement. Subsequent to notification, the investment fund can redeem Chubb's investment within several months of the notification. Notice periods for redemption of the investment funds range between 5 and 120 days. Chubb can redeem its investment funds without consent from the investment fund managers.

d) 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 March 31, 2020 and December 31, 2019 are investments, primarily fixed maturities, totaling $20.9 billion and $21.0 billion, respectively, and cash of $146 million and $109 million, respectively.

The following table presents the components of restricted assets:

(in millions of U.S. dollars)		**March 31 2020**		December 31 2019
Trust funds	**$**	**13,974**	$	14,004
Deposits with U.S. regulatory authorities		**2,424**		2,466
Deposits with non-U.S. regulatory authorities		**2,669**		2,709
Assets pledged under repurchase agreements		**1,492**		1,464
Other pledged assets		**496**		490
Total	**$**	**21,055**	$	21,133

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

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

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

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

approaching maturity and, as such, their cost approximates fair value. Short-term investments for which pricing is unobservable are classified within Level 3.

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

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

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

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

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

Guaranteed living benefits
The GLB arises from life reinsurance programs covering living benefit guarantees whereby we assume the risk of guaranteed minimum income benefits (GMIB) associated with variable annuity contracts. GLB's are recorded in Accounts payable, accrued expenses, and other liabilities and Future policy benefits 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

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

March 31, 2020 (in millions of U.S. dollars)	Level 1	Level 2	Level 3	Total
Assets:				
Fixed maturities available for sale				
U.S. Treasury and agency	$ 2,400	$ 613	$ —	$ 3,013
Foreign	—	22,379	465	22,844
Corporate securities	—	29,166	1,502	30,668
Mortgage-backed securities	—	17,825	60	17,885
States, municipalities, and political subdivisions	—	7,120	—	7,120
	2,400	77,103	2,027	81,530
Equity securities	2,001	—	67	2,068
Short-term investments	2,165	1,420	1	3,586
Other investments [1]	285	335	10	630
Securities lending collateral	—	1,342	—	1,342
Investment derivative instruments	64	—	—	64
Other derivative instruments	2	—	—	2
Separate account assets	2,778	130	—	2,908
Total assets measured at fair value [1]	$ 9,695	$ 80,330	$ 2,105	$ 92,130
Liabilities:				
Investment derivative instruments	$ 141	$ —	$ —	$ 141
GLB [2]	—	—	1,141	1,141
Total liabilities measured at fair value	$ 141	$ —	$ 1,141	$ 1,282

(1) Excluded from the table above are partially-owned investments, investment funds, and limited partnerships of $5,091 million, policy loans of $228 million and other investments of $126 million at March 31, 2020 measured using NAV as a practical expedient.

(2) Our GLB reinsurance product meets the definition of a derivative instrument for accounting purposes and is accordingly carried at fair value. Excluded from the table above is the portion of the GLB derivative liability classified as Future policy benefits in the Consolidated balance sheets.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

December 31, 2019 (in millions of U.S. dollars)	Level 1	Level 2	Level 3	Total
Assets:				
Fixed maturities available for sale				
U.S. Treasury and agency	$ 2,664	$ 619	$ —	$ 3,283
Foreign	—	23,258	449	23,707
Corporate securities	—	30,340	1,451	31,791
Mortgage-backed securities	—	19,132	60	19,192
States, municipalities, and political subdivisions	—	7,515	—	7,515
	2,664	80,864	1,960	85,488
Equity securities	728	15	69	812
Short-term investments	2,803	1,482	6	4,291
Other investments [1]	412	377	10	799
Securities lending collateral	—	994	—	994
Investment derivative instruments	24	—	—	24
Other derivative instruments	2	—	—	2
Separate account assets	3,437	136	—	3,573
Total assets measured at fair value [1]	$ 10,070	$ 83,868	$ 2,045	$ 95,983
Liabilities:				
Investment derivative instruments	$ 93	$ —	$ —	$ 93
Other derivative instruments	13	—	—	13
GLB [2]	—	—	456	456
Total liabilities measured at fair value	$ 106	$ —	$ 456	$ 562

[1] Excluded from the table above are partially-owned investments, investment funds, and limited partnerships of $4,921 million and other investments of $95 million at December 31, 2019 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. Excluded from the table above is the portion of the GLB derivative liability classified as Future policy benefits in the Consolidated balance sheets.

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]
	March 31, 2020	December 31, 2019				
GLB [1]	**$ 1,141**	$ 456	**Actuarial model**	**Lapse rate**	**3% – 34%**	**4.3%**
				Annuitization rate	**0% – 52%**	**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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

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.

The effect of changes in key market factors on assumed lapse and annuitization rates reflect emerging trends using data available from cedants. For treaties with limited experience, rates are established in line with data received from other ceding companies adjusted, as appropriate, with industry estimates. The model and related assumptions are regularly re-evaluated by management and enhanced, as appropriate, based upon additional experience obtained related to policyholder behavior and availability of updated information such as market conditions, market participant assumptions, and demographics of in-force annuities. For the three months ended March 31, 2020 and 2019, no material refinements were made to the model. For detailed information on our lapse and annuitization rate assumptions, refer to Note 4 to the Consolidated Financial Statements of our 2019 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	
Three Months Ended March 31, 2020 (in millions of U.S. dollars)	Available-for-Sale Debt Securities													
	Foreign		Corporate securities		MBS		Equity securities		Short-term investments		Other investments		GLB [1]	
Balance – beginning of period	$	449	$	1,451	$	60	$	69	$	6	$	10	$	456
Transfers into Level 3		—		91		—		—		—		—		—
Transfers out of Level 3		(3)		(1)		—		—		—		—		—
Change in Net Unrealized Gains (Losses) in OCI		(14)		(45)		—		1		—		—		—
Net Realized Gains/Losses		(2)		(13)		—		(2)		—		—		685
Purchases		82		139		—		3		1		—		—
Sales		(46)		(19)		—		(4)		—		—		—
Settlements		(1)		(101)		—		—		(6)		—		—
Balance – end of period	$	465	$	1,502	$	60	$	67	$	1	$	10	$	1,141
Net Realized Gains/Losses Attributable to Changes in Fair Value at the Balance Sheet Date	$	—	$	(14)	$	—	$	(2)	$	—	$	—	$	685
Change in Net Unrealized Gains/Losses included in OCI at the Balance sheet date	$	(15)	$	(44)	$	—	$	—	$	—	$	—	$	—

[1] Our GLB reinsurance product meets the definition of a derivative instrument for accounting purposes and is accordingly carried at fair value. Excluded from the table above is the portion of the GLB derivative liability classified as Future policy benefits in the Consolidated balance sheets. The liability for GLB reinsurance was $1,591 million at March 31, 2020, and $897 million at December 31, 2019, which includes a fair value derivative adjustment of $1,141 million and $456 million, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

Three Months Ended March 31, 2019 (in millions of U.S. dollars)	Available-for-Sale Debt Securities						Assets	Liabilities
	Foreign	Corporate securities	MBS	Equity securities	Short-term investments	Other investments		GLB [1]
Balance – beginning of period	$ 345	$ 1,299	$ 61	$ 57	$ 1	$ 11	$ 452	
Transfers into Level 3	3	5	—	—	—	—	—	
Transfers out of Level 3	(15)	—	—	—	—	—	—	
Change in Net Unrealized Gains/Losses in OCI, including foreign exchange	6	4	—	1	—	—	—	
Net Realized Gains/Losses	(1)	1	—	(2)	—	—	(114)	
Purchases	53	128	18	9	—	—	—	
Sales	(5)	(37)	—	(10)	—	—	—	
Settlements	(26)	(58)	(1)	—	(1)	—	—	
Balance – end of period	$ 360	$ 1,342	$ 78	$ 55	$ —	$ 11	$ 338	
Net Realized Gains/Losses Attributable to Changes in Fair Value at the Balance Sheet Date	$ —	$ —	$ —	$ (1)	$ —	$ —	$ (114)	

[1] Our GLB reinsurance product meets the definition of a derivative instrument for accounting purposes and is accordingly carried at fair value. Excluded from the table above is the portion of the GLB derivative liability classified as Future policy benefits in the Consolidated balance sheets. The liability for GLB reinsurance was $741 million at March 31, 2019, and $861 million at December 31, 2018, which includes a fair value derivative adjustment of $338 million and $452 million, respectively.

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 2019 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.

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

March 31, 2020 (in millions of U.S. dollars)	Fair Value				Net Carrying Value
	Level 1	Level 2	Level 3	Total	
Assets:					
Fixed maturities held to maturity					
U.S. Treasury and agency	$ 1,227	$ 56	$ —	$ 1,283	$ 1,208
Foreign	—	1,343	—	1,343	1,287
Corporate securities	—	2,294	28	2,322	2,236
Mortgage-backed securities	—	2,367	—	2,367	2,265
States, municipalities, and political subdivisions	—	5,156	—	5,156	5,029
Total assets	$ 1,227	$ 11,216	$ 28	$ 12,471	$ 12,025
Liabilities:					
Repurchase agreements	$ —	$ 1,408	$ —	$ 1,408	$ 1,408
Short-term debt	—	1,300	—	1,300	1,300
Long-term debt	—	14,353	—	14,353	13,510
Trust preferred securities	—	406	—	406	308
Total liabilities	$ —	$ 17,467	$ —	$ 17,467	$ 16,526

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

December 31, 2019 (in millions of U.S. dollars)	Fair Value Level 1	Level 2	Level 3	Total	Carrying Value
Assets:					
Fixed maturities held to maturity					
U.S. Treasury and agency	$ 1,292	$ 55	$ —	$ 1,347	$ 1,318
Foreign	—	1,485	—	1,485	1,423
Corporate securities	—	2,436	32	2,468	2,349
Mortgage-backed securities	—	2,396	—	2,396	2,331
States, municipalities, and political subdivisions	—	5,309	—	5,309	5,160
Total assets	$ 1,292	$ 11,681	$ 32	$ 13,005	$ 12,581
Liabilities:					
Repurchase agreements	$ —	$ 1,416	$ —	$ 1,416	$ 1,416
Short-term debt	—	1,307	—	1,307	1,299
Long-term debt	—	15,048	—	15,048	13,559
Trust preferred securities	—	467	—	467	308
Total liabilities	$ —	$ 18,238	$ —	$ 18,238	$ 16,582

5. Reinsurance

Management evaluates the need for a valuation allowance for uncollectible reinsurance recoverable using current and historical factors, and forecasts each quarter. These factors include a review of active and run-off lines of business, review of reinsurer financial strength ratings, and review of our largest reinsurers. The evaluation of the valuation allowance includes several judgments including certain aspects of the allocation of reinsurance recoverable on incurred but not reported (IBNR) claims by reinsurer and a default analysis to estimate uncollectible reinsurance. The primary components of the default analysis are reinsurance recoverable balances by reinsurer, net of collateral, and default factors used to determine the portion of a reinsurer's balance deemed uncollectible. Default factors require considerable judgment and are determined using principally the current financial strength rating, or rating equivalent, of each reinsurer. Changes in the valuation allowance for uncollectible reinsurance recoverables are recorded in Losses and loss expenses in the Consolidated statements of operations. For additional information, refer to Note 1 d) to the Consolidated Financial Statements of our 2019 Form 10-K.

The evaluation of the valuation allowance at December 31, 2019 was consistent with the new accounting guidance adopted January 1, 2020, therefore, there was no material change to the valuation allowance upon adoption.

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

(in millions of U.S. dollars)	Three Months Ended March 31 **2020**
Reinsurance recoverable	
Valuation allowance for uncollectible reinsurance - beginning of period	**$ 316**
Provision for uncollectible reinsurance	**2**
Write-offs charged against the valuation allowance	**(13)**
Valuation allowance for uncollectible reinsurance - end of period	**$ 305**

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

6. Unpaid losses and loss expenses

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

	Three Months Ended March 31	
(in millions of U.S. dollars)	**2020**	2019
Gross unpaid losses and loss expenses – beginning of period	**$ 62,690**	$ 62,960
Reinsurance recoverable on unpaid losses - beginning of period [1]	**(14,181)**	(14,689)
Net unpaid losses and loss expenses – beginning of period	**48,509**	48,271
Net losses and loss expenses incurred in respect of losses occurring in:		
Current year	**4,605**	4,326
Prior years [2]	**(120)**	(228)
Total	**4,485**	4,098
Net losses and loss expenses paid in respect of losses occurring in:		
Current year	**920**	785
Prior years	**3,335**	3,234
Total	**4,255**	4,019
Foreign currency revaluation and other	**(565)**	86
Net unpaid losses and loss expenses – end of period	**48,174**	48,436
Reinsurance recoverable on unpaid losses [1]	**14,040**	14,707
Gross unpaid losses and loss expenses – end of period	**$ 62,214**	$ 63,143

(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 $2 million and $24 million for the three months ended March 31, 2020 and 2019, respectively.

Gross and net unpaid losses and loss expenses decreased $476 million and $335 million, respectively for the three months ended March 31, 2020, reflecting favorable foreign exchange movement, partially offset by an increase in underlying reserves.

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

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

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

	Three Months Ended March 31		
(in millions of U.S. dollars)	**Long-tail**	**Short-tail**	**Total**
2020			
North America Commercial P&C Insurance	**$ (43)**	**$ (62)**	**$ (105)**
North America Personal P&C Insurance	**—**	**1**	**1**
North America Agricultural Insurance	**—**	**(14)**	**(14)**
Overseas General Insurance	**—**	**(4)**	**(4)**
Global Reinsurance	**—**	**(7)**	**(7)**
Corporate	**11**	**—**	**11**
Total	**$ (32)**	**$ (86)**	**$ (118)**
2019			
North America Commercial P&C Insurance	$ (65)	$ (66)	$ (131)
North America Personal P&C Insurance	—	(10)	(10)
North America Agricultural Insurance	—	(61)	(61)
Overseas General Insurance	—	(4)	(4)
Global Reinsurance	(1)	(7)	(8)
Corporate	10	—	10
Total	$ (56)	$ (148)	$ (204)

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
2020
For the three months ended March 31, 2020, net favorable PPD was $105 million, which was the net result of several underlying favorable and adverse movements, and was driven by the following principal changes:

- Net favorable development of $43 million in long-tail business, primarily from:
  - Net favorable development of $66 million in professional liability (errors & omissions and cyber), driven by accident years 2016 and prior, which saw lower than expected emergence;
  - Net favorable development of $43 million in voluntary environmental lines, driven by accident years 2016 and prior, which saw lower than expected emergence and a favorable revision to loss development patterns;
  - Net favorable development of $28 million in construction workers' compensation, mainly seen in accident years 2016 and prior, which saw lower than expected reported loss emergence and a favorable revision to loss development patterns;
  - Net adverse development of $49 million in excess and umbrella portfolios, with accident years 2015 through 2019 experiencing higher than expected reported development, partially offset by lower than expected emergence in accident years 2014 and prior;
  - Net adverse development of $23 million in wholesale general liability coverages, driven by higher than expected reported loss emergence in accident years 2014 through 2019; and

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

- Net favorable development of $62 million in short-tail business, primarily from:
    - Net favorable development of $36 million, in accident & health, mainly in accident years 2018 and 2019, driven by lower than expected paid loss emergence; and
    - Net favorable development of $31 million in surety, driven by accident year 2018, where loss emergence was lower than expected.

2019
For the three months ended March 31, 2019, net favorable PPD was $131 million, which was the net result of several underlying favorable and adverse movements, and was driven by the following principal changes:

- Net favorable development of $65 million in long-tail business, primarily from:
    - Net favorable development of $57 million in professional liability (errors & omissions and cyber), mainly in the 2015 and prior accident years where case activity was less than expected, partially offset by adverse development in the 2016 accident year, which was driven by several large adverse claim developments;
    - Net favorable development of $31 million in commercial excess and umbrella portfolios, driven by the 2013 and prior accident years, where case emergence was less than expected and greater weight was given to experience-based methods; this was partially offset by higher than expected claim activity in the 2015, 2016, and 2018 accident years which led to reserve strengthening in those years;
    - Net favorable development of $30 million in our construction workers' compensation lines, impacting accident years 2015 and prior, and was driven by both lower than expected reported development and related favorable updates to development patterns used in our loss projection methods;
    - Net adverse development of $50 million from the aggregation of general liability and automobile liability coverages within construction and wholesale portfolios, mainly impacting the 2013 through 2018 accident years, and largely the result of higher than expected reported loss development; and
- Net favorable development of $66 million in short-tail business, primarily from net favorable development of $49 million in surety business, mainly in the 2017 accident year, driven by lower than expected reported loss activity.

North America Agricultural Insurance
For the three months ended March 31, 2020 and 2019, net favorable PPD was related to our Multiple Peril Crop Insurance (MPCI) business and was $14 million, related to the 2019 crop year, and $61 million, related to the 2018 crop year, respectively.

7. Commitments, contingencies, and guarantees

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

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

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. Benefit reserves in respect of GLBs are classified as Future policy benefits (FPB) while the fair value derivative adjustment is classified within AP. Chubb also generally maintains positions in exchange-traded equity futures contracts on equity market indices to limit equity exposure in the GMDB and GLB book of business.

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

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:

		March 31, 2020			December 31, 2019		
		Fair Value		**Notional Value/ Payment Provision**	Fair Value		Notional Value/ Payment Provision
(in millions of U.S. dollars)	**Consolidated Balance Sheet Location**	**Derivative Asset**	**Derivative (Liability)**		Derivative Asset	Derivative (Liability)	
Investment and embedded derivative instruments:							
Foreign currency forward contracts	**OA / (AP)**	**$ 32**	**$ (109)**	**$ 2,639**	$ 11	$ (78)	$ 2,579
Options/Futures contracts on notes, bonds, and equities	**OA / (AP)**	**15**	**(32)**	**1,116**	13	(15)	1,615
Convertible securities [1]	**FM AFS / ES**	**4**	**—**	**5**	4	—	5
		$ 51	**$ (141)**	**$ 3,760**	$ 28	$ (93)	$ 4,199
Other derivative instruments:							
Futures contracts on equities [2]	**OA / (AP)**	**$ 17**	**$ —**	**$ 514**	$ —	$ (13)	$ 613
Other	**OA / (AP)**	**2**	**—**	**103**	2	—	63
		$ 19	**$ —**	**$ 617**	$ 2	$ (13)	$ 676
GLB [3]	**(AP) / (FPB)**	**$ —**	**$ (1,591)**	**$ 2,680**	$ —	$ (897)	$ 1,510

(1) Includes fair value of embedded derivatives.

(2) Related to GMDB and GLB book of business.

(3) Includes both future policy benefits reserves of $450 million and $441 million and fair value derivative adjustment of $1,141 million and $456 million at March 31, 2020 and December 31, 2019, respectively. Note that the payment provision related to GLB is the net amount at risk. The concept of a notional value does not apply to the GLB reinsurance contracts.

At March 31, 2020 and December 31, 2019, derivative liabilities of $67 million and $75 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

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

	Three Months Ended March 31	
(in millions of U.S. dollars)	**2020**	2019
Investment and embedded derivative instruments:		
Foreign currency forward contracts	**$ 43**	$ (15)
Interest rate swaps	**—**	(80)
All other futures contracts, options, and equities	**(27)**	(36)
Convertible securities [1]	**(1)**	1
Total investment and embedded derivative instruments	**$ 15**	$ (130)
GLB and other derivative instruments:		
GLB [2]	**$ (685)**	$ 114
Futures contracts on equities [3]	**125**	(63)
Other	**(2)**	(1)
Total GLB and other derivative instruments	**$ (562)**	$ 50
	$ (547)	$ (80)

(1) Includes embedded derivatives.
(2) Excludes foreign exchange gains (losses) related to GLB.
(3) Related to GMDB and GLB book of business.

b) Derivative instrument objectives

(i) Foreign currency exposure management

A foreign currency forward contract (forward) is an agreement between participants to exchange specific foreign 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 reserves for GMDB and GLB reinsurance business.

Options

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

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

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

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

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

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

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

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

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

(v) GLB
Under the GLB program, as the assuming entity, Chubb is obligated to provide coverage until the expiration or maturity of the underlying deferred annuity contracts or the expiry of the reinsurance treaty. Premiums received under the reinsurance treaties are classified as premium. Expected losses allocated to premiums received are classified as Future policy benefits and valued similar to GMDB reinsurance. Other changes in fair value arise principally from changes in expected losses allocated to expected future premiums. Fair value represents management's estimate of an exit price and thus, includes a risk margin. We may recognize a realized loss for other changes in fair value due to adverse changes in the capital markets (e.g., declining interest rates and/or declining U.S. and/or international equity markets) and changes in actual or estimated future policyholder behavior (e.g., increased annuitization or decreased lapse rates) although we expect the business to be profitable.

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

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

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	
	March 31, 2020	December 31, 2019
(in millions of U.S. dollars)	Overnight and Continuous	
Collateral held under securities lending agreements:		
Cash	**$ 675**	$ 346
U.S. Treasury and agency	**15**	6
Foreign	**609**	595
Corporate securities	**3**	5
Mortgage-backed securities	**17**	18
Equity securities	**23**	24
	$ 1,342	$ 994
Gross amount of recognized liability for securities lending payable	**$ 1,342**	$ 994

At March 31, 2020 and December 31, 2019, our repurchase agreement obligations of $1,408 million and $1,416 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						
	March 31, 2020			December 31, 2019			
(in millions of U.S. dollars)	**30-90 Days**	**Greater than 90 Days**	**Total**	Up to 30 Days	30-90 Days	Greater than 90 Days	Total
Collateral pledged under repurchase agreements:							
Cash	**$ —**	**$ 1**	**$ 1**	$ 2	$ —	$ —	$ 2
U.S. Treasury and agency	**—**	**105**	**105**	107	—	—	107
Mortgage-backed securities	**499**	**887**	**1,386**	399	476	480	1,355
	$ 499	**$ 993**	**$ 1,492**	$ 508	$ 476	$ 480	$ 1,464
Gross amount of recognized liabilities for repurchase agreements			**$ 1,408**				$ 1,416
Difference [1]			**$ 84**				$ 48

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

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

d) Fixed maturities

At March 31, 2020, we have commitments to purchase fixed income securities of $757 million over the next several years.

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

e) Other investments
At March 31, 2020, included in Other investments in the Consolidated balance sheet are investments in limited partnerships and partially-owned investment companies with a carrying value of $4.8 billion. In connection with these investments, we have commitments that may require funding of up to $2.9 billion over the next several years.

f) Income taxes
At March 31, 2020, $48 million of unrecognized tax benefits remain outstanding. It is reasonably possible that over the next twelve months, that the amount of unrecognized tax benefits may change resulting from the re-evaluation of unrecognized tax benefits arising from examinations by taxing authorities and the lapses of statutes of limitations. With few exceptions, Chubb is no longer subject to income tax examinations for years before 2010.

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

h) Leases
At March 31, 2020 and December 31, 2019, the right-of-use asset was $509 million and $551 million, respectively, and is recorded within Other assets on the Consolidated balance sheets. At March 31, 2020 and December 31, 2019, the lease liability was $563 million and $603 million, respectively, and is 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.

8. Shareholders' equity

All of Chubb's Common Shares are authorized under Swiss corporate law. Though the par value of Common Shares is stated in Swiss francs, Chubb continues to use U.S. dollars as its reporting currency for preparing consolidated financial statements. Under Swiss corporate law, dividends, including distributions through a reduction in par value (par value reduction) or from legal reserves, must be stated in Swiss francs though dividend payments are made by Chubb in U.S. dollars. At March 31, 2020, our Common Shares had a par value of CHF 24.15 per share.

At our May 2019 and 2018 annual general meetings, our shareholders approved annual dividends for the following year of up to $3.00 per share and $2.92 per share, respectively, which were paid in four quarterly installments of $0.75 per share and $0.73 per share, respectively, at dates determined by the Board of Directors (Board) after the annual general meetings by way of a distribution from capital contribution reserves, transferred to free reserves for payment.

Dividend distributions per Common Share for the three months ended March 31, 2020 and 2019 were $0.75 (CHF 0.72) and $0.73 (CHF 0.72), respectively.

Common Shares in treasury are used principally for issuance upon the exercise of employee stock options, grants of restricted stock, and purchases under the Employee Stock Purchase Plan (ESPP). At March 31, 2020, 28,416,082 Common Shares remain in treasury after net shares redeemed under employee share-based compensation plans.

Chubb Limited securities repurchase authorizations
In December 2018, the Board authorized the repurchase of up to $1.5 billion of Chubb's Common Shares from December 1, 2018 through December 31, 2019. In November 2019, the Board authorized the repurchase of up to $1.5 billion of Chubb's Common Shares from November 21, 2019 through December 31, 2020. On April 22, 2020, we announced that given the current economic environment and to preserve capital for both risk and opportunity, we had suspended share repurchases until further notice. We did not engage in any share repurchase activity during April 2020.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

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

	Three Months Ended March 31	
(in millions of U.S. dollars, except share data)	**2020**	2019
Number of shares repurchased	**2,266,150**	2,753,754
Cost of shares repurchased	**$ 326**	$ 367
Repurchase authorization remaining at end of period	**$ 1,124**	$ 1,112

9. Share-based compensation

The Chubb Limited 2016 Long-Term Incentive Plan (the 2016 LTIP) permits grants of both incentive and non-qualified stock options principally at an option price per share equal to the grant date fair value of Chubb's Common Shares. Stock options are generally granted with a 3-year vesting period and a 10-year term. Stock options typically vest in equal annual installments over the respective vesting period, which is also the requisite service period. On February 27, 2020, Chubb granted 1,957,505 stock options with a weighted-average grant date fair value of $19.89 each. The fair value of the options issued is estimated on the grant date using the Black-Scholes option pricing model.

The 2016 LTIP also permits grants of service-based restricted stock and restricted stock units as well as performance-based restricted stock awards. Chubb generally grants service-based restricted stock and restricted stock units with a 4-year vesting period, based on a graded vesting schedule. Beginning in 2017, the performance-based restricted stock awards granted comprise target awards and premium awards that cliff vest at the end of a 3-year performance period based on both tangible book value (shareholders' equity less goodwill and intangible assets, net of tax) per share growth and P&C combined ratio compared to a defined group of peer companies. Premium awards are subject to an additional vesting provision based on total shareholder return compared to our peer group. The restricted stock is granted at market close price on the grant date. On February 27, 2020, Chubb granted 1,002,341 service-based restricted stock awards, 344,501 service-based restricted stock units, and 203,533 performance-based stock awards to employees and officers with a grant date fair value of $150.11 each. Each restricted stock unit represents our obligation to deliver to the holder one Common Share upon vesting.

10. Postretirement benefits

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

	Pension Benefit Plans				Other Postretirement Benefit Plans	
	2020		2019		**2020**	2019
Three Months Ended March 31 (in millions of U.S. dollars)	**U.S. Plans**	**Non-U.S. Plans**	U.S. Plans	Non-U.S. Plans		
Service cost	**$ —**	**$ 1**	$ 12	$ 3	**$ —**	$ —
Non-service cost:						
Interest cost	**25**	**6**	30	7	**1**	1
Expected return on plan assets	**(56)**	**(10)**	(47)	(11)	**(1)**	(1)
Amortization of prior service cost	**—**	**—**	—	—	**(20)**	(20)
Settlements	**1**	**—**	—	—	**—**	—
Total non-service (benefit) cost	**(30)**	**(4)**	(17)	(4)	**(20)**	(20)
Net periodic (benefit) cost	**$ (30)**	**$ (3)**	$ (5)	$ (1)	**$ (20)**	$ (20)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

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

	Pension Benefit Plans		Other Postretirement Benefit Plans	
Three Months Ended March 31 (in millions of U.S. dollars)	**2020**	2019	**2020**	2019
Service cost:				
Losses and loss expenses	**$ —**	$ 2	**$ —**	$ —
Administrative expenses	**1**	13	**—**	—
Total service cost	**1**	15	**—**	—
Non-service cost:				
Losses and loss expenses	**(3)**	(2)	**(2)**	(2)
Administrative expenses	**(31)**	(19)	**(18)**	(18)
Total non-service (benefit) cost	**(34)**	(21)	**(20)**	(20)
Net periodic (benefit) cost	**$ (33)**	$ (6)	**$ (20)**	$ (20)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

11. 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.

For segment reporting purposes, certain items are presented in a different manner below than in the consolidated financial statements. Management uses underwriting income (loss) as the main measure of 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. To calculate Segment income (loss), include Net investment income (loss), Other (income) expense, and Amortization expense of purchased intangibles. For the North America Agricultural Insurance segment, management includes gains and losses on crop derivatives as a component of underwriting income (loss). For example, for the three months ended March 31, 2020, underwriting income in our North America Agricultural Insurance segment was $14 million. This amount includes $2 million of realized losses related to crop derivatives which are reported in Net realized gains (losses) in the Corporate column below.

For the Life Insurance segment, management includes Net investment income (loss) and (Gains) losses from fair value changes in separate account assets that do not qualify for separate account reporting under GAAP as components of Life Insurance underwriting income (loss). For example, for the three months ended March 31, 2020, Life Insurance underwriting income of $83 million includes Net investment income of $95 million and losses from fair value changes in separate account assets of $56 million. The losses from fair value changes in separate account assets are reported in Other (income) expense in the table below.

The following tables present the Statement of Operations by segment:

For the Three Months Ended March 31, 2020 (in millions of U.S. dollars)	North America Commercial P&C Insurance	North America Personal P&C Insurance	North America Agricultural Insurance	Overseas General Insurance	Global Reinsurance	Life Insurance	Corporate	Chubb Consolidated
Net premiums written	$ 3,252	$ 1,107	$ 157	$ 2,598	$ 218	$ 645	$ —	$ 7,977
Net premiums earned	3,376	1,200	94	2,307	186	631	—	7,794
Losses and loss expenses	2,181	683	63	1,258	87	202	11	4,485
Policy benefits	—	—	—	—	—	129	—	129
Policy acquisition costs	492	245	11	642	45	180	—	1,615
Administrative expenses	259	68	4	258	10	76	66	741
Underwriting income (loss)	444	204	16	149	44	44	(77)	824
Net investment income (loss)	516	66	9	145	54	95	(24)	861
Other (income) expense	(3)	2	—	4	(15)	44	23	55
Amortization expense of purchased intangibles	—	3	7	12	—	1	50	73
Segment income (loss)	$ 963	$ 265	$ 18	$ 278	$ 113	$ 94	$ (174)	$ 1,557
Net realized gains (losses)							(958)	(958)
Interest expense							132	132
Income tax expense							215	215
Net income (loss)							$ (1,479)	$ 252

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

For the Three Months Ended March 31, 2019 (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	Chubb Consolidated
Net premiums written	$ 2,951	$ 1,056	$ 130	$ 2,395	$ 202	$ 579	$ —	$ 7,313
Net premiums earned	3,085	1,154	55	2,114	168	561	—	7,137
Losses and loss expenses	1,973	757	(27)	1,106	76	202	11	4,098
Policy benefits	—	—	—	—	—	196	—	196
Policy acquisition costs	459	231	7	596	43	128	—	1,464
Administrative expenses	240	68	1	249	10	79	63	710
Underwriting income (loss)	413	98	74	163	39	(44)	(74)	669
Net investment income (loss)	510	64	10	144	56	89	(37)	836
Other (income) expense	(5)	—	—	4	(9)	(40)	11	(39)
Amortization expense of purchased intangibles	—	3	7	11	—	—	55	76
Segment income (loss)	$ 928	$ 159	$ 77	$ 292	$ 104	$ 85	$ (177)	$ 1,468
Net realized gains (losses) including OTTI							(97)	(97)
Interest expense							140	140
Chubb integration expenses							3	3
Income tax expense							188	188
Net income (loss)							$ (605)	$ 1,040

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

12. Earnings per share

	Three Months Ended March 31	
(in millions of U.S. dollars, except share and per share data)	**2020**	2019
Numerator:		
Net income	**$ 252**	$ 1,040
Denominator:		
Denominator for basic earnings per share:		
Weighted-average shares outstanding	**451,868,658**	458,805,185
Denominator for diluted earnings per share:		
Share-based compensation plans	**2,651,610**	2,731,755
Weighted-average shares outstanding and assumed conversions	**454,520,268**	461,536,940
Basic earnings per share	**$ 0.56**	$ 2.27
Diluted earnings per share	**$ 0.55**	$ 2.25
Potential anti-dilutive share conversions	**3,154,406**	4,343,204

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

13. Information provided in connection with outstanding debt of subsidiaries

The following tables present condensed consolidating financial information at March 31, 2020 and December 31, 2019, and for the three months ended March 31, 2020 and 2019 for Chubb Limited (Parent Guarantor) and Chubb INA Holdings Inc. (Subsidiary Issuer). The Subsidiary Issuer is an indirect 100 percent-owned subsidiary of the Parent Guarantor. The Parent Guarantor fully and unconditionally guarantees certain of the debt of the Subsidiary Issuer. Condensed consolidating financial information of the Parent Guarantor and Subsidiary Issuer are presented on the equity method of accounting. The revenues and expenses and cash flows of the subsidiaries of the Subsidiary Issuer are presented in the Other Chubb Limited Subsidiaries column on a combined basis.

Condensed Consolidating Balance Sheet at March 31, 2020

(in millions of U.S. dollars)	Chubb Limited (Parent Guarantor)	Chubb INA Holdings Inc. (Subsidiary Issuer)	Other Chubb Limited Subsidiaries	Consolidating Adjustments and Eliminations	Chubb Limited Consolidated
Assets					
Investments	$ —	$ 229	$ 105,055	$ —	$ 105,284
Cash [1]	10	49	2,193	(740)	1,512
Restricted cash	—	—	146	—	146
Insurance and reinsurance balances receivable	—	—	12,727	(2,669)	10,058
Reinsurance recoverable on losses and loss expenses	—	—	24,293	(9,395)	14,898
Reinsurance recoverable on policy benefits	—	—	288	(92)	196
Value of business acquired	—	—	289	—	289
Goodwill and other intangible assets	—	—	20,873	—	20,873
Investments in subsidiaries	49,573	50,731	—	(100,304)	—
Due from subsidiaries and affiliates, net	3,695	—	—	(3,695)	—
Other assets	6	340	21,345	(1,820)	19,871
Total assets	$ 53,284	$ 51,349	$ 187,209	$ (118,715)	$ 173,127
Liabilities					
Unpaid losses and loss expenses	$ —	$ —	$ 71,283	$ (9,069)	$ 62,214
Unearned premiums	—	—	17,652	(1,193)	16,459
Future policy benefits	—	—	5,868	(92)	5,776
Due to subsidiaries and affiliates, net	—	3,338	357	(3,695)	—
Affiliated notional cash pooling programs [1]	740	—	—	(740)	—
Repurchase agreements	—	—	1,408	—	1,408
Short-term debt	—	1,299	1	—	1,300
Long-term debt	—	13,510	—	—	13,510
Trust preferred securities	—	308	—	—	308
Other liabilities	347	1,595	21,635	(3,622)	19,955
Total liabilities	1,087	20,050	118,204	(18,411)	120,930
Total shareholders' equity	52,197	31,299	69,005	(100,304)	52,197
Total liabilities and shareholders' equity	$ 53,284	$ 51,349	$ 187,209	$ (118,715)	$ 173,127

[1] Chubb maintains two notional multicurrency cash pools (Pools) with a third-party bank. Various Chubb entities participate in one or the other of the Pools, pursuant to which credit and debit balances in individual Chubb accounts are translated daily into a single currency and pooled on a notional basis. Individual Chubb entities are permitted to overdraw on their individual accounts provided the overall Pool balances do not fall below zero. At March 31, 2020, the cash balance of one or more entities was negative; however, the overall Pool balances were positive.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

Condensed Consolidating Balance Sheet at December 31, 2019

(in millions of U.S. dollars)	Chubb Limited (Parent Guarantor)	Chubb INA Holdings Inc. (Subsidiary Issuer)	Other Chubb Limited Subsidiaries	Consolidating Adjustments and Eliminations	Chubb Limited Consolidated
Assets					
Investments	$ —	$ 1,013	$ 108,221	$ —	$ 109,234
Cash [1]	2	442	1,093	—	1,537
Restricted cash	—	—	109	—	109
Insurance and reinsurance balances receivable	—	—	12,920	(2,563)	10,357
Reinsurance recoverable on losses and loss expenses	—	—	24,780	(9,599)	15,181
Reinsurance recoverable on policy benefits	—	—	292	(95)	197
Value of business acquired	—	—	306	—	306
Goodwill and other intangible assets	—	—	21,359	—	21,359
Investments in subsidiaries	50,853	52,076	—	(102,929)	—
Due from subsidiaries and affiliates, net	4,776	—	—	(4,776)	—
Other assets	12	408	20,072	(1,829)	18,663
Total assets	$ 55,643	$ 53,939	$ 189,152	$ (121,791)	$ 176,943
Liabilities					
Unpaid losses and loss expenses	$ —	$ —	$ 71,916	$ (9,226)	$ 62,690
Unearned premiums	—	—	17,978	(1,207)	16,771
Future policy benefits	—	—	5,909	(95)	5,814
Due to subsidiaries and affiliates, net	—	4,446	330	(4,776)	—
Repurchase agreements	—	—	1,416	—	1,416
Short-term debt	—	1,298	1	—	1,299
Long-term debt	—	13,559	—	—	13,559
Trust preferred securities	—	308	—	—	308
Other liabilities	312	1,649	21,352	(3,558)	19,755
Total liabilities	312	21,260	118,902	(18,862)	121,612
Total shareholders' equity	55,331	32,679	70,250	(102,929)	55,331
Total liabilities and shareholders' equity	$ 55,643	$ 53,939	$ 189,152	$ (121,791)	$ 176,943

[1] Chubb maintains two notional multicurrency cash pools (Pools) with a third-party bank. Refer to the 2019 Form 10-K for additional information.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

Condensed Consolidating Statements of Operations and Comprehensive Income (Loss)

For the Three Months Ended March 31, 2020 (in millions of U.S. dollars)	Chubb Limited (Parent Guarantor)	Chubb INA Holdings Inc. (Subsidiary Issuer)	Other Chubb Limited Subsidiaries	Consolidating Adjustments and Eliminations	Chubb Limited Consolidated
Net premiums written	$ —	$ —	$ 7,977	$ —	$ 7,977
Net premiums earned	—	—	7,794	—	7,794
Net investment income	(2)	4	859	—	861
Equity in earnings of subsidiaries	256	593	—	(849)	—
Net realized gains (losses)	(21)	113	(1,050)	—	(958)
Losses and loss expenses	—	—	4,485	—	4,485
Policy benefits	—	—	129	—	129
Policy acquisition costs and administrative expenses	24	(38)	2,370	—	2,356
Interest (income) expense	(34)	148	18	—	132
Other (income) expense	(9)	8	56	—	55
Amortization of purchased intangibles	—	—	73	—	73
Income tax expense	—	7	208	—	215
Net income	$ 252	$ 585	$ 264	$ (849)	$ 252
Comprehensive income (loss)	$ (2,460)	$ (1,200)	$ (2,418)	$ 3,618	$ (2,460)

Condensed Consolidating Statements of Operations and Comprehensive Income

For the Three Months Ended March 31, 2019 (in millions of U.S. dollars)	Chubb Limited (Parent Guarantor)	Chubb INA Holdings Inc. (Subsidiary Issuer)	Other Chubb Limited Subsidiaries	Consolidating Adjustments and Eliminations	Chubb Limited Consolidated
Net premiums written	$ —	$ —	$ 7,313	$ —	$ 7,313
Net premiums earned	—	—	7,137	—	7,137
Net investment income	1	(4)	839	—	836
Equity in earnings of subsidiaries	990	759	—	(1,749)	—
Net realized gains (losses) including OTTI	1	(13)	(85)	—	(97)
Losses and loss expenses	—	—	4,098	—	4,098
Policy benefits	—	—	196	—	196
Policy acquisition costs and administrative expenses	20	(15)	2,169	—	2,174
Interest (income) expense	(66)	185	21	—	140
Other (income) expense	(6)	3	(36)	—	(39)
Amortization of purchased intangibles	—	—	76	—	76
Chubb integration expenses	—	2	1	—	3
Income tax expense (benefit)	4	(42)	226	—	188
Net income	$ 1,040	$ 609	$ 1,140	$ (1,749)	$ 1,040
Comprehensive income	$ 2,718	$ 1,941	$ 2,788	$ (4,729)	$ 2,718

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

Condensed Consolidating Statement of Cash Flows

Three Months Ended March 31, 2020 (in millions of U.S. dollars)	Chubb Limited (Parent Guarantor)	Chubb INA Holdings Inc. (Subsidiary Issuer)	Other Chubb Limited Subsidiaries	Consolidating Adjustments and Eliminations	Chubb Limited Consolidated
Net cash flows from (used for) operating activities	$ 65	$ (148)	$ 1,795	$ —	$ 1,712
Cash flows from investing activities					
Purchases of fixed maturities available for sale	—	(11)	(6,463)	—	(6,474)
Purchases of fixed maturities held to maturity	—	—	(6)	—	(6)
Purchases of equity securities	—	—	(1,380)	—	(1,380)
Sales of fixed maturities available for sale	—	—	4,687	—	4,687
Sales of equity securities	—	—	131	—	131
Maturities and redemptions of fixed maturities available for sale	—	15	2,741	—	2,756
Maturities and redemptions of fixed maturities held to maturity	—	—	440	—	440
Net change in short-term investments	—	781	(229)	—	552
Net derivative instruments settlements	—	78	31	—	109
Private equity contributions	—	—	(361)	—	(361)
Private equity distributions	—	—	211	—	211
Deposit paid on share acquisition	—	—	(1,550)	—	(1,550)
Capital contribution	(1,200)	—	—	1,200	—
Other	—	(3)	(122)	—	(125)
Net cash flows from (used for) investing activities	(1,200)	860	(1,870)	1,200	(1,010)
Cash flows from financing activities					
Dividends paid on Common Shares	(339)	—	—	—	(339)
Common Shares repurchased	(323)	—	—	—	(323)
Proceeds from issuance of repurchase agreements	—	—	952	—	952
Repayment of repurchase agreements	—	—	(952)	—	(952)
Proceeds from share-based compensation plans	—	—	47	—	47
Dividend to parent company	—	—	—	—	—
Advances (to) from affiliates	1,066	(1,102)	36	—	—
Capital contribution	—	—	1,200	(1,200)	—
Net proceeds from (payments to) affiliated notional cash pooling programs [1]	740	—	—	(740)	—
Policyholder contract deposits	—	—	135	—	135
Policyholder contract withdrawals	—	—	(162)	—	(162)
Other	—	(3)	—		(3)
Net cash flows from (used for) financing activities	1,144	(1,105)	1,256	(1,940)	(645)
Effect of foreign currency rate changes on cash and restricted cash	(1)	—	(44)	—	(45)
Net increase (decrease) in cash and restricted cash	8	(393)	1,137	(740)	12
Cash and restricted cash – beginning of period [1]	2	442	1,202	—	1,646
Cash and restricted cash – end of period [1]	$ 10	$ 49	$ 2,339	$ (740)	$ 1,658

[1] Chubb maintains two notional multicurrency cash pools (Pools) with a third-party bank. Various Chubb entities participate in one or the other of the Pools, pursuant to which credit and debit balances in individual Chubb accounts are translated daily into a single currency and pooled on a notional basis. Individual Chubb entities are permitted to overdraw on their individual accounts provided the overall Pool balances do not fall below zero. At March 31, 2020 and December 31, 2019, the cash balance of one or more entities was negative; however, the overall Pool balances were positive.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – continued (Unaudited)

Chubb Limited and Subsidiaries

Condensed Consolidating Statement of Cash Flows

Three Months Ended March 31, 2019 (in millions of U.S. dollars)	Chubb Limited (Parent Guarantor)	Chubb INA Holdings Inc. (Subsidiary Issuer)	Other Chubb Limited Subsidiaries	Consolidating Adjustments and Eliminations	Chubb Limited Consolidated
Net cash flows from (used for) operating activities	$ 307	$ (163)	$ 1,378	$ (200)	$ 1,322
Cash flows from investing activities					
Purchases of fixed maturities available for sale	—	(3)	(5,558)	—	(5,561)
Purchases of fixed maturities held to maturity	—	—	(1)	—	(1)
Purchases of equity securities	—	—	(49)	—	(49)
Sales of fixed maturities available for sale	—	—	3,293	—	3,293
Sales of equity securities	—	—	60	—	60
Maturities and redemptions of fixed maturities available for sale	—	6	1,825	—	1,831
Maturities and redemptions of fixed maturities held to maturity	—	—	280	—	280
Net change in short-term investments	—	(3)	(36)	—	(39)
Net derivative instruments settlements	—	(28)	(330)	—	(358)
Private equity contributions	—	—	(410)	—	(410)
Private equity distributions	—	—	368	—	368
Capital contribution	—	(110)	—	110	—
Other	—	(12)	(75)	—	(87)
Net cash flows used for investing activities	—	(150)	(633)	110	(673)
Cash flows from financing activities					
Dividends paid on Common Shares	(336)	—	—	—	(336)
Common Shares repurchased	—	—	(367)	—	(367)
Proceeds from issuance of repurchase agreements	—	—	471	—	471
Repayment of repurchase agreements	—	—	(470)	—	(470)
Proceeds from share-based compensation plans	—	—	35	—	35
Dividend to parent company	—	—	(200)	200	—
Advances (to) from affiliates	(266)	308	(42)	—	—
Capital contribution	—	—	110	(110)	—
Net proceeds from affiliated notional cash pooling programs [1]	296	74	—	(370)	—
Policyholder contract deposits	—	—	115	—	115
Policyholder contract withdrawals	—	—	(78)	—	(78)
Net cash flows from (used for) financing activities	(306)	382	(426)	(280)	(630)
Effect of foreign currency rate changes on cash and restricted cash	—	—	34	—	34
Net increase (decrease) in cash and restricted cash	1	69	353	(370)	53
Cash and restricted cash – beginning of period [1]	1	2	1,989	(652)	1,340
Cash and restricted cash – end of period [1]	$ 2	$ 71	$ 2,342	$ (1,022)	$ 1,393

[1] Chubb maintains two notional multicurrency cash pools (Pools) with a third-party bank. Various Chubb entities participate in one or the other of the Pools, pursuant to which credit and debit balances in individual Chubb accounts are translated daily into a single currency and pooled on a notional basis. Individual Chubb entities are permitted to overdraw on their individual accounts provided the overall Pool balances do not fall below zero. At March 31, 2019 and December 31, 2018, the cash balance of one or more entities was negative; however, the overall Pool balances were positive.

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 months ended March 31, 2020.

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, 2019 (2019 Form 10-K).

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

MD&A Index	Page
Forward-Looking Statements	41
Overview	43
Financial Highlights	43
Consolidated Operating Results	44
Segment Operating Results	49
Net Realized and Unrealized Gains (Losses)	59
Effective Income Tax Rate	60
Non-GAAP Reconciliation	60
Other Income and Expense	64
Amortization of Purchased Intangibles and Other Amortization	64
Net Investment Income	66
Investments	66
Critical Accounting Estimates	70
Reinsurance Recoverable on Ceded Reinsurance	70
Unpaid Losses and Loss Expenses	70
Asbestos and Environmental (A&E)	71
Fair Value Measurements	71
Catastrophe Management	71
Natural Catastrophe Property Reinsurance Program	72
Liquidity	73
Capital Resources	74

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. 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:

- losses arising out of natural or man-made catastrophes such as hurricanes, typhoons, earthquakes, floods, climate change (including effects on weather patterns; greenhouse gases; sea, land and air temperatures; sea levels; and rain and snow), nuclear accidents, pandemics (including COVID-19), or terrorism which could be affected by:
    - the number of insureds and ceding companies affected;
    - the amount and timing of losses actually incurred and reported by insureds;
    - the impact of these losses on our reinsurers and the amount and timing of reinsurance recoverable actually received;
    - the cost of building materials and labor to reconstruct properties or to perform environmental remediation following a catastrophic event; and
    - complex coverage and regulatory issues such as whether losses occurred from storm surge or flooding and related lawsuits;
- 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 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;
- 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;
- 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;
- infection rates and severity of pandemics, including COVID-19, and their effects on our business operations and claims activity, and any adverse impact to our insureds, brokers, agents, and employees;
- 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 (which we refer to in this report as foreign exchange and foreign currency exchange), which could affect our statement of operations, investment portfolio, financial condition, and financing plans;
- general economic and business conditions resulting from volatility in the stock and credit markets and the depth and duration of potential recession;
- global political conditions, the occurrence of any terrorist attacks, including any nuclear, radiological, biological, or chemical events, or the outbreak and effects of war, and possible business disruption or economic contraction that may result from such events;
- the potential impact of the United Kingdom's vote to withdraw from the European Union, including political, regulatory, social, and economic uncertainty and market and exchange rate volatility;
- judicial decisions and rulings, new theories of liability, legal tactics, and settlement terms;
- the effects of public company bankruptcies and/or accounting restatements, as well as disclosures by and investigations of public companies relating to possible accounting irregularities, and other corporate governance issues, including the effects of such events on:
    - the capital markets;
    - the markets for directors and officers (D&O) and errors and omissions (E&O) insurance; and

  - claims and litigation arising out of such disclosures or practices by other companies;
- uncertainties relating to governmental, legislative and regulatory policies, developments, actions, investigations, and treaties, which, among other things, could subject us to insurance regulation or taxation in additional jurisdictions or affect our current operations;
- the effects of data privacy or cyber laws or regulation on our current or future business;
- the actual amount of new and renewal business, market acceptance of our products, and risks associated with the introduction of new products and services and entering new markets, including regulatory constraints on exit strategies;
- 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;
- acquisitions made by us performing differently than expected, our failure to realize anticipated expense-related efficiencies or growth from acquisitions, the impact of acquisitions on our pre-existing organization, or announced acquisitions not closing;
- risks and uncertainties relating to our planned purchases of additional interests in Huatai Insurance Group Company Limited (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;
- the potential impact from government-mandated insurance coverage for acts of terrorism;
- the availability of borrowings and letters of credit under our credit facilities;
- the adequacy of collateral supporting funded high deductible programs;
- 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 effects of investigations into market practices in the property and casualty (P&C) industry;
- changing rates of inflation and other economic conditions, for example, recession;
- the amount of dividends received from subsidiaries;
- 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).

The words "believe," "anticipate," "estimate," "project," "should," "plan," "expect," "intend," "hope," "feel," "foresee," "will likely result," or "will continue," and variations thereof and similar expressions, identify forward-looking statements. 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 March 31, 2020, we had total assets of $173 billion and shareholders' equity of $52 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 2019 Form 10-K.

Financial Highlights for the Three Months Ended March 31, 2020

- Net income was $252 million compared with $1,040 million in the prior year. Net income in the current year included after-tax realized losses of $940 million, compared with $92 million prior year. Realized losses in the quarter was impacted by financial market volatility in the credit, equity and foreign exchange markets, reflecting the economic downturn resulting from COVID-19 global pandemic.
- Realized losses in the current year comprised principally of a $560 million mark-to-market loss on the variable annuity reinsurance portfolio, net of a $125 million gain on applicable derivative hedges, compared to a gain of $51 million prior year, net of a $63 million loss on applicable derivative hedges. On our investment portfolio, we recorded an additional $150 million pre-tax, or $129 million after-tax, related to expected credit losses and $121 million pre-tax, or $103 million after-tax, of impairment related to our intent to sell certain securities.
- Consolidated and P&C net premiums written were $8.0 billion and $7.3 billion, respectively, up 9.1 percent and 8.9 percent, respectively, or 9.5 percent and 9.3 percent, respectively, on a constant-dollar basis.
- P&C combined ratio was 89.1 percent compared with 89.2 percent in the prior year period. P&C current accident year combined ratio excluding catastrophe losses was 87.5 percent compared with 88.5 percent in the prior year period.
- Total pre-tax and after-tax catastrophe losses were $237 million (3.3 percentage points of the combined ratio) and $199 million, respectively, compared with $250 million (3.8 percentage points of the combined ratio) and $201 million, respectively, in the prior year period. Pre-tax catastrophe losses included $13 million related to the COVID-19 global pandemic, which will be tracked as a separate ongoing catastrophe event.
- Total pre-tax and after-tax favorable prior period development were $118 million (1.7 percentage points of the combined ratio) and $94 million, respectively, compared with $204 million (3.1 percentage points of the combined ratio) and $161 million, respectively, in the prior year period. Pre-tax prior period development included a $14 million benefit from North America Agricultural Insurance related to the 2019 crop year, compared with $61 million in the prior year related to the 2018 crop year.
- Operating cash flow was $1,712 million compared with $1,322 million in the prior year period. Refer to the Liquidity section for additional information on our cash flows.
- Net investment income was $861 million compared with $836 million in the prior year period.
- Shareholders' equity was adversely impacted by total net realized and unrealized losses of $3.7 billion, including $2.2 billion in the investment portfolio, unfavorable foreign exchange of $896 million, and $560 million in the variable annuity reinsurance portfolio.
- Share repurchases totaled $326 million, or approximately 2.3 million shares, during the quarter, at an average purchase price of $143.67 per share. On April 22, 2020, we announced that given the current economic environment and to preserve capital for both risk and opportunity, we had suspended share repurchases until further notice. We did not engage in any share repurchase activity during April 2020.

Outlook

During the first quarter of 2020, worldwide social and economic activity became severely impacted by the spread and threat of COVID-19. We have taken actions to minimize risk to our employees, including restricting travel and instituting extensive work-from-home protocols. This leveraged our existing operational contingency plans at every level of the organization which ensured business process and control continuity. These actions have helped prevent major disruption to our clients and operations.

While there was no significant impact on our premiums and losses in the first quarter relating to the COVID-19 global pandemic, we anticipate that this global catastrophe event will have a meaningful impact on revenue as well as net income in the second quarter and potentially future quarters as a result of an increase in insurance claims due to both the pandemic and recessionary economic conditions. With regards to claims, we expect an increase in claims relating to various property and casualty lines. Given the expected nature and impact on our business of COVID-19 related matters, we have elected to treat it as a catastrophe. With regards to investments, our investment portfolio incurred significant valuation adjustments as spreads widened and perceived risks elevated; this was reflected in first quarter financial results and we expect there will be continued volatility for the remainder of the year.

Additionally, within our Life Insurance Segment, our international operations and the North American supplemental A&H and life business of Combined Insurance will be impacted by restrictions on our sales force to personally meet with clients and write new business. We expect this activity to negatively affect written premiums until government restrictions are lifted.

Consolidated Operating Results – Three Months Ended March 31, 2020 and 2019

	Three Months Ended March 31		% Change
(in millions of U.S. dollars, except for percentages)	**2020**	2019	Q-20 vs. Q-19
Net premiums written	**$ 7,977**	$ 7,313	9.1 %
Net premiums earned	**7,794**	7,137	9.2 %
Net investment income	**861**	836	3.1 %
Net realized gains (losses)	**(958)**	(97)	NM
Total revenues	**7,697**	7,876	(2.3)%
Losses and loss expenses	**4,485**	4,098	9.4 %
Policy benefits	**129**	196	(34.4)%
Policy acquisition costs	**1,615**	1,464	10.3 %
Administrative expenses	**741**	710	4.3 %
Interest expense	**132**	140	(5.3)%
Other (income) expense	**55**	(39)	NM
Amortization of purchased intangibles	**73**	76	(4.0)%
Chubb integration expenses	**—**	3	NM
Total expenses	**7,230**	6,648	8.7 %
Income before income tax	**467**	1,228	(62.0)%
Income tax expense	**215**	188	14.4 %
Net income	**$ 252**	$ 1,040	(75.8)%
Net premiums written - constant dollars [(1)]			9.5 %
Net premiums earned - constant dollars [(1)]			9.6 %

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.

Net Premiums Written

Net premiums written reflect the premiums we retain after purchasing reinsurance protection. For the three months ended March 31, 2020 consolidated net premiums written increased $664 million, or $689 million on a constant-dollar basis, reflecting growth across all segments.

- Net premiums written in our North America Commercial P&C Insurance segment increased $301 million, or 10.2 percent, for the three months ended March 31, 2020, reflecting positive rate increases, renewal retention and new business written across most retail lines, including property, financial lines, large risk casualty, excess casualty, and commercial multiple peril, as well as in our wholesale and small commercial businesses.

- Net premiums written in our North America Personal P&C Insurance segment increased $51 million, or 4.8 percent, for the three months ended March 31, 2020, due to strong new business written and rate increases across all lines.

- Net premiums written in our North America Agricultural Insurance segment increased $27 million, or 21.2 percent, for the three months ended March 31, 2020, primarily due to the year-over-year increase in MPCI premiums reflecting less premiums returned to the U.S. government under the premium-sharing formulas. Under the MPCI premium-sharing formulas, we retained more premiums on the 2019 crop year due to higher than expected losses for that year. Net premiums written in the first quarter 2019 was lower due to higher cessions to the U.S. government reflecting the more profitable 2018 crop year. Excluding the increase in MPCI premiums as a result of the premium sharing formulas, net premiums written increased slightly driven by growth in our Chubb Agribusiness unit.

- Net premiums written in our Overseas General Insurance segment increased $203 million, or $231 million on a constant-dollar basis, for the three months ended March 31, 2020, reflecting growth across all regions and lines of business. P&C lines growth was across all regions and due to new business, retention, and positive rate increases. Personal lines growth was driven by new business written, principally in Latin America and Europe. Accident and health (A&H) lines increased slightly due to new business in Latin America, offset by a decline in Asia, primarily driven by a decline in travel insurance as a result of COVID-19, and the termination of a contract in Thailand.

- Net premiums written in our Global Reinsurance segment increased $16 million, or $15 million on a constant-dollar basis, for the three months ended March 31, 2020, primarily due to new business written in casualty lines and unfavorable premium adjustments in the prior year, offset by lower property renewals and increased ceded retrocessions.

- Net premiums written in our Life Insurance segment increased $66 million, or $65 million on a constant-dollar basis, primarily reflecting growth in Latin America, principally driven by our expanded presence in Chile, and Asian international life operations, partially offset by a decline in our North America Combined Insurance business.

Net Premiums Written By Line of Business

(in millions of U.S. dollars, except for percentages)	Three Months Ended March 31				
	2020	2019	% Change Q-20 vs. Q-19	C$ [1] 2019	C$ [1] % Change Q-20 vs. Q-19
Commercial casualty	**$ 1,341**	$ 1,200	11.8 %	$ 1,198	11.9 %
Workers' compensation	**586**	593	(1.3)%	593	(1.3)%
Professional liability	**912**	786	15.9 %	783	16.5 %
Surety	**150**	152	(1.5)%	151	(0.8)%
Commercial multiple peril [2]	**241**	219	10.1 %	219	10.1 %
Property and other short-tail lines	**1,334**	1,157	15.3 %	1,144	16.6 %
Total Commercial P&C	**4,564**	4,107	11.1 %	4,088	11.6 %
Agriculture	**157**	130	21.2 %	130	21.2 %
Personal automobile	**441**	421	4.8 %	428	3.1 %
Personal homeowners	**773**	743	4.0 %	743	4.0 %
Personal other	**418**	368	13.7 %	363	15.2 %
Total Personal lines	**1,632**	1,532	6.5 %	1,534	6.4 %
Total Property and Casualty lines	**6,353**	5,769	10.1 %	5,752	10.4 %
Global A&H lines [3]	**1,067**	1,073	(0.6)%	1,064	0.3 %
Reinsurance lines	**218**	202	8.4 %	203	7.9 %
Life	**339**	269	26.1 %	269	26.1 %
Total consolidated	**$ 7,977**	$ 7,313	9.1 %	$ 7,288	9.5 %

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

The increase in net premiums written for the three months ended March 31, 2020 reflects growth across most lines of business.

- The growth in commercial casualty was due to new business and positive rate increases in North America. In addition, commercial casualty grew internationally due to retention increases and new business across Europe, as well as new business in Latin America.
- Workers' compensation was adversely impacted by competitive market conditions in North America.
- The increase in professional liability was due to new business and positive rate increases across all regions.
- Surety decreased in North America and was partially offset by increases internationally.
- Commercial multiple peril increased due to higher renewal retention in North America.
- Property and other short-tail lines increased due to new business and positive rate increases in North America, Europe and Latin America.
- Personal lines increased due to new business and positive rate increases in North America. Personal lines also increased due to growth in Latin America and Europe.
- Global A&H lines increased slightly on a constant-dollar basis due to new business in Latin America, offset by declines in Asia, principally from the unfavorable impact of the COVID-19 pandemic, and in our North American Combined Insurance supplemental A&H program.
- The increase in Life was primarily driven by growth in Latin America, principally driven by our expanded presence in Chile, and Asian international life operations.

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 March 31, 2020, net premiums earned increased $657 million or $680 million on a constant-dollar basis, reflecting the growth in net premiums written described above, including the impact of premiums that were fully earned when written (e.g., large structured transactions and audit and retrospective premium adjustments).

P&C Combined Ratio

In evaluating our segments excluding Life Insurance financial performance, we use the P&C combined ratio, the loss and loss expense ratio, the policy acquisition cost ratio, and the administrative expense ratio. We calculate these ratios by dividing the respective expense amounts by net premiums earned. We do not calculate these ratios for the Life Insurance segment as we do not use these measures to monitor or manage that segment. The P&C combined ratio is determined by adding the loss and loss expense ratio, the policy acquisition cost ratio, and the administrative expense ratio. A P&C combined ratio under 100 percent indicates underwriting income, and a combined ratio exceeding 100 percent indicates underwriting loss.

	Three Months Ended March 31	
	2020	2019
Loss and loss expense ratio	**59.8%**	59.3%
Policy acquisition cost ratio	**20.0%**	20.3%
Administrative expense ratio	**9.3%**	9.6%
P&C Combined ratio	**89.1%**	89.2%

The loss and loss expense ratio increased 0.5 percentage points for the three months ended March 31, 2020, principally due to lower favorable prior period development, partially offset by lower catastrophe losses.

The policy acquisition cost ratio decreased 0.3 percentage points for the three months ended March 31, 2020, due to a change in mix of business towards products and regions that have a lower policy acquisition cost ratio.

The administrative expense ratio decreased 0.3 percentage points for the three months ended March 31, 2020, primarily driven by the favorable impact of higher net premiums earned in the current quarter.

Catastrophe Losses and Prior Period Development

Catastrophe losses exclude reinstatement premiums which 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. Prior period development is net of related adjustments which typically relate 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 March 31	
(in millions of U.S. dollars)	**2020**	2019
Catastrophe losses (excludes reinstatement premiums)	**$ 237**	$ 250
Favorable prior period development	**$ 118**	$ 204

Catastrophe losses through March 31, 2020 and 2019 were primarily from the following events:

- 2020: Global weather-related events of $224 million (including Tornado in Nashville, Tennessee and other severe weather-related events in the U.S., storms in Australia, Australia wildfires, and other international weather-related events); and COVID-19 pandemic claims of $13 million.
- 2019: Winter-related storms; U.S. flooding, hail, tornadoes and wind events; and storms in Australia.

Favorable prior period development was $118 million for the three months ended March 31, 2020, with 28 percent in long-tail lines, principally from accident years 2016 and prior, and 72 percent in short-tail lines. Favorable development in the current year included a $14 million benefit from crop insurance compared with $61 million in the prior year. This reduction in benefit reflected the challenging 2019 crop year conditions. Refer to the prior period development discussion in Footnote 6 to the Consolidated Financial Statements for additional information.

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.

Current Accident Year (CAY) Loss Ratio excluding CATs and CAY P&C Combined Ratio excluding CATs
The following table presents the impact of catastrophe losses and prior period development on our loss and loss expense ratio. Refer to the Non-GAAP Reconciliation section for additional information.

	Three Months Ended March 31	
	2020	2019
Loss and loss expense ratio	**59.8 %**	59.3 %
Catastrophe losses	**(3.3)%**	(3.8)%
Prior period development	**1.7 %**	3.1 %
CAY loss ratio excluding catastrophe losses	**58.2 %**	58.6 %

CAY P&C Combined Ratio excluding Catastrophe Losses

	Three Months Ended March 31	
	2020	2019
CAY Loss and loss expense ratio ex CATs	**58.2%**	58.6 %
CAY Policy acquisition cost ratio ex CATs	**20.0%**	20.3 %
CAY Administrative expense ratio ex CATs	**9.3%**	9.6 %
CAY P&C combined ratio ex CATs	**87.5%**	88.5 %

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 March 31, 2020 and 2019, Policy benefits were $129 million, and $196 million, respectively, which included separate account liabilities (gains) losses of $(56) million and $30 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 $185 million and $166 million for the three months ended March 31, 2020 and 2019, respectively, reflecting growth in new business as described above and our expanded presence in Chile.

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

Segment Operating Results – Three Months Ended March 31, 2020 and 2019

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 2019 Form 10-K.

For segment reporting purposes, certain items are presented in a different manner than in the consolidated financial statements. Management uses underwriting income (loss) as the main measures of segment performance. For the North America Agricultural Insurance segment, management includes gains and losses on crop derivatives as a component of adjusted losses and loss expenses within underwriting income. For the Life Insurance segment, management includes the gains and losses on separate account assets that do not qualify for separate account reporting under GAAP as a component of Life Insurance underwriting income.

North America Commercial P&C Insurance

The North America Commercial P&C Insurance segment comprises operations that provide property and casualty (P&C) 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 March 31		% Change
(in millions of U.S. dollars, except for percentages)	**2020**	2019	Q-20 vs. Q-19
Net premiums written	**$ 3,252**	$ 2,951	10.2 %
Net premiums earned	**3,376**	3,085	9.4 %
Losses and loss expenses	**2,181**	1,973	10.6 %
Policy acquisition costs	**492**	459	7.1 %
Administrative expenses	**259**	240	7.4 %
Underwriting income	**444**	413	7.6 %
Net investment income	**516**	510	1.3 %
Other (income) expense	**(3)**	(5)	(42.7)%
Segment income	**$ 963**	$ 928	3.8 %
Loss and loss expense ratio	**64.6%**	63.9%	0.7 pts
Policy acquisition cost ratio	**14.6%**	14.9%	(0.3) pts
Administrative expense ratio	**7.6%**	7.8%	(0.2) pts
Combined ratio	**86.8%**	86.6%	0.2 pts

Premiums

Net premiums written increased $301 million, or 10.2 percent, for the three months ended March 31, 2020, reflecting positive rate increases, renewal retention and new business written across most retail lines, including property, financial lines, large risk casualty, excess casualty, and commercial multiple peril, as well as in our wholesale and small commercial businesses.

Net premiums earned increased $291 million, or 9.4 percent, for the three months ended March 31, 2020, reflecting the growth in net premiums written described above. The table below shows the impact of large structured transactions as well as other transactions that are fully earned when written (e.g., audit and retrospective premium adjustments).

	Three Months Ended March 31	
(in millions of U.S. dollars)	**2020**	2019
Net premiums fully earned when written	**$ 67**	$ 57

Combined Ratio

The loss and loss expense ratio increased 0.7 percentage points for the three months ended March 31, 2020, primarily due to lower favorable prior period development and higher catastrophe losses.

The policy acquisition cost ratio decreased 0.3 percentage points for the three months ended March 31, 2020, primarily due to a change in mix of business towards lower acquisition cost ratio lines and increased cessions under certain reinsurance agreements that resulted in higher ceded acquisition costs benefit than in prior year.

Catastrophe Losses and Prior Period Development

	Three Months Ended March 31	
(in millions of U.S. dollars)	**2020**	2019
Catastrophe losses (excludes reinstatement premiums)	**$ 118**	$ 94
Favorable prior period development	**$ 105**	$ 131

Catastrophe losses through March 31, 2020 and 2019 were primarily from the following events:

- 2020: Nashville, Tennessee tornado and other severe weather-related events in the U.S.
- 2019: Winter-related storms 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.

CAY Loss Ratio excluding Catastrophe Losses

	Three Months Ended March 31	
	2020	2019
Loss and loss expense ratio	**64.6 %**	63.9 %
Catastrophe losses	**(3.5)%**	(3.0)%
Prior period development	**3.1 %**	4.1 %
CAY loss ratio excluding catastrophe losses	**64.2 %**	65.0 %

The CAY loss ratio excluding catastrophe losses decreased 0.8 percentage points for the three months ended March 31, 2020, primarily due to the favorable impact of higher net premiums earned in the current quarter.

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 March 31		% Change
(in millions of U.S. dollars, except for percentages)	**2020**	2019	Q-20 vs. Q-19
Net premiums written	**$ 1,107**	$ 1,056	4.8 %
Net premiums earned	**1,200**	1,154	3.9 %
Losses and loss expenses	**683**	757	(9.7)%
Policy acquisition costs	**245**	231	5.8 %
Administrative expenses	**68**	68	—
Underwriting income	**204**	98	106.6 %
Net investment income	**66**	64	3.8 %
Other (income) expense	**2**	—	NM
Amortization of purchased intangibles	**3**	3	—
Segment income	**$ 265**	$ 159	66.5 %
Loss and loss expense ratio	**57.0%**	65.5%	(8.5) pts
Policy acquisition cost ratio	**20.4%**	20.1%	0.3 pts
Administrative expense ratio	**5.6%**	5.9%	(0.3) pts
Combined ratio	**83.0%**	91.5%	(8.5) pts

NM – not meaningful

Premiums

Net premiums written increased $51 million, or 4.8 percent, for the three months ended March 31, 2020, due to strong new business written and rate increases across all lines.

Net premiums earned increased $46 million, or 3.9 percent, for the three months ended March 31, 2020, reflecting the growth in net premiums written described above.

Combined Ratio

The loss and loss expense ratio decreased 8.5 percentage points for the three months ended March 31, 2020, primarily due to lower catastrophe losses, partially offset by modest unfavorable prior period development in the current year compared to favorable prior period development in the prior year.

The policy acquisition cost ratio increased 0.3 percentage points for the three months ended March 31, 2020, primarily due to a one-time benefit in the prior year.

The administrative expense ratio decreased 0.3 percentage points for the three months ended March 31, 2020, primarily due to the favorable impact of higher net premiums earned in the current quarter.

Catastrophe Losses and Prior Period Development

	Three Months Ended March 31	
(in millions of U.S. dollars)	**2020**	2019
Catastrophe losses (excludes reinstatement premiums)	**$ 21**	$ 129
Favorable (unfavorable) prior period development	**$ (1)**	$ 10

Catastrophe losses through March 31, 2020 and 2019 were primarily from the following events:
- 2020: Severe weather-related events in the U.S.
- 2019: Winter-related storms 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.

CAY Loss Ratio excluding Catastrophe Losses

	Three Months Ended March 31	
	2020	2019
Loss and loss expense ratio	**57.0 %**	65.5 %
Catastrophe losses	**(1.8)%**	(11.2)%
Prior period development	**(0.1)%**	0.8 %
CAY loss ratio excluding catastrophe losses	**55.1 %**	55.1 %

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 March 31		% Change
(in millions of U.S. dollars, except for percentages)	**2020**	2019	Q-20 vs. Q-19
Net premiums written	**$ 157**	$ 130	21.2 %
Net premiums earned	**94**	55	71.8 %
Adjusted losses and loss expenses	**65**	(26)	NM
Policy acquisition costs	**11**	7	57.3 %
Administrative expenses	**4**	1	173.8 %
Underwriting income	**14**	73	(80.5)%
Net investment income	**9**	10	(6.7)%
Amortization of purchased intangibles	**7**	7	—
Segment income	**$ 16**	$ 76	(78.5)%
Loss and loss expense ratio	**69.6%**	(48.3)%	117.9 pts
Policy acquisition cost ratio	**11.1%**	12.1 %	(1.0) pts
Administrative expense ratio	**4.1%**	2.6 %	1.5 pts
Combined ratio	**84.8%**	(33.6)%	118.4 pts

NM – not meaningful

Premiums

Net premiums written increased $27 million, or 21.2 percent, for the three months ended March 31, 2020, primarily due to the year-over-year increase in MPCI premiums reflecting less premiums returned to the U.S. government under the premium-sharing formulas. Under the MPCI premium-sharing formulas, we retained more premiums on the 2019 crop year due to higher than expected losses for that year. Net premiums written in the first quarter 2019 was lower due to higher cessions to the U.S. government reflecting the more profitable 2018 crop year. Excluding the increase in MPCI premiums as a result of the premium sharing formulas, net premiums written increased slightly driven by growth in our Chubb Agribusiness unit.

Net premiums earned increased $39 million, or 71.8 percent, for the three months ended March 31, 2020, reflecting the growth in net premiums written described above.

Combined Ratio

The loss and loss expense ratio was 69.6 percent for the three months ended March 31, 2020, compared to (48.3) percent for the three months ended March 31, 2019. The increase in the loss and loss expense ratio was primarily due to lower favorable prior period development, higher catastrophe losses, higher underlying losses in our Chubb Agribusiness unit and the year-over-year impact of crop derivative losses.

The policy acquisition cost ratio decreased 1.0 percentage point for the three months ended March 31, 2020, primarily due to the year-over-year impact of higher earned premium retention as a result of the premium sharing formula under the U.S. government, which does not impact acquisition costs.

The administrative expense ratio increased 1.5 percentage points for the three months ended March 31, 2020, primarily due to normal operating expense and inflationary increases and a reduction in the current year Administrative and Operating (A&O) reimbursements on the MPCI business we earned under the government program.

Catastrophe Losses and Prior Period Development

	Three Months Ended March 31	
(in millions of U.S. dollars)	**2020**	2019
Catastrophe losses (excludes reinstatement premiums)	**$ 8**	$ 2
Favorable prior period development	**$ 14**	$ 61

Catastrophe losses through March 31, 2020 and 2019 were primarily from severe weather-related events in the U.S. in our farm, ranch, and specialty P&C businesses.

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

For the three months ended March 31, 2020, net favorable prior period development was $14 million which included $17 million of favorable incurred losses due to lower than expected MPCI losses for the 2019 crop year, partially offset by a $3 million decrease in net premiums earned related to the MPCI profit and loss calculation formula. For the three months ended March 31, 2019, net favorable prior period development was $61 million which included $90 million of favorable incurred losses and $3 million of lower acquisition costs due to lower than expected MPCI losses for the 2018 crop year, partially offset by a $32 million decrease in net premiums earned related to the MPCI profit and loss calculation formula.

CAY Loss Ratio excluding Catastrophe Losses

	Three Months Ended March 31	
	2020	2019
Loss and loss expense ratio	**69.6 %**	(48.3)%
Catastrophe losses	**(8.9)%**	(4.1)%
Prior period development	**15.5 %**	123.5 %
CAY loss ratio excluding catastrophe losses	**76.2 %**	71.1 %

The CAY loss ratio excluding catastrophe losses increased 5.1 percentage points for the three months ended March 31, 2020, principally due to higher underlying losses of $3 million, or 2.8 percentage points, in our Chubb Agribusiness unit and $2 million, or 1.7 percentage points, related to the year-over-year impact of crop derivative losses.

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 March 31		% Change
(in millions of U.S. dollars, except for percentages)	**2020**	2019	Q-20 vs. Q-19
Net premiums written	**$ 2,598**	$ 2,395	8.5 %
Net premiums earned	**2,307**	2,114	9.2 %
Losses and loss expenses	**1,258**	1,106	13.7 %
Policy acquisition costs	**642**	596	7.7 %
Administrative expenses	**258**	249	3.8 %
Underwriting income	**149**	163	(8.2)%
Net investment income	**145**	144	0.2 %
Other (income) expense	**4**	4	—
Amortization of purchased intangibles	**12**	11	5.0 %
Segment income	**$ 278**	$ 292	(4.7)%
Net premiums written - constant dollars [1]			9.7 %
Net premiums earned - constant dollars [1]			10.5 %
Underwriting income - constant dollars [1]			(7.1)%
Loss and loss expense ratio	**54.5%**	52.3%	2.2 pts
Policy acquisition cost ratio	**27.8%**	28.2%	(0.4) pts
Administrative expense ratio	**11.2%**	11.8%	(0.6) pts
Combined ratio	**93.5%**	92.3%	1.2 pts

Net Premiums Written by Region

Three months ended March 31

(in millions of U.S. dollars, except for percentages)								
Region	**2020**	**2020 % of Total**	2019	2019 % of Total	C$ [1] 2019	Q-20 vs. Q-19	C$ [1] Q-20 vs. Q-19
Europe	**$ 1,228**	**47%**	$ 1,106	46%	$ 1,095	11.1%	12.2%
Latin America	**583**	**22%**	533	22%	522	9.4%	11.7%
Asia	**688**	**27%**	669	28%	663	2.9%	3.7%
Other [2]	**99**	**4%**	87	4%	87	12.6%	13.4%
Net premiums written	**$ 2,598**	**100%**	$ 2,395	100%	$ 2,367	8.5%	9.7%

[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.

[2] Comprises Combined International, Eurasia and Africa region, and other international.

Premiums

Net premiums written increased $203 million, or $231 million on a constant-dollar basis, for the three months ended March 31, 2020, reflecting growth across all regions and lines of business. P&C lines growth was across all regions and due to new business, retention, and positive rate increases. Personal lines growth was driven by new business written, principally in Latin America and Europe. Accident and health (A&H) lines increased slightly due to new business in Latin America, offset by a decline in Asia, primarily driven by a decline in travel insurance as a result of COVID-19, and the termination of a contract in Thailand.

Net premiums earned increased $193 million, or $220 million on a constant-dollar basis, for the three months ended March 31, 2020, reflecting the increase in net premiums written.

Combined Ratio

The loss and loss expense ratio increased 2.2 percentage points for the three months ended March 31, 2020, primarily due to higher catastrophe losses.

The policy acquisition cost ratio decreased 0.4 percentage points for the three months ended March 31, 2020, due to a change in mix of business towards products and regions that have a lower policy acquisition cost ratio.

The administrative expense ratio decreased 0.6 percentage points for the three months ended March 31, 2020, primarily driven by the favorable impact of higher net premiums earned in the current quarter.

Catastrophe Losses and Prior Period Development

	Three Months Ended March 31	
(in millions of U.S. dollars)	**2020**	2019
Catastrophe losses (excludes reinstatement premiums)	**$ 90**	$ 25
Favorable prior period development	**$ 4**	$ 4

Catastrophe losses through March 31, 2020 and 2019 were primarily from the following events:

- 2020: Storms in Australia, Australia wildfires, and other international weather-related events; and COVID-19 pandemic claims of $13 million.
- 2019: Storms in Australia and other international weather-related events

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

CAY Loss Ratio excluding Catastrophe Losses

	Three Months Ended March 31	
	2020	2019
Loss and loss expense ratio	**54.5 %**	52.3 %
Catastrophe losses	**(3.8)%**	(1.2)%
Prior period development	**0.1 %**	0.2 %
CAY loss ratio excluding catastrophe losses	**50.8 %**	51.3 %

The CAY loss ratio excluding catastrophe losses decreased 0.5 percentage points for the three months ended March 31, 2020, due to a change in mix of business towards products and regions that have a lower loss and loss expense ratio.

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 under the Chubb Tempest Re brand name and provides a broad range of traditional reinsurance coverage to a diverse array of primary P&C companies.

	Three Months Ended March 31		% Change
(in millions of U.S. dollars, except for percentages)	**2020**	2019	Q-20 vs. Q-19
Net premiums written	**$ 218**	$ 202	8.4 %
Net premiums earned	**186**	168	10.4 %
Losses and loss expenses	**87**	76	12.3 %
Policy acquisition costs	**45**	43	6.5 %
Administrative expenses	**10**	10	—
Underwriting income	**44**	39	13.8 %
Net investment income	**54**	56	(5.0)%
Other (income) expense	**(15)**	(9)	71.2 %
Segment income	**$ 113**	$ 104	8.3 %
Net premiums written - constant dollars [(1)]			7.9 %
Net premiums earned - constant dollars [(1)]			10.2 %
Underwriting income - constant dollars [(1)]			14.9 %
Loss and loss expense ratio	**46.5%**	45.7%	0.8 pts
Policy acquisition cost ratio	**24.5%**	25.4%	(0.9) pts
Administrative expense ratio	**5.1%**	5.7%	(0.6) pts
Combined ratio	**76.1%**	76.8%	(0.7) pts

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

Premiums

Net premiums written increased $16 million, or $15 million on a constant-dollar basis, for the three months ended March 31, 2020 primarily due to new business written in casualty lines and unfavorable premium adjustments in the prior year, offset by lower property renewals and increased ceded retrocessions.

Net premiums earned increased $18 million, or $17 million on a constant-dollar basis, for the three months ended March 31, 2020 principally reflecting the increase in net premiums written described above.

Combined Ratio

The loss and loss expense ratio increased 0.8 percentage points for the three months ended March 31, 2020, mainly from lower favorable prior period development.

The policy acquisition cost ratio decreased 0.9 percentage points for the three months ended March 31, 2020, primarily due to favorable commission benefits on increased ceded retrocessions and favorable change in mix of business.

The administrative expense ratio decreased 0.6 percentage points for the three months ended March 31, 2020, primarily driven by the favorable impact of higher net premiums earned in the current quarter.

Catastrophe Losses and Prior Period Development

(in millions of U.S dollars)	Three Months Ended March 31 2020	2019
Catastrophe losses (excludes reinstatement premiums)	**$ —**	$ —
Favorable prior period development	**$ 7**	$ 8

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

CAY Loss Ratio excluding Catastrophe Losses

	Three Months Ended March 31 2020	2019
Loss and loss expense ratio	**46.5%**	45.7%
Catastrophe losses	**—**	—
Prior period development	**3.9%**	4.8%
CAY loss ratio excluding catastrophe losses	**50.4%**	50.5%

Life Insurance

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

(in millions of U.S. dollars, except for percentages)	Three Months Ended March 31 2020	2019	% Change Q-20 vs. Q-19
Net premiums written	**$ 645**	$ 579	11.4 %
Net premiums earned	**631**	561	12.6 %
Losses and loss expenses	**202**	202	—
Adjusted policy benefits	**185**	166	11.4 %
Policy acquisition costs	**180**	128	40.8 %
Administrative expenses	**76**	79	(3.1)%
Net investment income	**95**	89	6.4 %
Life Insurance underwriting income	**83**	75	9.6 %
Other (income) expense	**(12)**	(10)	23.9 %
Amortization of purchased intangibles	**1**	—	94.6 %
Segment income	**$ 94**	$ 85	10.6 %
Net premiums written - constant dollars [(1)]			11.3 %
Net premiums earned - constant dollars [(1)]			12.5 %
Life Insurance underwriting income - constant dollars [(1)]			9.2 %

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

Premiums
For the three months ended March 31, 2020, net premiums written increased $66 million, or $65 million on a constant-dollar basis, primarily reflecting growth in Latin America, principally driven by our expanded presence in Chile, and Asian international life operations, partially offset by a decline in our North America Combined Insurance business.

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

	Three Months Ended March 31			% Change	
(in millions of U.S. dollars, except for percentages)	**2020**	2019	C$ [1] 2019	Q-20 vs. Q-19	C$ [1] Q-20 vs. Q-19
Deposits collected on Universal life and investment contracts	**$ 443**	$ 321	$ 325	37.9%	36.7%

[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.

Deposits collected on universal life and investment contracts (life deposits) are not reflected as revenues in our Consolidated statements of operations in accordance with GAAP. New life deposits are an important component of production, and although they do not significantly affect current period income from operations, they are key to our efforts to grow our business. Life deposits collected increased for the three months ended March 31, 2020 primarily due to growth in Taiwan.

Life Insurance underwriting income and Segment income
Life Insurance underwriting income increased $8 million for the three months ended March 31, 2020 due to higher net investment income. Segment income for the three months ended March 31, 2020 included $4 million from our operations in Chile. Additionally, segment income included other income of $12 million and $10 million for the three months ended March 31, 2020 and 2019, respectively, principally due to our share of net income from Huatai Life, our partially-owned life insurance entity in China.

Corporate

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

	Three Months Ended March 31		% Change
(in millions of U.S. dollars, except for percentages)	**2020**	2019	Q-20 vs. Q-19
Losses and loss expenses	**$ 11**	$ 11	0.4 %
Administrative expenses	**66**	63	5.5 %
Underwriting loss	**77**	74	5.0 %
Net investment income (loss)	**(24)**	(37)	(37.4)%
Interest expense	**132**	140	(5.3)%
Net realized gains (losses)	**(956)**	(96)	NM
Other (income) expense	**23**	11	104.1 %
Amortization of purchased intangibles	**50**	55	(7.0)%
Chubb integration expenses	**—**	3	NM
Income tax expense	**215**	188	14.4 %
Net loss	**$ (1,477)**	$ (604)	144.6 %

NM - not meaningful

Losses and loss expenses in both years were primarily related to unallocated loss adjustment expenses of the A&E claim operations.

Administrative expenses increased $3 million for the three months ended March 31, 2020 primarily due to higher global advertising expenses.

Refer to the respective sections for a discussion of Net investment income, Net realized gains and losses, Other (income) expense, Amortization of purchased intangibles, and Income tax 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 certain specific guidelines designed to minimize risk. The majority of our investment portfolio is available for sale and reported at fair value. Our held to maturity investment portfolio is reported at amortized cost, net of valuation allowance.

The effect of market movements on our fixed maturities portfolio impacts Net income (through Net realized gains (losses)) when securities are sold, when we write down an asset because we intend to sell the security, or when we record a change to the allowance for expected credit losses. For a further discussion related to how we assess the allowance for expected credit losses and the related impact on Net income, refer to Note 3 c) to the Consolidated Financial Statements. Additionally, Net income is impacted through the reporting of changes in the fair value of equity securities and private equity securities 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 liability adjustment, are reported as separate components of Accumulated other comprehensive income (loss) in Shareholders' equity in the Consolidated balance sheets.

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

	Three Months Ended March 31, 2020			Three Months Ended March 31, 2019		
(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	**$ (319)**	**$ (2,160)**	**$ (2,479)**	$ (44)	$ 1,889	$ 1,845
Fixed income and equity derivatives	**15**	**—**	**15**	(130)	—	(130)
Public equity						
Sales	**(24)**	**—**	**(24)**	1	—	1
Mark-to-market	**(5)**	**—**	**(5)**	57	—	57
Private equity (less than 3 percent ownership)						
Sales	**—**	**—**	**—**	(2)	—	(2)
Mark-to-market	**5**	**—**	**5**	(42)	—	(42)
Total investment portfolio	**(328)**	**(2,160)**	**(2,488)**	(160)	1,889	1,729
Variable annuity reinsurance derivative transactions, net of applicable hedges	**(560)**	**—**	**(560)**	51	—	51
Other derivatives	**(2)**	**—**	**(2)**	(1)	—	(1)
Foreign exchange	**(68)**	**(859)**	**(927)**	13	147	160
Other	**—**	**(14)**	**(14)**	—	(27)	(27)
Net gains (losses), pre-tax	**$ (958)**	**$ (3,033)**	**$ (3,991)**	$ (97)	$ 2,009	$ 1,912

Pre-tax net losses of $3,991 million for the three months ended March 31, 2020 reflected the financial market volatility in the credit, equity and foreign exchange markets, driven by the impact of the COVID-19 global pandemic. The $2,488 million loss in our investment portfolio was principally a result of the widening credit spreads, including a $150 million realized loss related to

expected credit losses of certain securities and $121 million of impairments for securities we intend to sell subsequent to March 31, 2020. The $927 million foreign exchange loss reflected the strengthening of the U.S. dollar against most major currencies. The $560 million realized loss in our variable annuity reinsurance portfolio was principally driven by lower global equities levels, as discussed below.

The variable annuity reinsurance derivative transactions resulted in realized losses of $560 million for the three months ended March 31, 2020, reflecting a net increase in the fair value of GLB liabilities of $685 million. The net increase in the fair value of GLB liabilities was principally due to lower global equity market levels. In addition, we maintain positions in derivative instruments that decrease in fair value when the S&P 500 index increases. There were realized gains of $125 million for the three months ended March 31, 2020, related to these derivative instruments.

The variable annuity reinsurance derivative transactions resulted in realized gains of $51 million for the three months ended March 31, 2019, reflecting a net decrease in the fair value of GLB liabilities of $114 million. The decrease in the fair value of GLB liabilities was primarily due to higher global equity market levels, partially offset by lower interest rates. In addition, we maintain positions in derivative instruments that decrease in fair value when the S&P 500 index increases. There were realized losses of $63 million for the three months ended March 31, 2019, related to these derivative instruments.

Effective Income Tax Rate

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

For the three months ended March 31, 2020, our effective income tax rate was 46.0 percent compared to 15.3 percent, in the prior year period. The effective income tax rate in the current year was higher compared to the prior year period primarily due to a higher percentage of realized losses generated in lower tax jurisdictions and discrete tax expense on employee benefit programs.

Non-GAAP Reconciliation

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

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.

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

The following table presents a reconciliation of Policy benefits to Adjusted policy benefits:

	Three Months Ended March 31	
(in millions of U.S. dollars)	**2020**	2019
Policy benefits	**$ 129**	$ 196
Add: (Gains) losses from fair value changes in separate account assets	**56**	(30)
Adjusted policy benefits	**$ 185**	$ 166

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.

For this disclosure purpose, the normalized level of CATs, or expected level of CATs, is not intended to represent a probability weighted expectation for the company but rather to represent management's view of what might be more typical for a given period, based on various factors, including historical experience, seasonal patterns, and consideration of both modeled CATs (e.g., windstorm and earthquake) as well as non-modeled CATs (e.g., wildfires, floods and freeze). The following table presents CATs above (below) expected level and the impact on the combined ratio:

	Three Months Ended March 31	
(in millions of U.S. dollars, except for percentage points)	**2020**	2019
Actual level of CATs - pre-tax	**$ 237**	$ 250
Less: Expected level of CATs - pre-tax	**224**	206
CATs above expected level - pre-tax	**$ 13**	$ 44
Adverse impact of CATs above an expected level on combined ratio	**0.2%**	0.6%

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

Three Months Ended March 31, 2020 (in millions of U.S. dollars except for ratios)		North America Commercial P&C Insurance	North America Personal P&C Insurance	North America Agricultural Insurance	Overseas General Insurance	Global Reinsurance	Corporate	Total P&C
Numerator								
Losses and loss expenses								
Losses and loss expenses		$ 2,181	$ 683	$ 63	$ 1,258	$ 87	$ 11	$ 4,283
Realized (gains) losses on crop derivatives		—	—	2	—	—	—	2
Adjusted losses and loss expenses	A	$ 2,181	$ 683	$ 65	$ 1,258	$ 87	$ 11	$ 4,285
Catastrophe losses and related adjustments								
Catastrophe losses, net of related adjustments		(118)	(21)	(8)	(90)	—	—	(237)
Reinstatement premiums collected (expensed) on catastrophe losses		—	—	—	—	—	—	—
Catastrophe losses, gross of related adjustments		(118)	(21)	(8)	(90)	—	—	(237)
PPD and related adjustments								
PPD, net of related adjustments - favorable (unfavorable)		105	(1)	14	4	7	(11)	118
Net premiums earned adjustments on PPD - unfavorable (favorable)		—	—	3	—	—	—	3
Expense adjustments - unfavorable (favorable)		(1)	—	—	—	—	—	(1)
PPD, gross of related adjustments - favorable (unfavorable)		104	(1)	17	4	7	(11)	120
CAY loss and loss expense ex CATs	B	$ 2,167	$ 661	$ 74	$ 1,172	$ 94	$ —	$ 4,168
Policy acquisition costs and administrative expenses								
Policy acquisition costs and administrative expenses	C	$ 751	$ 313	$ 15	$ 900	$ 55	$ 66	$ 2,100
Expense adjustments - favorable (unfavorable)		1	—	—	—	—	—	1
Policy acquisition costs and administrative expenses, adjusted	D	$ 752	$ 313	$ 15	$ 900	$ 55	$ 66	$ 2,101
Denominator								
Net premiums earned	E	$ 3,376	$ 1,200	$ 94	$ 2,307	$ 186		$ 7,163
Net premiums earned adjustments on PPD - unfavorable (favorable)		—	—	3	—	—		3
Net premiums earned excluding adjustments	F	$ 3,376	$ 1,200	$ 97	$ 2,307	$ 186		$ 7,166
P&C Combined ratio								
Loss and loss expense ratio	A/E	64.6%	57.0%	69.6%	54.5%	46.5%		59.8%
Policy acquisition cost and administrative expense ratio	C/E	22.2%	26.0%	15.2%	39.0%	29.6%		29.3%
P&C Combined ratio		86.8%	83.0%	84.8%	93.5%	76.1%		89.1%
CAY P&C Combined ratio ex CATs								
Loss and loss expense ratio, adjusted	B/F	64.2%	55.1%	76.2%	50.8%	50.4%		58.2%
Policy acquisition cost and administrative expense ratio, adjusted	D/F	22.3%	26.1%	14.7%	39.0%	29.6%		29.3%
CAY P&C Combined ratio ex CATs		86.5%	81.2%	90.9%	89.8%	80.0%		87.5%
Combined ratio								
Combined ratio								89.1%
Add: impact of gains and losses on crop derivatives								—
P&C Combined ratio								89.1%

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 March 31, 2019 (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								
Losses and loss expenses		$ 1,973	$ 757	$ (27)	$ 1,106	$ 76	$ 11	$ 3,896
Realized (gains) losses on crop derivatives		—	—	1	—	—	—	1
Adjusted losses and loss expenses	**A**	$ 1,973	$ 757	$ (26)	$ 1,106	$ 76	$ 11	$ 3,897
Catastrophe losses and related adjustments								
Catastrophe losses, net of related adjustments		(94)	(129)	(2)	(25)	—	—	(250)
Reinstatement premiums collected (expensed) on catastrophe losses		—	—	—	—	—	—	—
Catastrophe losses, gross of related adjustments		(94)	(129)	(2)	(25)	—	—	(250)
PPD and related adjustments								
PPD, net of related adjustments - favorable (unfavorable)		131	10	61	4	8	(10)	204
Net premiums earned adjustments on PPD - unfavorable (favorable)		2	—	32	—	—	—	34
Expense adjustments - unfavorable (favorable)		(4)	—	(3)	—	—	—	(7)
PPD reinstatement premiums - unfavorable (favorable)		—	(3)	—	—	—	—	(3)
PPD, gross of related adjustments - favorable (unfavorable)		129	7	90	4	8	(10)	228
CAY loss and loss expense ex CATs	**B**	$ 2,008	$ 635	$ 62	$ 1,085	$ 84	$ 1	$ 3,875
Policy acquisition costs and administrative expenses								
Policy acquisition costs and administrative expenses	**C**	$ 699	$ 299	$ 8	$ 845	$ 53	$ 63	$ 1,967
Expense adjustments - favorable (unfavorable)		4	—	3	—	—	—	7
Policy acquisition costs and administrative expenses, adjusted	**D**	$ 703	$ 299	$ 11	$ 845	$ 53	$ 63	$ 1,974
Denominator								
Net premiums earned	**E**	$ 3,085	$ 1,154	$ 55	$ 2,114	$ 168		$ 6,576
Net premiums earned adjustments on PPD - unfavorable (favorable)		2	—	32	—	—		34
PPD reinstatement premiums - unfavorable (favorable)		—	(3)	—	—	—		(3)
Net premiums earned excluding adjustments	**F**	$ 3,087	$ 1,151	$ 87	$ 2,114	$ 168		$ 6,607
P&C Combined ratio								
Loss and loss expense ratio	**A/E**	63.9%	65.5%	(48.3)%	52.3%	45.7%		59.3%
Policy acquisition cost and administrative expense ratio	**C/E**	22.7%	26.0%	14.7 %	40.0%	31.1%		29.9%
P&C Combined ratio		86.6%	91.5%	(33.6)%	92.3%	76.8%		89.2%
CAY P&C Combined ratio ex CATs								
Loss and loss expense ratio, adjusted	**B/F**	65.0%	55.1%	71.1 %	51.3%	50.5%		58.6%
Policy acquisition cost and administrative expense ratio, adjusted	**D/F**	22.8%	26.0%	12.8 %	40.0%	31.0%		29.9%
CAY P&C Combined ratio ex CATs		87.8%	81.1%	83.9 %	91.3%	81.5%		88.5%
Combined ratio								
Combined ratio								89.2%
Add: impact of gains and losses on crop derivatives								—
P&C Combined ratio								89.2%

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

Other Income and Expense

(in millions of U.S. dollars)	Three Months Ended March 31 2020	2019
Equity in net income of partially-owned entities [1]	**$ 29**	$ 22
Gains (losses) from fair value changes in separate account assets [2]	**(56)**	30
Federal excise and capital taxes	**(6)**	(6)
Other	**(22)**	(7)
Total	**$ (55)**	$ 39

[1] Equity in net income of partially-owned entities includes $18 million and $11 million attributable to our investments in Huatai (Huatai Group, Huatai P&C, and Huatai Life) for the three months ended March 31, 2020 and 2019, respectively

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

Other income and expense includes equity in net income of partially-owned entities, which includes our share of net income or loss 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.

Amortization of purchased intangibles and Other amortization

Amortization expense related to purchased intangibles was $73 million and $76 million for the three months ended March 31, 2020 and 2019, respectively, and principally relates to the Chubb Corp acquisition. The decrease in amortization expense of purchased intangibles reflects lower intangible amortization expense related to agency distribution relationships and renewal rights.

Amortization expense for the remainder of 2020 is expected to be $213 million, or $71 million each quarter.

The following table presents, as of March 31, 2020, the estimated pre-tax amortization expense (benefit) of purchased intangibles, at current foreign currency exchange rates, for the second through fourth quarters of 2020 and the next five years:

	Associated with the Chubb Corp Acquisition				
For the Years Ending December 31 (in millions of U.S. dollars)	Agency distribution relationships and renewal rights	Fair value adjustment on Unpaid losses and loss expenses	Total [1]	Other intangible assets [2]	Total Amortization of purchased intangibles
Second quarter of 2020	$ 59	$ (9)	$ 50	$ 21	$ 71
Third quarter of 2020	59	(9)	50	21	71
Fourth quarter of 2020	59	(9)	50	21	71
2021	215	(20)	195	82	277
2022	196	(14)	182	92	274
2023	177	(6)	171	90	261
2024	159	(5)	154	85	239
2025	144	(5)	139	83	222
Total	$ 1,068	$ (77)	$ 991	$ 495	$ 1,486

[1] Recorded in Corporate.

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

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

At March 31, 2020, the deferred tax liability associated with Other intangible assets (excluding the fair value adjustment on Unpaid losses and loss expense) was $1,304 million.

The following table presents, as of March 31, 2020, the expected reduction of the deferred tax liability associated with Other intangible assets (which reduces as agency distribution relationships and renewal rights and other intangible assets amortize), at current foreign currency exchange rates, for the second through fourth quarters of 2020 and for the next five years:

For the Years Ending December 31 (in millions of U.S. dollars)	Reduction to deferred tax liability associated with intangible assets
Second quarter of 2020	$ 18
Third quarter of 2020	18
Fourth quarter of 2020	17
2021	66
2022	64
2023	59
2024	54
2025	49
Total	$ 345

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

The following table presents at March 31, 2020, the expected amortization expense of the fair value adjustment on acquired invested assets, at current foreign currency exchange rates, and the expected amortization benefit from the amortization of the fair value adjustment on assumed long-term debt for the second through fourth quarters of 2020 and for the next five years:

	Amortization (expense) benefit of the fair value adjustment on	
For the Years Ending December 31 (in millions of U.S. dollars)	Acquired invested assets [1]	Assumed long-term debt [2]
Second quarter of 2020	$ (32)	$ 5
Third quarter of 2020	(30)	5
Fourth quarter of 2020	(28)	6
2021	(110)	21
2022	(96)	21
2023	—	21
2024	—	21
2025	—	21
Total	$ (296)	$ 121

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

(2) Recorded as a reduction to Interest expense in the Consolidated statements of operations.

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

Net Investment Income

(in millions of U.S. dollars)	Three Months Ended March 31 2020	2019
Fixed maturities [1]	**$ 851**	$ 820
Short-term investments	**17**	24
Other interest income	**9**	6
Equity securities	**9**	7
Other investments	**20**	22
Gross investment income	**906**	879
Investment expenses	**(45)**	(43)
Net investment income	**$ 861**	$ 836
[1] Includes amortization expense related to fair value adjustment on acquired invested assets related to the Chubb Corp acquisition	**$ (32)**	$ (46)

Net investment income is influenced by a number of factors including the amounts and timing of inward and outward cash flows, the level of interest rates, and changes in overall asset allocation. Net investment income increased 3.1 percent for the three months ended March 31, 2020 primarily due to higher average invested assets, partially offset by lower reinvestment rates on new and reinvested assets and lower private equity distributions.

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 March 31 2020	2019
Total mark-to-market on private equity, pre-tax	**$ (7)**	$ (47)

Investments

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

The average duration of our fixed income securities, including the effect of options and swaps, was 3.9 years and 3.8 years at March 31, 2020 and December 31, 2019, respectively. We estimate that a 100 basis point (bps) increase in interest rates would reduce the valuation of our fixed income portfolio by approximately $3.8 billion at March 31, 2020.

We established credit loss valuation allowances as a result of our adoption of guidance on Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments (CECL) on January 1, 2020. During the first quarter of 2020, worldwide social and economic activity became severely impacted by the spread and threat of COVID-19. Credit allowances increased by $150 million, principally in our Available for sale portfolio, for the three months ended March 31, 2020. The

adverse impact to our credit allowances were mitigated despite the significant economic downturn primarily due to the overall high credit quality of the portfolio, as noted above, and the stabilization of the valuation of investment grade securities due to measures announced by the U.S. Federal Reserve, including programs to support corporate and asset backed securities.

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

	March 31, 2020		December 31, 2019	
(in millions of U.S. dollars)	**Fair Value**	**Cost/ Amortized Cost, Net**	Fair Value	Cost/ Amortized Cost
Fixed maturities available for sale	**$ 81,530**	**$ 80,783**	$ 85,488	$ 82,580
Fixed maturities held to maturity	**12,471**	**12,025**	13,005	12,581
Short-term investments	**3,586**	**3,582**	4,291	4,291
	97,587	**96,390**	102,784	99,452
Equity securities	**2,068**	**2,068**	812	812
Other investments	**6,075**	**6,075**	6,062	6,062
Total investments	**$ 105,730**	**$ 104,533**	$ 109,658	$ 106,326

The fair value of our total investments decreased $3.9 billion during the three months ended March 31, 2020, primarily due to unrealized depreciation, the payment of collateralized deposits for the purchase of additional ownership in Huatai Group and unfavorable foreign exchange movement. This decrease was partially offset by the investing of operating cash flows.

The following tables present the market value of our fixed maturities and short-term investments at March 31, 2020 and December 31, 2019. The first table lists investments according to type and second according to S&P credit rating:

	March 31, 2020		December 31, 2019	
(in millions of U.S. dollars, except for percentages)	**Market Value**	**% of Total**	Market Value	% of Total
Treasury / Agency	**$ 4,296**	**4%**	$ 4,630	5%
Corporate and asset-backed	**32,990**	**33%**	34,259	33%
Mortgage-backed	**20,252**	**21%**	21,588	21%
Municipal	**12,276**	**13%**	12,824	12%
Non-U.S.	**24,187**	**25%**	25,192	25%
Short-term investments	**3,586**	**4%**	4,291	4%
Total	**$ 97,587**	**100%**	$ 102,784	100%
AAA	**$ 14,578**	**15%**	$ 15,714	15%
AA	**35,442**	**36%**	37,504	37%
A	**18,378**	**19%**	19,236	19%
BBB	**13,618**	**14%**	13,650	13%
BB	**8,661**	**9%**	9,474	9%
B	**6,487**	**7%**	6,897	7%
Other	**423**	**—**	309	—
Total	**$ 97,587**	**100%**	$ 102,784	100%

Corporate and asset-backed securities
The following table presents our 10 largest global exposures to corporate bonds by market value at March 31, 2020:

(in millions of U.S. dollars)	Market Value
Wells Fargo & Co	$ 670
Bank of America Corp	614
JP Morgan Chase & Co	560
Comcast Corp	452
Morgan Stanley	417
AT&T Inc	388
Verizon Communications Inc	387
HSBC Holdings Plc	381
Citigroup Inc	378
Goldman Sachs Group Inc	360

Mortgage-backed securities

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

	S&P Credit Rating					Market Value	Amortized Cost, Net
March 31, 2020 (in millions of U.S. dollars)	AAA	AA	A	BBB	BB and below	Total	Total
Agency residential mortgage-backed (RMBS)	$ 130	$ 16,541	$ —	$ —	$ —	$ 16,671	$ 15,749
Non-agency RMBS	167	38	72	11	9	297	304
Commercial mortgage-backed	2,887	263	128	6	—	3,284	3,285
Total mortgage-backed securities	$ 3,184	$ 16,842	$ 200	$ 17	$ 9	$ 20,252	$ 19,338

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

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

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

The following table summarizes the market 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 March 31, 2020:

(in millions of U.S. dollars)	Market Value	Amortized Cost, Net
Republic of Korea	$ 1,040	$ 923
United Kingdom	854	820
Canada	808	774
Province of Ontario	630	604
Kingdom of Thailand	575	500
Federative Republic of Brazil	515	501
Province of Quebec	496	469
United Mexican States	427	422
Socialist Republic of Vietnam	371	269
Commonwealth of Australia	357	306
Other Non-U.S. Government Securities	4,796	4,777
Total	$ 10,869	$ 10,365

The following table summarizes the market 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 March 31, 2020:

(in millions of U.S. dollars)	Market Value	Amortized Cost, Net
United Kingdom	$ 2,169	$ 2,174
Canada	1,665	1,690
France	1,110	1,112
United States [(1)]	1,023	1,074
Australia	738	719
Netherlands	622	614
Japan	601	599
Germany	517	519
Switzerland	510	511
China	411	410
Other Non-U.S. Corporate Securities	3,952	4,071
Total	$ 13,318	$ 13,493

(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 March 31, 2020, our corporate fixed income investment portfolio included below-investment grade and non-rated securities which, in total, comprised approximately 14 percent of our fixed income portfolio. Our below-investment grade and non-rated portfolio includes over 1,300 issuers, with the greatest single exposure being $150 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. Thirteen external investment managers are responsible for high-yield security selection and portfolio construction. Our high-yield managers have a conservative approach to credit selection and very low historical default experience. Holdings are highly diversified across industries and generally subject to a 1.5 percent issuer limit

as a percentage of high-yield allocation. We monitor position limits daily through an internal compliance system. Derivative and structured securities (e.g., credit default swaps and collateralized loan obligations) are not permitted in the high-yield portfolio.

Critical Accounting Estimates

As of March 31, 2020, 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 2019 Form 10-K.

Reinsurance recoverable on ceded reinsurance

	March 31, 2020		December 31, 2019	
(in millions of U.S. dollars)	**Net Reinsurance Recoverable [1]**	**Valuation allowance**	Net Reinsurance Recoverable [1]	Valuation allowance
Reinsurance recoverable on unpaid losses and loss expenses	**$ 14,040**	**$ 238**	$ 14,181	$ 240
Reinsurance recoverable on paid losses and loss expenses	**858**	**67**	1,000	76
Reinsurance recoverable on losses and loss expenses	**$ 14,898**	**$ 305**	$ 15,181	$ 316
Reinsurance recoverable on policy benefits	**$ 196**	**$ 4**	$ 197	$ 4

[1] Net of valuation allowance for uncollectible reinsurance.

The decrease in reinsurance recoverable on losses and loss expenses was primarily due to foreign currency movement and crop activity.

We evaluate the financial condition of our reinsurers and potential reinsurers on a regular basis and also monitor concentrations of credit risk with reinsurers. The valuation allowance for uncollectible reinsurance is required principally due to the potential failure of reinsurers to indemnify Chubb, primarily because of disputes under reinsurance contracts and insolvencies. We have established a valuation allowance for amounts estimated to be uncollectible on both unpaid and paid losses as well as future policy benefits.

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, 2019	$ 62,690	$ 14,181	$ 48,509
Losses and loss expenses incurred	5,569	1,084	4,485
Losses and loss expenses paid	(5,345)	(1,090)	(4,255)
Other (including foreign exchange translation)	(700)	(135)	(565)
Balance at March 31, 2020	**$ 62,214**	**$ 14,040**	**$ 48,174**

[1] Net of valuation allowance for uncollectible reinsurance.

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

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

Asbestos and Environmental (A&E)
There was no significant A&E reserve activity during the three months ended March 31, 2020. A&E reserves are included in Corporate. Refer to our 2019 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 such as setting risk limits based on probable maximum loss (PML) and purchasing catastrophe reinsurance. The table below presents our modeled pre-tax estimates of natural catastrophe PML, net of reinsurance, at March 31, 2020, for Worldwide, U.S. hurricane and California earthquake events, based on our in-force portfolio at January 1, 2020 and reflecting the April 1, 2020 reinsurance program (see Natural Catastrophe Property Reinsurance Program section) as well as inuring reinsurance protection coverages. According to the model, for the 1-in-100 return period scenario, there is a one percent chance that our pre-tax annual aggregate losses incurred in any year from U.S. hurricane events could be in excess of $2,668 million (or 5.1 percent of our total shareholders' equity at March 31, 2020). These estimates assume that reinsurance recoverable is fully collectible.

	Modeled Net Probable Maximum Loss (PML) Pre-tax					
	Worldwide [1]		U.S. Hurricane [2]		California Earthquake [3]	
	Annual Aggregate		Annual Aggregate		Single Occurrence	
(in millions of U.S. dollars, except for percentages)	Chubb	% of Total Shareholders' Equity	Chubb	% of Total Shareholders' Equity	Chubb	% of Total Shareholders' Equity
1-in-10	$ 1,850	3.5%	$ 1,073	2.1%	$ 130	0.2%
1-in-100	$ 3,821	7.3%	$ 2,668	5.1%	$ 1,317	2.5%
1-in-250	$ 6,332	12.1%	$ 4,808	9.2%	$ 1,497	2.9%

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

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

(3) California earthquakes include fire-following perils.

The above estimates of Chubb's loss profile are inherently uncertain for many reasons, including the following:
- While the use of third-party catastrophe modeling packages to simulate potential hurricane and earthquake losses is prevalent within the insurance industry, the models are reliant upon significant meteorology, seismology, and engineering assumptions to estimate catastrophe losses. In particular, modeled catastrophe events are not always a representation of actual events and ensuing additional loss potential;
- There is no universal standard in the preparation of insured data for use in the models, the running of the modeling software and interpretation of loss output. These loss estimates do not represent our potential maximum exposures and it is highly likely that our actual incurred losses would vary materially from the modeled estimates; and
- The potential effects of climate change add to modeling complexity.

Natural Catastrophe Property Reinsurance Program

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

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

Chubb renewed its Global Property Catastrophe Reinsurance Program for our North American and International operations effective April 1, 2020 through March 31, 2021, 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 also renewed its terrorism coverage (excluding nuclear, biological, chemical and radiation coverage, with an inclusion of coverage for biological and chemical coverage for personal lines) for the United States from April 1, 2020 through March 31, 2021 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 – $2.15 billion	All natural perils and terrorism	(c)
United States (excluding Alaska and Hawaii)	$2.15 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 – $1.175 billion	All natural perils and terrorism	(c)
Alaska, Hawaii, and Canada	$1.175 billion – $2.525 billion	All natural perils and terrorism	(d)

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

(b) These coverages are partially placed with Reinsurers.

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

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

Liquidity

We anticipate that positive cash flows from operations (underwriting activities and investment income) should be sufficient to cover cash outflows under most loss scenarios for the near term. In addition to cash from operations, routine sales of investments, and financing arrangements, we have agreements with a third-party bank provider which implemented two international multi-currency notional cash pooling programs to enhance cash management efficiency during periods of short-term timing mismatches between expected inflows and outflows of cash by currency. The programs allow us to optimize investment income by avoiding portfolio disruption. Should the need arise, we generally have access to capital markets and an available $1.0 billion Chubb Group letter of credit/revolver facility (Group Credit Facility). We have the ability to increase this capacity to $2.0 billion under certain conditions, but any such increase would not raise the sub-limit for revolving loans above $1.0 billion. At March 31, 2020, our letters of credit usage under this Group Credit Facility was $289 million. Our access to funds under this Group Credit Facility is dependent on the ability of the banks that are a party to the facility to meet their funding commitments. This Group Credit Facility has a remaining term expiring in October 2022 and requires that we maintain certain financial covenants, all of which we met at March 31, 2020. Should the existing credit provider on the Group Credit Facility 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 Group Credit Facility. During March 2020, outside of this Group Credit Facility, we took actions to increase our letter of credit/revolver capacity to $3.1 billion. Subsequently in April 2020, our letters of credit usage increased to $2.0 billion, of which $1.3 billion relates to our variable annuity reinsurance program. This additional collateral is required to support the increase in our liability, driven by the fair value liability adjustment in our variable annuity program from lower global equity markets as a result of the economic impact of COVID-19. We believe that this negative fair value adjustment in the quarter is fundamentally transient and is required because the variable annuity program is accounted for as a derivative for accounting purposes, and therefore, will fluctuate with market conditions. Refer to "Credit Facilities" in our 2019 10-K for additional information.

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 three months ended March 31, 2020, 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 nil and $200 million from its Bermuda subsidiaries during the three months ended March 31, 2020 and 2019, respectively.

The payment of any dividends from CGM or its subsidiaries is subject to applicable U.K. insurance laws and regulations. In addition, the release of funds by Syndicate 2488 to subsidiaries of CGM is subject to regulations promulgated by the Society of Lloyd's. The U.S. insurance subsidiaries of Chubb INA Holdings Inc. (Chubb INA) may pay dividends, without prior regulatory approval, subject to restrictions set out in state law of the subsidiary's domicile (or, if applicable, commercial domicile). Chubb INA's international subsidiaries are also subject to insurance laws and regulations particular to the countries in which the subsidiaries operate. These laws and regulations sometimes include restrictions that limit the amount of dividends payable without prior approval of regulatory insurance authorities. Chubb Limited received no dividends from CGM or Chubb INA during the three months ended March 31, 2020 and 2019. 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 no dividends from its subsidiaries during the three months ended March 31, 2020 and 2019, 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 three months ended March 31, 2020 and 2019.

Operating cash flows were $1.7 billion in the three months ended March 31, 2020, compared to $1.3 billion in the prior year period, an increase of $390 million, principally reflecting higher underwriting income, partially due to lower catastrophe loss payments.

Cash used for investing was $1.0 billion in the three months ended March 31, 2020, compared to $0.7 billion in the prior year period. The current year included a $1.55 billion deposit for the purchase of an additional 22.4 percent ownership in Huatai

Group. In addition, the current year had net proceeds of $263 million from sale of investments and derivative settlements, compared to cash used of $505 million for net investments purchased and derivative settlements in the prior year.

Cash used for financing was $645 million in the three months ended March 31, 2020, compared to $630 million in the prior year period and was principally comprised of share repurchases and dividends paid on Common Shares.

Both internal and external forces influence our financial condition, results of operations, and cash flows. Claim settlements, premium levels, and investment returns may be impacted by changing rates of inflation and other economic conditions. In many cases, significant periods of time, ranging up to several years or more, may lapse between the occurrence of an insured loss, the reporting of the loss to us, and the settlement of the liability for that loss.

We use repurchase agreements as a funding alternative. At March 31, 2020, there were $1.4 billion in repurchase agreements outstanding with various maturities over the next nine months.

Capital Resources

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

(in millions of U.S. dollars, except for ratios)	March 31 2020	December 31 2019
Short-term debt	**$ 1,300**	$ 1,299
Long-term debt	**13,510**	13,559
Total financial debt	**14,810**	14,858
Trust preferred securities	**308**	308
Total shareholders' equity	**52,197**	55,331
Total capitalization	**$ 67,315**	$ 70,497
Ratio of financial debt to total capitalization	**22.0%**	21.1%
Ratio of financial debt plus trust preferred securities to total capitalization	**22.5%**	21.5%

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 three months ended March 31, 2020, we repurchased $326 million of Common Shares in a series of open market transactions under the Board of Directors (Board) share repurchase authorization. At March 31, 2020, there were 28,416,082 Common Shares in treasury with a weighted average cost of $136.25 per share, and $1.12 billion in share repurchase authorization remained through December 31, 2020. On April 22, 2020, we announced that given the current economic environment and to preserve capital for both risk and opportunity, we had suspended share repurchases until further notice. We did not engage in any share repurchase activity during April 2020.

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

Dividends

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

At our May 2019 annual general meeting, our shareholders approved an annual dividend for the following year of up to $3.00 per share, or CHF 3.00 per share, calculated using the USD/CHF exchange rate as published in the Wall Street Journal on May 16, 2019, which was paid in four quarterly installments of $0.75 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 2020 annual general meeting, and is authorized to abstain from distributing a dividend at its discretion. The annual dividend approved in May 2019 represented an $0.08 per share increase ($0.02 per quarter) over the prior year dividend.

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

Shareholders of record as of:	Dividends paid as of:	
December 20, 2019	January 10, 2020	$0.75 (CHF 0.74)
March 20, 2020	April 10, 2020	$0.75 (CHF 0.72)

ITEM 3. Quantitative and Qualitative Disclosures about Market Risk

Refer to Item 7A included in our 2019 Form 10-K.

Foreign currency management

As a global company, Chubb entities transact business in multiple currencies. Our policy is to generally match assets, liabilities and required capital for each individual jurisdiction in local currency, which would include the use of derivatives. We do not hedge our net asset non-U.S. dollar capital positions. We occasionally engage in hedging activity for planned cross border transactions. For an estimated impact of foreign currency movement on our net assets denominated in non-U.S. currencies, refer to Item 7A in our 2019 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, 2019 balances disclosed in the 2019 Form 10-K.

Reinsurance of GMDB and GLB guarantees

Chubb views its variable annuity reinsurance business as having a similar risk profile to that of catastrophe reinsurance with the probability of long-term economic loss relatively small, at the time of pricing. Adverse changes in market factors and policyholder behavior will have an impact on both Life Insurance underwriting income and net income. 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.

Net income is directly impacted by changes in benefit reserves calculated in connection with reinsurance of variable annuity guarantees. In addition, 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 established for a GLB reinsurance contract represents the difference between the fair value of the contract and the benefit reserves. Benefit reserves and FVL calculations are directly affected by market factors, including equity levels, interest rate levels, credit risk, and implied volatilities, as well as policyholder behaviors, such as annuitization and lapse rates, and policyholder mortality.

The tables below are estimates of the sensitivities to instantaneous changes in economic inputs (e.g., equity shock, interest rate shock etc.) or actuarial assumptions at March 31, 2020 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:

- No changes to the benefit ratio used to establish benefit reserves at March 31, 2020.
- Equity shocks impact all global equity markets equally
  - Our liabilities are sensitive to global equity markets in the following proportions: 75 percent—85 percent U.S. equity, and 15 percent—25 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), 25 percent —35 percent medium-term rates (maturing between 5 years and 10 years, inclusive), and 55 percent—65 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 March 31, 2020 market levels and only applicable to the equity and interest rate sensitivities table below.

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

- In addition, the tables below do not reflect the expected quarterly run rate of net income generated by the variable annuity guarantee reinsurance portfolio if markets remain unchanged during the period. All else equal, if markets remain unchanged during the period, the Gross FVL will increase, resulting in a realized loss. This realized loss occurs primarily because the guarantees provided in the underlying contracts continue to become more valuable even when markets remain unchanged. We refer to this increase in Gross FVL as “timing effect”. The unfavorable impact of timing effect on our Gross FVL in a quarter is not reflected in the sensitivity tables below. For this reason, when using the tables below to estimate the sensitivity of Gross FVL in the second quarter of 2020 to various changes, it is necessary to assume an additional $5 million to $45 million increase in Gross FVL and realized losses. The impact to Net income is partially mitigated because this realized loss is partially offset by the positive quarterly run rate of Life Insurance underwriting income generated by the variable annuity guarantee reinsurance portfolio if markets remain unchanged during the period. Note that both the timing effect and the quarterly run rate of Life Insurance underwriting income change over time as the book ages.

Sensitivities to equity and interest rate movements

(in millions of U.S. dollars)		Worldwide Equity Shock					
Interest Rate Shock		+10%	Flat	-10%	-20%	-30%	-40%
+100 bps	(Increase)/decrease in Gross FVL	$ 445	$ 277	$ 92	$ (110)	$ (325)	$ (549)
	Increase/(decrease) in hedge value	(50)	—	50	99	149	199
	Increase/(decrease) in net income	$ 395	$ 277	$ 142	$ (11)	$ (176)	$ (350)
Flat	(Increase)/decrease in Gross FVL	$ 180	$ —	$ (195)	$ (404)	$ (621)	$ (848)
	Increase/(decrease) in hedge value	(50)	—	50	99	149	199
	Increase/(decrease) in net income	$ 130	$ —	$ (145)	$ (305)	$ (472)	$ (649)
-100 bps	(Increase)/decrease in Gross FVL	$ (82)	$ (271)	$ (476)	$ (692)	$ (916)	$ (1,153)
	Increase/(decrease) in hedge value	(50)	—	50	99	149	199
	Increase/(decrease) in net income	$ (132)	$ (271)	$ (426)	$ (593)	$ (767)	$ (954)

Sensitivities to Other Economic Variables	AA-rated Credit Spreads		Interest Rate Volatility		Equity Volatility	
(in millions of U.S. dollars)	+100 bps	-100 bps	+2%	-2%	+2%	-2%
(Increase)/decrease in Gross FVL	$ 98	$ (107)	$ (1)	$ 1	$ (2)	$ 2
Increase/(decrease) in net income	$ 98	$ (107)	$ (1)	$ 1	$ (2)	$ 2

Sensitivities to Actuarial Assumptions

	Mortality			
(in millions of U.S. dollars)	+20%	+10%	-10%	-20%
(Increase)/decrease in Gross FVL	$ 24	$ 12	$ (12)	$ (24)
Increase/(decrease) in net income	$ 24	$ 12	$ (12)	$ (24)

	Lapses			
(in millions of U.S. dollars)	+50%	+25%	-25%	-50%
(Increase)/decrease in Gross FVL	$ 144	$ 75	$ (80)	$ (166)
Increase/(decrease) in net income	$ 144	$ 75	$ (80)	$ (166)

	Annuitization			
(in millions of U.S. dollars)	+50%	+25%	-25%	-50%
(Increase)/decrease in Gross FVL	$ (678)	$ (362)	$ 418	$ 899
Increase/(decrease) in net income	$ (678)	$ (362)	$ 418	$ 899

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 March 31, 2020 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	$ 265	$ 454	$ 764	$ 844	$ 774	$ 656
Claims at 100% immediate mortality	183	178	166	151	136	123

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	$ 1,601	$ 2,058	$ 2,523	$ 2,916	$ 3,208	$ 3,432

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	$ 52	$ 61	$ 70	$ 79	$ 86	$ 93
GLB net amount at risk	504	622	750	877	1,000	1,014
Claims at 100% immediate mortality	35	35	35	35	34	35

The treaty limits control the increase in the GMDB net amount at risk as equity markets fall. The GMDB net amount at risk continues to grow 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 March 31, 2020. 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 January 14, 2016, Chubb completed the acquisition of The Chubb Corporation. For the three months ended March 31, 2020, we continued to integrate the information technology environments of the two companies.

There were no other changes to Chubb's internal controls over financial reporting for the three months ended March 31, 2020 that have materially affected, or are reasonably likely to materially affect, Chubb's internal controls over financial reporting.

ITEM 1. Legal Proceedings

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

ITEM 1A. Risk Factors

The following supplements the risk factors that could have a material impact on our results of operations or financial condition as described under "Risk Factors" in Item 1A of Part I of our 2019 Form 10-K.

COVID-19, the Effects of Global Actions Taken to Contain its Spread, and its Economic and Societal Impact Could Adversely Impact Our Businesses, Assets and Financial Performance.

COVID-19, (the “virus”, or the “pandemic”) is causing significant disruption to public health, the global economy, financial markets, and commercial, social and community activity generally. The pandemic will have a significant effect on our company’s business operations and current and future financial performance. We may experience higher levels of loss and claims activity in certain lines of business and our premiums written and earned could also be adversely affected by a suppression of global commercial activity that results in a reduction in insurable assets and other exposure. Financial conditions resulting from the

virus may also have a negative effect on the value and quality of the assets we hold within our portfolio of invested assets, thereby adversely affecting our investment income and increasing our credit and related risk. Certain lines of our business, such as our variable annuity life reinsurance business, may require additional forms of collateral in the event of a decline in the securities and benchmarks to which those repayment mechanisms are linked.

Governmental, Regulatory and Judicial Actions in Response to the COVID-19 Pandemic May Adversely Affect Our Financial Performance and Our Ability to Conduct Our Businesses as We Have Historically.
Insurance and financial regulators may attempt to impose new obligations on insurers in connection with the pandemic that could materially affect our business or profitability, including any retroactive change to the terms of existing insurance contracts that generally exclude business interruption losses arising from pandemic. While we cannot be certain of ultimate judicial outcomes, we believe that any retroactive attempt to rewrite the terms of existing contracts would be unconstitutional.
In addition, there is a risk that novel litigation theories, in conjunction with a diverse range of potential jury and judicial venues across many jurisdictions, could give rise to unforeseen pandemic related liability.

The Disruption and Other Effects Caused by COVID-19 Could Adversely Impact the Efficiency and Productivity of Our Business Operations, Which Could Increase our Expenses and Adversely Affect our Financial Performance and Results.
To protect our employees and in response to the global and regional restrictions on interpersonal contact and travel because of the COVID-19 pandemic, much of our work force is working remotely, placing increased demands on our IT systems. While we have continued to conduct our business effectively, there is no assurance that our ability to continue to function in this new environment will not be adversely affected by an extended period of limited access to our physical facilities or by other developments such as an extended disruption in the telecommunications and internet infrastructure that support our remote work capability.

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 March 31, 2020:

Period	Total Number of Shares Purchased [1]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan [2]	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plan [3]
January 1 through January 31	262,066	$ 152.53	259,200	$ 1.41 billion
February 1 through February 29	1,281,153	$ 158.42	892,200	$ 1.27 billion
March 1 through March 31	1,116,179	$ 129.33	1,114,750	$ 1.12 billion
Total	2,659,398	$ 145.63	2,266,150	

(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 the exercising of options by employees.

(2) The aggregate value of shares repurchased in the three months ended March 31, 2020 as part of the publicly announced plan was $326 million.

(3) Refer to Note 8 to the Consolidated Financial Statements for more information on the Chubb Limited securities repurchase authorization. In November 2019, the Board authorized the repurchase of up to $1.5 billion of Chubb's Common Shares from November 21, 2019 through December 31, 2020. On April 22, 2020, we announced that given the current economic environment and to preserve capital for both risk and opportunity, we had suspended share repurchases until further notice. We did not engage in any share repurchase activity during April 2020.

ITEM 6. Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Original Number	Date Filed	
3.1	Articles of Association of the Company, as amended	8-K	3.1	May 18, 2018	
3.2	Organizational Regulations of the Company, as amended	8-K	3.1	November 21, 2016	
4.1	Articles of Association of the Company, as amended	8-K	4.1	May 18, 2018	
4.2	Organizational Regulations of the Company, as amended	8-K	3.1	November 21, 2016	
10.1*	Outside Directors Compensation Parameters	10-K	10.11	February 27, 2020	
10.2	Form of Performance Based Restricted Stock Award Terms under the Chubb Limited 2016 Long-Term Incentive Plan for Executive Officers				X
10.3	Form of Performance Based Restricted Stock Award Terms under the Chubb Limited 2016 Long-Term Incentive Plan for Swiss Executive Management				X
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 March 31, 2020 formatted in Inline XBRL: (i) Consolidated Balance Sheets at March 31, 2020, and December 31, 2019; (ii) Consolidated Statements of Operations and Comprehensive Income for the three months ended March 31, 2020 and 2019; (iii) Consolidated Statements of Shareholders' Equity for the three months ended March 31, 2020 and 2019; (iv) Consolidated Statements of Cash Flows for the three months ended March 31, 2020 and 2019; 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)

April 29, 2020

/s/ Evan G. Greenberg

Evan G. Greenberg
Chairman, President and Chief Executive Officer

April 29, 2020

/s/ Philip V. Bancroft

Philip V. Bancroft
Executive Vice President and Chief Financial Officer