Liberty Mutual Holding Company Inc.

Third Quarter 2022

Consolidated Financial Statements

LIBERTY MUTUAL HOLDING COMPANY INC.

Consolidated Statement of Operations

(dollars in millions)

(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	**2021**	**2022**	**2021**
Revenues				
Premiums earned	$ 12,169	$ 10,672	$ 34,808	$ 31,051
Net investment income	281	1,411	2,074	4,112
Fee and other revenues	237	267	709	733
Net realized gains (losses)	53	20	(762)	83
Total revenues	12,740	12,370	36,829	35,979
Claims, Benefits and Expenses				
Benefits, claims and claim adjustment expenses	9,507	8,022	26,106	22,398
Operating costs and expenses	1,954	1,711	5,962	5,216
Amortization of deferred policy acquisition costs	1,659	1,701	4,729	4,798
Interest expense	133	119	375	354
Interest credited to policyholders	8	9	23	26
Total claims, benefits and expenses	13,261	11,562	37,195	32,792
Acquisition & integration costs	(23)	(4)	(80)	(13)
Restructuring costs	(5)	(36)	(5)	(147)
Unit linked life insurance	17	(7)	137	(95)
(Loss) Income from continuing operations before income tax expense and non-controlling interest	(532)	761	(314)	2,932
Income tax (benefit) expense	(179)	39	(117)	584
Consolidated net (loss) income	(353)	722	(197)	2,348
Less: Net income attributable to non-controlling interest	-	1	1	2
Net (loss) income attributable to Liberty Mutual Holding Company Inc.	$ (353)	$ 721	$ (198)	$ 2,346

Net Realized Gains (Losses)	**2022**	**2021**	**2022**	**2021**
Other-than-temporary impairment losses	$ (49)	$ (87)	$ (66)	$ (602)
Other net realized (losses) gains	(1)	92	(204)	337
Valuation changes on equity investments, derivatives, other	103	15	(492)	348
Total net realized gains (losses)	$ 53	$ 20	$ (762)	$ 83

Liberty Mutual Holding Company Inc.

Consolidated Balance Sheets

(dollars in millions)

(Unaudited)

	September 30, 2022	December 31, 2021
Assets:		
Investments		
Fixed maturities, available for sale, at fair value (amortized cost of $72,883 and $71,580)	$ 65,246	$ 73,106
Equity securities	1,694	3,034
Short-term investments	447	218
Mortgage loans	3,582	2,659
Other investments	14,980	13,401
Total investments	85,949	92,418
Cash and cash equivalents	11,027	10,777
Premium and other receivables	16,836	14,972
Reinsurance recoverables	18,575	17,776
Deferred tax asset	2,052	-
Deferred acquisition costs	4,264	3,994
Goodwill	5,722	5,672
Prepaid reinsurance premiums	2,604	2,053
Other assets	9,166	8,381
Total assets	$ 156,195	$ 156,043
Liabilities:		
Unpaid claims and claim adjustment expenses and future policy benefits:		
Property and casualty	$ 77,051	$ 72,049
Life	1,419	1,934
Other policyholder funds and benefits payable	14	16
Unearned premiums	28,362	24,950
Funds held under reinsurance treaties	347	309
Short-term debt	547	473
Long-term debt	9,515	9,181
Accrued postretirement and pension benefits	2,577	2,685
Payable for investments purchased and loaned	3,059	5,102
Deferred tax liability	-	201
Other liabilities	12,348	11,295
Total liabilities	135,239	128,195
Equity:		
Unassigned equity	29,210	28,776
Accumulated other comprehensive loss	(8,454)	(960)
Total policyholders' equity	20,756	27,816
Non-controlling interest	200	32
Total equity	20,956	27,848
Total liabilities and equity	$ 156,195	$ 156,043

Liberty Mutual Holding Company Inc.

Consolidated Statements of Comprehensive Income

(dollars in millions)

(Unaudited)

	Three Months Ended September 30, 2022	Three Months Ended September 30, 2021	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021
Consolidated net (loss) income	$ (353)	$ 722	$ (197)	$ 2,348
Other comprehensive (loss), net of taxes:				
Unrealized losses on securities	(2,143)	(367)	(7,229)	(1,184)
Foreign currency translation and other adjustments	(16)	(90)	(98)	(22)
Other comprehensive loss, net of taxes	(2,159)	(457)	(7,327)	(1,206)
Comprehensive (loss) income	$ (2,512)	$ 265	$ (7,524)	$ 1,142

See accompanying notes to the unaudited consolidated financial statements

Liberty Mutual Holding Company Inc.

Consolidated Statements of Changes in Total Equity

(dollars in millions)

(Unaudited)

	Nine Months Ended September 30,	
	2022	**2021**
Balance at beginning of the year	$ 27,848	$ 25,957
Cumulative effect from the adoption of ASU 2016-02, Leases	90	-
Mutual Merger with State Auto	542	-
Consolidated net (loss) income	(197)	2,348
Other comprehensive loss, net of taxes	(7,327)	(1,206)
Total comprehensive (loss) income	(7,524)	1,142
Balance at end of the period	$ 20,956	$ 27,099

See accompanying notes to the unaudited consolidated financial statements

LIBERTY MUTUAL HOLDING COMPANY INC.

Consolidated Statements of Cash Flows

(dollars in millions)

(Unaudited)

	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021
Cash flows from operating activities:		
Consolidated net (loss) income	$ (197)	$ 2,348
Adjustments to reconcile consolidated net (loss) income to net cash provided by operating activities:		
Depreciation and amortization	662	572
Realized losses (gains)	762	(83)
Undistributed private equity investment gains	(381)	(2,658)
Premium, other receivables, and reinsurance recoverables	(3,011)	(1,937)
Deferred acquisition costs	(357)	(218)
Liabilities for insurance reserves	6,214	6,067
Taxes payable, net of deferred	(588)	445
Other, net	908	145
Total adjustments	4,209	2,333
Net cash provided by operating activities	4,012	4,681
Cash flows from investing activities:		
Purchases of investments	(37,878)	(56,143)
Sales and maturities of investments	37,150	51,088
Property and equipment purchased, net	(105)	46
Cash paid for mutual merger, net of cash on hand	(1,069)	-
Other investing activities	(1,243)	(67)
Net cash used in investing activities	(3,145)	(5,076)
Cash flows from financing activities:		
Net activity in policyholder accounts	(16)	(68)
Debt financing, net	483	972
Net security lending activity and other financing activities	(828)	2,241
Net cash (used in) provided by financing activities	(361)	3,145
Effect of exchange rate changes on cash	(256)	(94)
Net increase in cash and cash equivalents	250	2,656
Cash and cash equivalents, beginning of year	10,777	8,224
Cash and cash equivalents, end of period	$ 11,027	$ 10,880

See accompanying notes to the unaudited consolidated financial statements

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying consolidated financial statements include the accounts of Liberty Mutual Holding Company Inc., entities over which the Company exercises control including majority and wholly owned subsidiaries and variable interest entities ("VIE") when the Company is deemed the primary beneficiary (collectively "LMHC" or the "Company"). The minority ownership of consolidated affiliates is represented in equity as non-controlling interest. All material intercompany transactions and balances have been eliminated.

The accompanying consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP"). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The Company's principal estimates include (1) unpaid claims and claim adjustment expense reserves, including asbestos and environmental liability reserves and loss sensitive premium attributable to prior years, (2) reinsurance recoverables and associated uncollectible allowance, (3) fair value determination and other-than temporary impairments of the investment portfolio and direct investments in natural resources, (4) valuation of goodwill and intangible assets, (5) deferred income tax valuation allowance, and (6) pension and post-retirement benefit obligations. While the amounts included in the consolidated financial statements reflect management's best estimates and assumptions, these amounts ultimately could vary.

Adoption of New Accounting Standards

The Company adopted the FASB issued updated guidance for leases, ASU 2016-02, which requires a lessee to recognize a right-of-use asset and a lease liability on the balance sheet for leases with terms longer than 12 months. Leases are classified as either finance or operating, with classification affecting the pattern of expense recognition in the statements of income. The Company adopted the updated guidance for the quarter ended March 31, 2022, and elected the option allowed in the transition guidance to recognize a cumulative effect adjustment to the opening balance of unassigned equity in the year of adoption. The adoption resulted in the recognition of a right-of-use asset and a lease liability of $476 and an equity adjustment of $90 net of tax.

Future Adoption of New Accounting Standards

The Company will adopt the FASB issued ASU 2016-13, Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments ("ASU 2016-13"). ASU 2016-13 replaces the current incurred loss model with an expected credit loss model, which measures credit losses on financial instruments measured at amortized cost and will require companies to recognize an allowance for expected credit losses. In addition, ASU 2016-13 also amends the credit loss measurement guidance for available-for-sale debt securities and beneficial interests in securitized financial assets. This amendment removes certain factors to consider when determining whether credit losses should be recognized and will require companies to recognize expected credit losses through an allowance. ASU 2016-13 is effective for non-public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2022. The Company is currently evaluating the impact of the adoption of ASU 2016-13.

There are no other accounting standards not yet adopted by the Company that are expected to have a material impact on the consolidated financial statements.

Securities Lending

The Company participates in a securities lending program to generate additional income, whereby certain domestic fixed maturity securities and equity securities are loaned for a short period of time from the Company's portfolio to qualifying third parties via a lending agent. Terms of the agreement are for borrowers of these securities to provide collateral of at least 102% of the market value of the loaned securities. Acceptable collateral may be in the form of cash or permitted securities as outlined in the securities lending agreement. The market value of the loaned securities is monitored, and additional collateral is obtained if the market value of the collateral falls below 102% of the market value of the loaned securities. Under the terms of the securities lending program, the lending agent indemnifies the Company against borrower defaults. The loaned securities remain a recorded asset of the Company; however, the Company records a liability for amount of cash collateral held, representing its obligation to return the collateral related to the loaned securities.

Net Investment Hedge Instruments

The Company has designated non-derivative foreign currency denominated long-term debt and the related accrued interest as hedges of its net investment in certain foreign operations. Accordingly, the foreign currency translation of the debt instrument and accrued interest is recorded in accumulated other comprehensive loss, offsetting the foreign currency translation adjustment of the related net investment that is also recorded in accumulated other comprehensive loss. As of September 30, 2022, the Company had €1,750 million of outstanding long-term debt and approximately €20 million of accrued interest designated as non-derivative hedges of its net investment in certain foreign operations. As of September 30, 2022, the foreign currency translation of the debt instrument and accrued interest recorded in accumulated other comprehensive loss was $(220) (See Note 5 for further discussion).

(dollars in millions)

Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss consists principally of unrealized gains and losses on certain investments in debt securities, foreign currency translation adjustments, and pension and postretirement liability adjustments.

The components of accumulated other comprehensive loss excluding non-controlling interest, net of related deferred acquisition costs and taxes, are as follows:

	September 30, 2022	December 31, 2021
Unrealized (losses) gains on securities	$(6,210)	$1,019
Foreign currency translation and other adjustments	(1,300)	(961)
Pension and post retirement liability funded status	(944)	(1,018)
Accumulated other comprehensive loss	$(8,454)	$(960)

The following tables present the changes in the components of other comprehensive (loss) income for three and nine months ended September 30, 2022 and 2021, respectively.

Three months ended September 30, 2022	Unrealized losses on securities	Change in pension and post retirement plans funded status	Foreign currency translation and other adjustments [(1)]	Total
Unrealized change arising during the period	$(2,635)	$-	$(36)	$(2,671)
Less: Reclassification adjustments included in consolidated net income	(13)	(31)	-	(44)
Total other comprehensive (loss) income before income tax expense	(2,622)	31	(36)	(2,627)
Less: Income tax (benefit) expenses	(479)	6	5	(468)
Total other comprehensive (loss) income net of income tax (benefit)expense	$(2,143)	$25	$(41)	$(2,159)

(1) Includes $170 of non-controlling interest

Three months ended September 30, 2021	Unrealized (losses) gains on securities	Change in pension and post retirement plans funded status	Foreign currency translation and other adjustments	Total
Unrealized change arising during the period	$(371)	$-	$(118)	$(489)
Less:Reclassification adjustments included in consolidated net income(loss)	96	(35)	-	61
Total other comprehensive (loss) income before income tax expense	(467)	35	(118)	(550)
Less: Income tax (benefit) expenses	(100)	7	-	(93)
Total other comprehensive (loss) income, net of income tax (benefit) expense	$(367)	$28	$(118)	$(457)

Nine months ended September 30, 2022	Unrealized losses on securities [(1)]	Change in pension and post retirement plans funded status	Foreign currency translation and other adjustments [(2)]	Total
Unrealized change arising during the period	$(9,251)	$-	$(141)	$(9,392)
Less: Reclassification adjustments included in consolidated net income	(188)	(93)	-	(281)
Total other comprehensive (loss) income before income tax expense	(9,063)	93	(141)	(9,111)
Less: Income tax (benefit) expenses	(1,834)	19	31	(1,784)
Total other comprehensive (loss) income, net of income tax (benefit) expense	$(7,229)	$74	$(172)	$(7,327)

(1) Includes $(1) of non-controlling interest

(2) Includes $168 of non-controlling interest

(dollars in millions)

Nine months ended September 30, 2021	Unrealized (losses) gains on securities	Change in pension and post retirement plans funded status	Foreign currency translation and other adjustments(1)	Total
Unrealized change arising during the period	$(1,219)	$1	$(108)	$(1,326)
Less: Reclassification adjustments included in consolidated net income	278	(120)	-	158
Total other comprehensive (loss) income before income tax expense	(1,497)	121	(108)	(1,484)
Less: Income tax (benefit) expenses	(313)	25	10	(278)
Total other comprehensive (loss) income net of income tax (benefit) expense	$(1,184)	$96	$(118)	$(1,206)

(1) Includes $(1) of non-controlling interest

(2) ACQUISITIONS, MERGERS AND DISPOSITIONS

ACQUISITIONS

AmGeneral Insurance Berhad

On July 28, 2022, the Company completed its acquisition of Malaysian insurer AmGeneral Insurance Berhad. Liberty Insurance Berhad acquired 100% shares of AmGeneral, and AmBank Group's share of the sale proceeds were in the form of cash and consideration shares, which resulted in AmBank Group holding a 30% interest in the Liberty Insurance Berhad and AmGeneral businesses. The AmGeneral and Liberty Insurance Berhad operations will, at a subsequent date, be formally merged. The table below details the preliminary allocation of assets acquired and liabilities assumed. The fair values listed below are the Company's best estimates as of September 30, 2022, and are subject to adjustments as additional information becomes available to complete the allocation.

		As of July 28, 2022
Assets		
	Total investments	835
	Cash and cash equivalents	42
	Premiums and other receivables	12
	Reinsurance recoverable	116
	Goodwill	83
	Other assets	104
	Total assets	1,192
Liabilities		
	Unpaid claims and claim adjustment expenses	310
	Unearned premium	159
	Deferred tax liability	7
	Other liabilities	201
	Total liabilities	677

Direct costs related to the acquisition were expensed as incurred. Integration and acquisition costs principally consisting of non-recurring banking, legal, tax and accounting services, retention and severance costs are reflected separately on the consolidated statements of income.

The following table summarizes the carrying value of intangible assets the Company recognized in other assets on the consolidated balance sheet as a result of the AmGen acquisition as of September 30, 2022.

(dollars in millions)

	Carrying Value September 30, 2022	Period (years)	Method
Value of business acquired	17	1	Straight-line
Trade name	12	20	Straight-line
Bancassurance distribution channel	38	20	Straight-line
Other distribution network	9	20	Straight-line
Total intangible assets	76		

For the nine months ended September 30, 2022 the Company recognized $4 of amortization expense which is reflected in insurance operating costs and expenses on the consolidated statements of income. Estimated amortization for the years ended December 31, 2022 through 2026 is $10, $15, $3, $3, and $3 respectively.

MERGERS

State Auto

On March 1, 2022, the Company completed the acquisition of State Auto Group, a super-regional insurance holding company headquartered in Columbus, Ohio. Under the terms of the agreement, State Auto mutual members became mutual members of Liberty Mutual and Liberty Mutual acquired all of the publicly held shares of common stock of State Auto Financial for $52 per share in cash. The table below details the preliminary allocation of assets acquired and liabilities assumed. The fair values listed below are the Company's best estimates as of September 30, 2022, and are subject to adjustments as additional information becomes available to complete the allocation.

	As of March 1, 2022
Assets	
Total investments	3,335
Cash and cash equivalents	176
Premiums and other receivables	650
Reinsurance recoverable	189
Goodwill	59
Prepaid reinsurance premiums	16
Deferred tax asset	63
Other assets	467
Total assets	4,955
Liabilities	
Unpaid claims and claim adjustment expenses	1,799
Unearned premium	1,233
Long-term debt	203
Other liabilities	198
Total liabilities	3,433

Direct costs related to the acquisition were expensed as incurred. Integration and acquisition costs principally consisting of non-recurring banking, legal, tax and accounting services, retention and severance costs are reflected separately on the consolidated statements of income.

The following table summarizes the carrying value of intangible assets the Company recognized in other assets on the consolidated balance sheet as a result of the State Auto acquisition as of September 30, 2022.

(dollars in millions)

	Carrying Value September 30, 2022	Period (years)	Method
Value of business acquired	54	1	Straight-line
Trade name	4	1	Straight-line
Agency relationship	28	10	Straight-line
Internally developed software	13	5	Straight-line
Licenses	47	Not subject to amortization	Not subject to amortization
Total intangible assets	146		

For the nine months ended September 30, 2022 the Company recognized $83 of amortization expense which is reflected in insurance operating costs and expenses on the consolidated statements of income. Estimated amortization for the years ended December 31, 2022 through 2026 is $119, $29, $6, $6, and $6 respectively.

DISPOSITIONS

In August 2021, the Company entered into an agreement to sell an Australian subsidiary entity (Baralaba Coal Company) and recorded an incremental impairment of $10 in Q4, bringing the total 2021 impairment to $509. The transaction closed in December 2021 with a realized loss incurred of $30.

(3) INVESTMENTS

The amortized cost, gross unrealized gains and losses and fair values of available for sale investments as of September 30, 2022 and December 31, 2021, are as follows:

September 30, 2022	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. government and agency securities	$8,843	$-	$(833)	$8,010
Residential MBS[(1)]	6,588	2	(675)	5,915
Commercial MBS	4,515	10	(326)	4,199
Other MBS and ABS[(2)]	4,956	-	(415)	4,541
U.S. state and municipal	8,112	12	(758)	7,366
Corporate and other	34,482	21	(4,269)	30,234
Foreign government securities	5,347	24	(430)	4,941
Redeemable Preferred Stock	40	-	-	40
Total securities available for sale	$72,883	$69	$(7,706)	$65,246

December 31, 2021	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. government and agency securities	$11,421	$78	$(43)	$11,456
Residential MBS[(1)]	5,287	100	(19)	5,368
Commercial MBS	4,045	190	(19)	4,216
Other MBS and ABS[(2)]	5,535	49	(33)	5,551
U.S. state and municipal	8,255	537	(12)	8,780
Corporate and other	31,986	847	(197)	32,636
Foreign government securities	5,051	132	(84)	5,099
Total securities available for sale	$71,580	$1,933	$(407)	$73,106

(1) Mortgage-backed securities ("MBS")

(2) Asset-backed securities ("ABS")

As of September 30, 2022 and December 31, 2021, the fair value of common stock securities associated with non-guaranteed unit linked products where the policyholder bears the investment risk were approximately $564 and $805, respectively.

As of September 30, 2022 and December 31, 2021, the fair values of fixed maturity securities and equity securities loaned were approximately $3,240 and $4,714, respectively. Cash and short-term investments received as collateral in connection with the loaned securities were approximately $2,881 and $3,580 as of September 30, 2022 and December 31, 2021, respectively. Investments other than cash and short-term investments received as collateral in connection with the loaned securities were approximately $429 and $1,234 as of September 30, 2022 and December 31, 2021, respectively.

(dollars in millions)

The amortized cost and fair value of fixed maturities as of September 30, 2022, by contractual maturity are as follows:

	Amortized Cost	**Fair Value**
Due to mature:		
One year or less	$2,049	$2,024
Over one year through five years	23,154	21,384
Over five years through ten years	22,082	19,190
Over ten years	9,539	7,993
MBS and ABS of government and corporate agencies	16,059	14,655
Total fixed maturities	$72,883	$65,246

Actual maturities may differ from contractual maturities as borrowers may have the right to call or prepay obligations with or without call or prepayment penalties. Due to the potential for prepayment on MBS and ABS, they are not categorized by contractual maturity.

The following table summarizes the Company's gross realized gains and losses by asset type for the three and nine months ended September 30, 2022 and 2021:

	Three Months Ended September 30,		**Nine Months Ended September 30,**	
Components of Net Realized Gains (Losses)	**2022**	**2021**	**2022**	**2021**
Fixed maturities:				
Gross realized gains	$37	$123	$156	$488
Gross realized losses	(49)	(27)	(344)	(210)
Equities:				
Gross realized gains	82	101	228	376
Gross realized losses	(103)	(101)	(912)	(72)
Derivatives:				
Gross realized gains	37	43	92	163
Gross realized losses	-	(39)	(57)	(87)
Other:				
Gross realized gains	89	40	329	108
Gross realized losses	(40)	(120)	(254)	(683)
Total net realized gains (losses)	$53	$20	$(762)	$83

Included in the above are unrealized gains (losses) related to equity securities still held of $47 and $(98) respectively, for the three and nine months ended September 30, 2022, and $12 and $327, respectively, for the three and nine months ended September 30, 2021.

As of September 30, 2022 and December 31, 2021, other-than-temporary impairment losses recognized through accumulated other comprehensive loss were $(3).

During the three months ended September 30, 2022 and 2021, the Company recorded $(49) and $(87) of impairment losses, respectively. During the nine months ended September 30, 2022 and 2021, the Company recorded $(66) and $(602) of impairment losses, respectively. Included in the impairment losses are impairment charges for assets measured at fair value on a non-recurring basis which are summarized in the following table for the nine months ended September 30, 2022 and 2021:

	2022	**2021**
Natural resources	$(12)	$(601)
Software	(5)	-
Intangible	(21)	-
Total	$(38)	$(601)

During the three months ended September 30, 2022 and 2021, proceeds from sales of fixed maturities available for sale were $2,190 and $8,042, respectively. The gross realized gains (losses) on sales of fixed maturities available for sale totaled $31 and $(25) in 2022 and $104 and $(25) in 2021. During the three months ended September 30, 2022 and 2021, proceeds from sales of equities at fair value were $378 and $106, respectively. The gross realized gains (losses) on sales of equities at fair value totaled $7 and $(68) in 2022 and $10 and $(19) in 2021. During the nine months ended September 30, 2022 and 2021, proceeds from sales of fixed maturities available for sale were $26,750 and $41,903, respectively. The gross realized gains (losses) on sales of fixed maturities available for sale totaled $139 and $(305) in

(dollars in millions)

2022 and $420 and $(196) in 2021. During the nine months ended September 30, 2022 and 2021, proceeds from sales of equities at fair value were $3,108 and $344, respectively. The gross realized gains (losses) on sales of equities at fair value totaled $164 and $(236) in 2022 and $16 and $(36) in 2021.

The following tables summarize the gross unrealized losses and fair value of available for sale investments by the length of time that individual securities have been in a continuous unrealized loss position as of September 30, 2022 and December 31, 2021, and that are not deemed to be other-than-temporarily impaired:

September 30, 2022	**Less Than 12 Months**		**12 Months or Longer**	
	Unrealized Losses	**Fair Value of Investments with Unrealized Losses**	**Unrealized Losses**	**Fair Value of Investments with Unrealized Losses**
U.S. government and agency securities	$(732)	$7,172	$(100)	$811
Residential MBS	(499)	4,756	(176)	1,093
Commercial MBS	(271)	3,808	(55)	302
Other MBS and ABS	(231)	2,806	(184)	1,729
U.S. state and municipal	(661)	6,496	(97)	534
Corporate and other	(3,087)	23,724	(1,183)	5,362
Foreign government securities	(196)	2,748	(234)	1,623
Total Securities Available for Sale	$(5,677)	$51,510	$(2,029)	$11,454

December 31, 2021	**Less Than 12 Months**		**12 Months or Longer**	
	Unrealized Losses	**Fair Value of Investments with Unrealized Losses**	**Unrealized Losses**	**Fair Value of Investments with Unrealized Losses**
U.S. government and agency securities	$(32)	$6,373	$(11)	$326
Residential MBS	(16)	1,755	(3)	126
Commercial MBS	(5)	431	(14)	152
Other MBS and ABS	(20)	2,993	(13)	95
U.S. state and municipal	(11)	916	(1)	29
Corporate and other	(143)	9,264	(54)	1,111
Foreign government securities	(55)	1,978	(29)	453
Total Securities Available for Sale	$(282)	$23,710	$(125)	$2,292

As of September 30, 2022, there were 2,169 securities that were in an unrealized loss position for 12 months or longer. The Company monitors the difference between the amortized cost and estimated fair value of fixed maturity securities to ascertain whether declines in value are temporary in nature. The Company currently does not have the intent to sell these securities and has determined it is not more likely than not that it would be required to sell these fixed maturity securities before they recover their fair value.

If the Company believes a decline in the value (including foreign exchange rates) of a particular fixed maturity security is temporary, the decline is recorded as an unrealized loss in policyholders' equity. If the decline is believed to be other-than-temporary, and the Company believes that it will not be able to collect all cash flows due on its fixed maturity securities, then the carrying value of the investment is written down to the expected cash flow amount and a realized loss is recorded as a credit impairment. A non-credit impairment loss is recognized in other comprehensive income, net of applicable taxes, as the difference between expected cash flows and fair value. The Company has concluded that the remaining gross unrealized losses of fixed maturity securities as of September 30, 2022, are temporary.

The Company reviews fixed maturity securities and other investments for impairment on a quarterly basis. These investments are reviewed for both quantitative and qualitative considerations including, but not limited to: (a) the extent of the decline in fair value below book value, (b) the duration of the decline, (c) significant adverse changes in the financial condition or near term prospects of the investment or issuer, (d) significant change in the business climate or credit ratings of the issuer, (e) general market conditions and volatility, (f) industry factors, (g) the past impairment of the security holding or the issuer and (h) impact of foreign exchange rates on foreign currency denominated securities. For fixed maturity securities that the Company does not intend to sell or for which it is more likely than not that the Company would not be required to sell before an anticipated recovery in value, the Company separates impairments into credit loss and non-credit loss components. The determination of the credit loss component of the impairment charge is based on the Company's best estimate of the present value of the cash flows expected to be collected from the fixed maturity security compared to its amortized cost and is reported as part of net realized gains. The non-credit component, the residual difference between the credit impairment component and the fair value, is recognized in other comprehensive income. The factors considered in making an evaluation for credit versus non-credit other-than-temporary impairment include the following: (a) failure of the issuer of the security to make scheduled interest or principal payments (including the payment structure of the fixed maturity security and the likelihood the issuer will be able to make payments that increase in the future), (b) performance indicators of the underlying assets in the security (including default and delinquency rates), (c) vintage, (d) geographic concentration and (e) industry analyst reports, sector credit ratings, and volatility of the security's fair value. In addition, the Company's accounting policy for other-than-temporary impairment recognition requires an other-than-temporary impairment charge be recorded when it is determined the security will be sold or it is more likely than not that the Company will be required to sell the security before recovery of the security's amortized cost basis (all fixed maturity securities and certain preferred equity securities) or the Company does not have the intent and ability to hold certain equity securities for a period of time that is sufficient to allow for any anticipated recovery in fair value.

The Company is required to review its natural resource and other equity method investments when facts and circumstances indicate that carrying values may not be recoverable. In performing a quarterly review, the fair value of the Company's investment is estimated using indicators including, but not limited to, market comparables and analyses, commodity prices, and discounted cash flows, and a realized loss is recognized for the excess, if any, of the investment's carrying value over its estimated fair value.

Variable Interest Entities

The Company invests in limited partnerships and other entities subject to VIE analysis under the VIE subsections of ASC 810, *Consolidation*. The Company analyzes each investment to determine whether it is a VIE, and if so, whether the Company is the primary beneficiary or a significant interest holder based on a qualitative and quantitative assessment. The Company evaluates the design of the entity, the risks to which the entity was designed to expose the variable interest holder and the extent of the Company's control of and variable interest in the VIE. As of September 30, 2022 and December 31, 2021, the Company has determined that it is not the primary beneficiary of any of its VIEs except for the Company's investment in its India joint venture, which is deemed immaterial.

The Company has variable interests in VIEs for which it is not the primary beneficiary and accounts for these VIEs under the equity method in accordance with ASC 323, *Investments-Equity Method and Joint Ventures*. The VIEs are principally private equity limited partnerships in which the Company has invested as a passive limited partner. The partnerships were deemed to be VIEs because the equity holders as a group lack the power to direct the activities that most significantly impact the respective entity's economic performance. The VIEs generate variability primarily from investment portfolio performance and that variability is passed to equity holders. The net carrying value of non-consolidated VIEs in which the Company has a variable interest was $11,274 and $10,080 as of September 30, 2022 and December 31, 2021, respectively, and the Company's maximum exposure to loss was $17,582 and $14,884 as of September 30, 2022 and December 31, 2021, respectively. The assets are included in other investments on the accompanying consolidated balance sheets. Maximum exposure to loss includes the carrying value and unfunded commitment of the VIE. The increase in the maximum exposure to loss from December 31, 2021 to September 30, 2022, is primarily related to valuation changes and new commitments to VIEs related to real estate and energy transition and infrastructure, partially offset by a decrease in traditional private equity.

Limited Partnership Investments

As of September 30, 2022 and December 31, 2021, the carrying values of limited partnership investments were $12,161 and $11,134, respectively. These investments consist of traditional private equity partnerships, real estate partnerships, natural resources partnerships (primarily energy, metals and mining, and agriculture and timber), and other partnership funds and equity method investments. Included in the carrying value of limited partnership investments are $549 and $614 of limited partnership investments where the Company has elected the fair value option as of September 30, 2022 and December 31, 2021, respectively. The Company's investments in limited partnership investments are long-term in nature. The Company believes these investments offer the potential for superior long-term returns and are appropriate in the overall context of a diversified portfolio.

(4) REINSURANCE

In the ordinary course of business, the Company assumes reinsurance and also cedes reinsurance to other insurers to reduce overall risk, including exposure to large losses and catastrophic events. The Company is also a member of various involuntary pools and associations and serves as a servicing carrier for residual market organizations. The Company remains contingently liable in the event reinsurers are unable to meet their obligations for paid and unpaid reinsurance recoverables and unearned premiums ceded under reinsurance agreements.

The Company reported reinsurance recoverables of $18,575 and $17,776 as of September 30, 2022 and December 31, 2021, respectively, net of allowance for doubtful accounts of $124 and $123, respectively. Included in these balances are $895 and $874 of paid recoverables and $17,804 and $17,025 of unpaid recoverables (including retroactive reinsurance), respectively.

Amounts recoverable from reinsurers are estimated in a manner consistent with the claim liability associated with the reinsured business. The Company evaluates and monitors the financial condition of its reinsurers under voluntary reinsurance arrangements to minimize its exposure to significant losses from reinsurer insolvencies. The Company reports its reinsurance recoverables net of an allowance for estimated uncollectible reinsurance recoverables. The allowance is based upon the Company's ongoing review of amounts outstanding, length of collection periods, changes in reinsurer credit standing and other relevant factors. Accordingly, the establishment of reinsurance recoverables and the related allowance for uncollectible reinsurance recoverables is also an inherently uncertain process involving estimates. Changes in these estimates could result in additional charges to the accompanying consolidated statements of income.

On November 5, 2019, Liberty Mutual Insurance Company ("LMIC") entered into a reinsurance transaction with National Indemnity Company ("NICO"), a subsidiary of Berkshire Hathaway Inc., on a combined aggregate excess of loss agreement for certain GRM U.S. Business Lines and GRS National Insurance workers compensation liabilities, commercial auto liability and general liability excluding umbrella and warranty ("NICO Casualty Reinsurance Transaction"). The first layer of the contract attaches at $300 below applicable held reserves at inception of $8,342 of combined aggregate reserves. The second layer of the contract provides adverse development coverage for $1,000 above a retention equal to $8,742. The contract includes a sublimit of $100 for certain general liability liabilities. At the closing of the NICO Casualty Reinsurance Transaction, but effective as of January 1, 2019, the Company ceded $300 of existing undiscounted liabilities, paid NICO total consideration of $462 and recorded a pre-tax loss of $173. This contract is accounted for on a retroactive basis.

In general terms, the covered business includes post December 31, 2018 development on: (1) certain workers compensation liabilities arising under policies on the books of the Company's GRM U.S. Business Lines and GRS National Insurance strategic business units as of December 31, 2018, as respects injuries or accidents occurring after December 31, 2013 and prior to January 1, 2019; (2) commercial auto liabilities arising under policies on the books of the Company's GRM U.S. Business Lines and GRS National Insurance strategic business units as of December 31, 2018, as respects injuries or accidents occurring prior to January 1, 2019; and (3) general liability excluding umbrella and warranty arising under policies on the books of the Company's GRM U.S. Business Lines and GRS National Insurance strategic business units as of December 31, 2018, as respects injuries or accidents occurring prior to January 1, 2019.

Since the NICO Casualty Reinsurance Transaction is accounted for as retroactive reinsurance in the Company's Consolidated Financial Statements, to the extent there is unfavorable development of losses covered by this reinsurance, an additional reinsurance benefit is recognized in the consolidated statement of operations until those benefits exceed the loss on the transaction. Reinsurance benefits will be deferred and are amortized into earnings over the period when underlying claims are settled.

As the aggregate development on the contract has exceeded the original pre-tax loss of $173, deferred gains are now being recorded. The Company reported deferred gain amortization of $46 and $37 at September 30, 2022 and December 31, 2021, respectively. As of September 30, 2022 and December 31, 2021, deferred gains were $213 and $226. Limits remaining on the contract as of September 30, 2022, were $555.

In conjunction with the Ironshore acquisition and effective May 1, 2017, the Company entered into a reinsurance transaction with NICO on a combined aggregate excess of loss agreement providing coverage for substantially all of Ironshore's reserves related to losses occurring prior to January 1, 2017. The first layer of the contract transfers $400 of held reserves at inception, for which the Company established reinsurance recoverables on the consolidated balance sheets. The second layer of the contract provides adverse development coverage for 95% of $500 above a retention equal to $3,006, minus paid losses between January 1, 2017 and May 1, 2017, which retention approximates the total held reserves on the covered business on Ironshore's opening balance sheet. The contract includes a sublimit of $277 for certain construction liability liabilities. The Company paid NICO consideration of $550, including interest accrued at the time of the settlement. The contract is accounted for on a prospective basis. Limits remaining on the contracts in total, and for construction liability liabilities, respectively, were $431 and zero as of September 30, 2022.

On July 17, 2014, LMIC entered into a reinsurance transaction with NICO on a combined aggregate excess of loss agreement for substantially all of the Company's U.S. workers compensation, asbestos and environmental liabilities (the "NICO Reinsurance Transaction"), attaching at $12,522 of combined aggregate reserves, with an aggregate limit of $6,500 and sublimits of $3,100 for asbestos and environmental liabilities and $4,507 for certain workers compensation liabilities. At the closing of the NICO Reinsurance Transaction, but effective as of January 1, 2014, the Company ceded $3,320 of existing undiscounted liabilities under this retroactive reinsurance agreement. NICO will provide $3,180 of additional aggregate adverse development reinsurance. The Company paid NICO total consideration of $3,046. With respect to the ceded asbestos and environmental business, NICO has been given authority to handle claims, subject to the Company's oversight and control. With respect to the ceded workers compensation business, the Company will continue to handle claims. The contract is accounted for on a retroactive basis.

In general terms, the covered business includes post December 31, 2013 development on: (1) asbestos and environmental liabilities arising under policies of insurance and reinsurance with effective dates prior to January 1, 2005; and (2) workers compensation liabilities arising out of policies on the books of the Company's former Commercial Insurance Strategic Business Unit as of December 31, 2013, as respects injuries or accidents occurring prior to January 1, 2014.

The Company reported the net position of the contract as a loss of $97 and $92 as of September 30, 2022 and December 31, 2021, respectively. Limits remaining on the contracts in total, and for asbestos and environmental liabilities, respectively, were $3,262 and $463 as of September 30, 2022.

Non Catastrophe Reinsurance
The Company purchases facultative and treaty reinsurance protection on a per risk, per policy, per loss and/or per occurrence basis. Treaty coverage is provided on a pro rata and excess of loss basis for portions of the Company's property, marine, terrorism, energy, third party motor, cyber, financial risk, surety, aviation and casualty lines portfolios.

Catastrophe Reinsurance
The Company has property catastrophe reinsurance coverage for its domestic business and certain specialty operations including: 1) hurricanes and earthquake reinsurance covering a substantial portion of $3,100 of loss in excess of $500 of retained loss in the United States, Canada and the Caribbean, excluding certain reinsurance exposures; 2) per occurrence and aggregate excess of loss coverage targeting our reinsurance exposures; and 3) quota share reinsurance programs. These programs are structured to meet the Company's established tolerances under its Enterprise Risk Management Program.

The Company purchases property catastrophe reinsurance coverage for the international property books to protect against international catastrophe events.

The Company purchases workers compensation catastrophe reinsurance, including coverage for its domestic commercial operations and certain specialty operations' US exposures. This program provides significant reinsurance protection in excess of $330 per occurrence retention, including coverage for terrorism events and/or losses for a single event at a single insured location in excess of $75. These contracts generally exclude acts of terrorism which are "certified" by the US government where such certified terrorism events involve the intentional use of nuclear, chemical, or biological materials.

Catastrophe Bond Reinsurance
On June 16, 2021, the Company entered into a multi-year property catastrophe reinsurance agreement, effective July 1, 2021, with Mystic Re IV Ltd. ("Mystic IV"), a Bermuda domiciled reinsurer, to provide a total of $300 of reinsurance coverage for the Company and its affiliates for named storms and earthquakes covering U.S., Caribbean and Canada. The reinsurance agreement is collateralized. Such collateral is provided by Mystic IV using proceeds from the issuance of certain catastrophe bonds. The reinsurance agreement provides per occurrence indemnity coverage. The Company has not recorded any recoveries under this program.

On December 21, 2020, the Company entered into a multi-year property catastrophe reinsurance agreement, effective January 1, 2021, with Mystic Re IV, a Bermuda domiciled reinsurer, to provide a total of $300 of reinsurance coverage for the Company and its affiliates for named storms covering U.S. and earthquakes covering U.S. and Canada. The reinsurance agreement is collateralized. Such collateral is provided by Mystic IV using proceeds from the issuance of certain catastrophe bonds. The reinsurance agreement provides per occurrence coverage based on weighted industry insured loss index. This loss index is weighted to align with the Company's assumed reinsurance portfolio. The Company has not recorded any recoveries under this program.

Florida Hurricane Catastrophe Fund
The Company participates in the Florida Hurricane Catastrophe Fund ("FHCF"), a state-mandated catastrophe fund that provides reimbursement to insurers for a portion of their Florida hurricane losses. FHCF resources may be insufficient to meet the obligations of FHCF. Limits, premium and reimbursements from FHCF apply on a per company basis. If losses fall disproportionately on one insurance entity within the Company, recovery from FHCF could be less than anticipated. On June 1, 2022, the Company renewed coverage for 90% of approximately $52 excess of $22. Recoveries from FHCF inure to the sole benefit of the Company. If the Company fails to recover as anticipated from FHCF there could be an adverse effect on the Company's business, financial condition or results of operations.

The Company participates in the Reinsurance to Assist Policyholders ("RAP") program, a state administered catastrophe fund that provides reimbursement to insurers for a portion of their Florida hurricane losses. Limits, premium and reimbursements from RAP apply on a per company basis. If losses fall disproportionately on one insurance entity within the Company, recovery from RAP could be less than anticipated. On July 15, 2022, the Company received coverage for 90% of approximately $5 excess of $14.

(dollars in millions)

(5) DEBT OUTSTANDING

Debt outstanding as of September 30, 2022 and December 31, 2021, includes the following:

Short-term debt:

	2022	2021
4.95% Notes, due 2022[1]	$-	$473
4.25% Notes, due 2023[1]	547	-
Total short-term debt	$547	$473

Long-term debt:

	2022	2021
4.25% Notes, due 2023[1]	$-	$547
1.75% €500 million Notes, due 2024	490	568
8.50% Surplus Notes, due 2025	140	140
2.75% €750 million Notes, due 2026	734	853
7.875% Surplus Notes, due 2026	227	227
7.625% Notes, due 2028	3	3
4.569% Notes, due 2029	1,000	1,000
1.37% - 4.25% Federal Home Loan Bank Borrowings due 2033[2]	396	300
Floating Rate Junior Subordinated Notes, due 2033[3]	15	-
7.00% Notes, due 2034	124	124
6.50% Notes, due 2035	271	271
Floating Rate Junior Subordinated Notes, due 2035[4]	40	-
7.50% Notes, due 2036	19	19
6.50% Notes, due 2042	250	250
4.85% Notes, due 2044	564	564
4.50% Notes, due 2049	232	232
3.951% Notes, due 2050	1,248	1,248
4.125% Junior Subordinated Notes, due 2051[5]	500	500
5.50% Notes, due 2052	1,000	-
3.625% €500 million Junior Subordinated Notes, due 2059[6]	490	568
3.95% Notes, due 2060	746	746
4.30% Junior Subordinated Notes, due 2061[7]	800	800
7.80% Junior Subordinated Notes, due 2087[8]	437	437
10.75% Junior Subordinated Notes, due 2088[9]	35	35
7.697% Surplus Notes, due 2097	260	260
Total long-term debt excluding unamortized discount and debt issuance costs	10,021	9,692
Unamortized discount	(441)	(453)
Long-term debt excluding unamortized debt issuance costs	9,580	9,239
Unamortized debt issuance costs	(65)	(58)
Total long-term debt	$9,515	$9,181

(1) Short-term debt is the current maturities of the 4.95% Notes, due May 1, 2022, and the 4.25% Notes, due June 15, 2023.
(2) FHLB long-term borrowings include $96 from the acquisition of State Auto on March 1, 2022.
(3) Floating rate callable at par plus accrued interest on each quarterly interest payment date. The floating rate equals to three-month LIBOR plus 4.20%.
(4) Floating rate callable at par plus accrued interest on each quarterly interest payment date. The floating rate equals to three-month LIBOR plus 3.70%.
(5) The par value call date is three months prior to and on December 15, 2026, after which the notes are callable at par during the three-month period prior to and on each succeeding interest reset date.
(6) The par value call date and final fixed rate interest payment date is May 23, 2024, subject to certain requirements.
(7) The par value call date is February 1, 2026, after which the notes are callable at par on each subsequent interest payment date.
(8) The par value call date and final fixed rate interest payment date is March 15, 2037, subject to certain requirements.
(9) The par value call date and final fixed rate interest payment date is June 15, 2038, subject to certain requirements.

Debt Transactions and In-Force Credit Facilities

On September 2, 2022, $11 of State Automobile Mutual Insurance Company ("SAM") Federal Home Loan Bank (FHLB) borrowings were paid.

On September 21, 2022, $19 of SAM and $21 of State Auto Property & Casualty Insurance Company ("SPC") FHLB borrowings were paid.

On June 6, 2022, Liberty Mutual Group, Inc. ("LMGI") issued $1,000 of Senior Notes, due 2052 (the "2052 Notes"). Interest is payable semi-annually at a fixed rate of 5.50%. The 2052 Notes mature on June 15, 2052.

On May 2, 2022, $473 of LMGI 4.95% Notes were paid at maturity.

On April 18, 2022, LMGI amended and restated its five-year unsecured revolving credit facility of $1,000 with an expiration date of April 18, 2027. To date, no funds have been borrowed under the facility.

On August 16, 2021, LMGI issued $500 of Series F Junior Subordinated Notes, due 2051 (the "Series F Notes"). Interest is payable semi-annually at a fixed rate of 4.125%. The Series F Notes may be redeemed in whole or in part three months prior to and on December 15, 2026, after which the notes may be redeemed during the three-month period prior to and on each succeeding interest reset date. The interest reset dates are on each five-year anniversary of December 15, 2021 until December 15, 2051.

On June 1, 2021, $330 of LMGI 5.00% Notes were paid at maturity.

On February 1, 2021, LMGI issued $800 of Series E Junior Subordinated Notes, due 2061 (the "Series E Notes"). Interest is payable semi-annually at a fixed rate of 4.30%. The Series E Notes may be redeemed in whole or in part on February 1, 2026, after which the notes may be redeemed on any interest payment date thereafter until February 1, 2061.

LMIC, Peerless Insurance Company ("PIC"), Liberty Mutual Fire Insurance Company ("LMFIC"), Employers Insurance Company of Wausau ("EICOW"), SAM, SPC and Rockhill Insurance Company ("RIC") are members of the Federal Home Loan Bank. On March 21, 2012, LMFIC borrowed $150 at a rate of 3.91% with a maturity date of March 22, 2032. On March 23, 2012 and April 2, 2012, LMIC borrowed $127 at a rate of 4.24% with a maturity date of March 23, 2032, and $23 at a rate of 4.25% with a maturity date of April 2, 2032, respectively. On May 17, 2018, SPC borrowed $96 at a rate of 3.96% with a maturity date of May 17, 2033. As of September 30, 2022, all outstanding Federal Home Loan Bank borrowings are fully collateralized. Ironshore Indemnity Insurance ("III") and Ironshore Specialty Insurance Company ("ISIC") memberships were cancelled on February 24th and 25th, 2020, respectively. III's membership was cancelled effective on February 9, 2022. For ISIC there is a five-year waiting period requirement for final cancellation of membership, so the effective date of its membership will be February 2025.

Payments of interest and principal of the surplus notes are expressly subordinate to all policyholder claims and other obligations of LMIC. Accordingly, interest and principal payments are contingent upon prior approval of the Commissioner of Insurance of the Commonwealth of Massachusetts.

(6) UNPAID CLAIMS AND CLAIM ADJUSTMENT EXPENSES

The Company establishes reserves for payment of claims and claim adjustment expenses that arise from the policies issued. As required by applicable accounting rules, no reserves are established until a loss, including a loss from a catastrophe, occurs. The Company's reserves are segmented into three major categories: reserves for reported claims (estimates made by claims adjusters); incurred but not reported claims reserves ("IBNR") representing reserves for unreported claims and supplemental reserves for reported claims; and reserves for the costs to settle claims. The Company establishes its reserves net of salvage and subrogation by line of business or coverage and year in which losses occur.

Establishing loss reserves, including loss reserves for catastrophic events that have occurred, is an estimation process. Many factors can ultimately affect the final settlement of a claim and, therefore, the necessary reserve. Changes in the law, results of litigation, medical costs, the costs of repair materials and labor rates can all affect ultimate claim costs. In addition, time can be a critical part of reserving determinations since the longer the span between the incidence of a loss and the payment or settlement of the claim, the more variable the ultimate settlement can be. Accordingly, "short-tail" claims, such as property damage claims, tend to be easier to estimate than "long-tail" claims, such as workers compensation or general liability claims.

As information develops that varies from past experience, provides additional data or augments data that previously was not considered sufficient for use in determining reserves, changes in the Company's estimate of ultimate liabilities may be required. The effects of these changes are reflected in current operating results.

In order to establish a reserve for IBNR claims, the actuarial teams within each of the SBUs use their experience and knowledge of the lines of business to estimate the potential future development of the incurred claims. The Company uses a number of actuarial methods and assumptions to develop an estimate of ultimate claim liabilities. Generally, these are a combination of exposure and experience based actuarial methods and review of other pertinent and available information from claims, underwriting, product and finance. Exposure based actuarial methods consider historical loss ratios and adjust for rate changes, premium and loss trends, industry trends and other information. These methods are typically used when developing an actuarial central estimate for more recent policy periods when claims data is insufficient to produce a reliable indication. As claims data becomes more reliable for a given policy period, more consideration is given to experience methods which review and monitor actual paid and reported development.

(dollars in millions)

A comprehensive actuarial reserve review is performed for each product line at least once a year. The process and methods used for each product line vary depending on the circumstances and include input from claims, underwriting, product and finance. Each quarter the actuarial central estimate for each product line is reviewed and updated based upon development and presented to the reserving committee to conclude on the Company's best estimate of ultimate claim liabilities.

Activity in property and casualty unpaid claims and claim adjustment expenses of the Company are summarized as follows:

	2022	2021
Balance as of January 1	$72,049	$67,465
Less: unpaid reinsurance recoverables (1)	12,638	11,322
Net balance as of January 1	59,411	56,143
Balance attributable to acquisitions, mergers and dispositions (2)	1,527	(442)
Incurred attributable to:		
Current year	26,346	22,428
Prior years (3)	(288)	(84)
Discount accretion attributable to prior years	27	32
Total incurred	26,085	22,376
Paid attributable to:		
Current year	12,131	10,535
Prior years	10,198	8,387
Total paid	22,329	18,922
Amortization of deferred retroactive reinsurance gain	16	9
Net adjustment due to foreign exchange	(1,162)	(332)
Add: unpaid reinsurance recoverables (1)	13,503	12,041
Balance as of September 30	$77,051	$70,873

(1) In addition to the unpaid reinsurance recoverable balances noted above, and as a result of retroactive reinsurance agreements, the Company has recorded retroactive reinsurance recoverable balances of $4,130 and $4,329 as of September 30, 2022 and 2021, respectively.

(2) The balance attributable to acquisitions, mergers and dispositions in 2022 represents the impact of the termination of our participation in Syndicates 2014 and 1980 via reinsurance to close transactions with Riverstone, as well as the mutual merger with State Auto Group. The balance attributable to acquisitions, mergers and dispositions in 2021 represents the impact of the termination of our participation in Syndicate 4000 via a reinsurance to close transaction with Riverstone.

(3) Does not include decreases in allowance related to reinsurance recoverables due to prior year development of $2 and $5 as of September 30, 2022 and 2021, respectively.

In 2022, the change in incurred attributable to prior years, excluding asbestos and environmental and amortization of deferred retroactive loss, is primarily attributable to favorable development on personal auto, specialty, and surety lines of business, partially offset by unfavorable development on casualty/general liability and reinsurance. In 2021, the change in incurred attributable to prior years, excluding asbestos and environmental and amortization of deferred retroactive loss, is primarily attributable to favorable development on the commercial multi-peril, homeowners, and personal auto lines of business, partially offset by unfavorable development on casualty runoff reserves and reinsurance.

In response to the COVID-19 pandemic, several states have passed amendments to expand Workers' Compensation coverage to ensure certain workers who contract the virus are eligible for compensation. In addition, some states have explored legislation that may expand the coverage obligations of certain insurance policies such as business interruption policies. The Company continues to evaluate the potential exposures but could experience increased claims frequency and severity depending on the terms and number of states implementing such changes.

Asbestos and Environmental Reserves

The Company's asbestos and environmental reserves for unpaid claims and claim adjustment expenses, net of reinsurance before the NICO Reinsurance Transaction and including uncollectible reinsurance, were $1,173 and $1,232 as of September 30, 2022 and December 31, 2021, respectively.

(dollars in millions)

(7) INCOME TAXES

The income tax provision is calculated under the liability method of accounting. The Company recognizes deferred income tax assets and liabilities for the expected future tax effects attributable to temporary differences between the financial statement and tax return bases of assets and liabilities based on enacted tax rates and other provisions of the tax laws. The effect of a change in tax laws or rates on deferred tax assets and liabilities is recognized in income in the period in which such change is enacted. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that all or some portion of the deferred tax assets will not be realized.

The Company's effective tax rate on continuing operations differs from the U.S. Federal statutory rate of 21% primarily due to the impact of non-U.S. operations, partially offset by tax-exempt investment income.

For the three-month period ended September 30, 2022, the Company established a partial valuation allowance of $63 on certain deferred tax assets related to unrealized losses in the available for sale securities portfolio. As part of evaluating whether it was more likely than not that the Company could realize the tax benefit from these losses, the Company considered all available positive and negative evidence. The establishment of this valuation allowance was allocated to other comprehensive income.

On August 16, 2022, the U.S. enacted the Inflation Reduction Act ("IRA"). For tax years beginning after December 31, 2022, the IRA imposes a new corporate alternative minimum tax ("CAMT") on applicable corporations with average adjusted financial statement income in excess of $1,000 for the three prior tax years. The Company expects to be an applicable corporation subject to the CAMT; however, it is not expected to have a material effect on the Company's consolidated results of operations or financial position. As Treasury issues guidance related to the IRA, the Company will continue to evaluate any impacts.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

Balance at December 31, 2021	$72
Additions based on tax positions related to current year	12
Additions for tax positions of prior years	2
Reductions for tax positions of prior years	(3)
Settlements	(1)
Translation	1
Balance at September 30, 2022	$83

Included in the tabular roll-forward of unrecognized tax benefits are interest and penalties in the amount of $33 and $31 as of September 30, 2022 and December 31, 2021, respectively.

Included in the balance at September 30, 2022 is $66 related to tax positions that would impact the effective tax rate.

The Company recognizes interest and penalties related to unrecognized tax benefits in U.S. Federal, state, and foreign income tax expense. For the three months ended September 30, 2022 and 2021, the Company recognized $0 and $1 of interest and penalties, respectively. For the nine months ended September 30, 2022 and 2021, the Company recognized $0 and $2 of interest and penalties, respectively. The Company had approximately $32 and $29 of interest and penalties accrued as of September 30, 2022 and December 31, 2021, respectively.

The U.S. Federal statute of limitations has expired through the 2017 tax year. The Company has foreign entities that are open for examination in their local countries for tax years after 2015. Any adjustments that may result from the examinations of these income tax returns are not expected to have a material impact on the financial position, liquidity, or results of operations of the Company.

The Company does not expect any significant changes to its liability for unrecognized tax benefits during the next twelve months.

(dollars in millions)

(8) BENEFIT PLANS

The net benefit costs for the three and nine months ended September 30, 2022 and 2021, include the following components:

Three months ended September 30,	**Pension Benefits**		**Supplemental Pension Benefits (1)**		**Postretirement Benefits**	
	2022	**2021**	**2022**	**2021**	**2022**	**2021**
Components of net periodic benefit costs:						
Service costs	$41	$40	$2	$2	$3	$4
Interest costs	54	50	3	2	7	6
Expected return on plan assets	(128)	(121)	-	-	-	-
Settlement Charge	-	36	-	-	-	-
Amortization of unrecognized:	-	-	-	-	-	-
Net loss	32	40	5	7	3	5
Prior service cost	(5)	(6)	(1)	(1)	(3)	(4)
Net periodic benefit costs(2)	$(6)	$39	$9	$10	$10	$11

(1) The Company sponsors non-qualified supplemental pension plans to restore to selected highly compensated employees the pension benefits to which they would be entitled under the Company's U.S. tax qualified, defined benefit pension plan had it not been for limits imposed by the Internal Revenue Code. The supplemental plans are unfunded.

(2) All components of net periodic benefit costs are reported in operating costs and expenses on the accompanying consolidated statements of income.

Nine months ended September 30,	**Pension Benefits**		**Supplemental Pension Benefits (1)**		**Postretirement Benefits**	
	2022	**2021**	**2022**	**2021**	**2022**	**2021**
Components of net periodic benefit costs:						
Service costs	$122	$119	$6	$5	$10	$12
Interest costs	160	149	8	8	19	17
Expected return on plan assets	(378)	(391)	-	-	-	-
Settlement Charge	-	146	-	-	-	-
Amortization of unrecognized:	-	-	-	-	-	-
Net loss	94	120	15	20	10	15
Prior service cost	(16)	(17)	(2)	(3)	(9)	(10)
Net periodic benefit costs(2)	$(18)	$126	$27	$30	$30	$34

(1) The Company sponsors non-qualified supplemental pension plans to restore to selected highly compensated employees the pension benefits to which they would be entitled under the Company's U.S. tax qualified, defined benefit pension plan had it not been for limits imposed by the Internal Revenue Code. The supplemental plans are unfunded.

(2) All components of net periodic benefit costs are reported in operating costs and expenses on the accompanying consolidated statements of income.

In 2020, the Company offered a voluntary early retirement option ("ERO") to U.S. employees meeting certain age and service requirements. Employees opting into the program will receive an enhanced pension benefit and were required to terminate employment with the Company between December 31, 2020 and December 30, 2021. The Company recorded $110 of settlement charges in restructuring costs in the consolidated statement of operations for the period ended September 30, 2021.

The Company has contributed $0 to the qualified plans as of September 30, 2022, and does not expect any additional contributions for 2022.

(9) FAIR VALUE OF FINANCIAL INSTRUMENTS

Fair value is the price that would be received to sell an asset or would be paid to transfer a liability in an orderly transaction between market participants at the measurement date. In determining fair value, the Company primarily uses the market approach, which generally utilizes market transaction data for identical or similar instruments.

The hierarchy level assigned to each security in the Company's investments portfolio is based on the Company's assessment of the transparency and reliability of the inputs used in the valuation of each instrument at the measurement date. The highest priority is given to unadjusted quoted prices in active markets for identical assets (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Securities are classified based on the lowest level of input that is significant to the fair value measurement. The Company recognizes transfers between levels at the end of each reporting period. The three hierarchy levels are defined as follows:

- Level 1 — Valuations based on unadjusted quoted market prices in active markets for identical assets or liabilities that the Company has the ability to access.
- Level 2 — Valuations based on observable inputs (other than Level 1 prices), such as quoted prices for similar assets or liabilities at the measurement date, quoted prices in markets that are not active, or other inputs that are observable, either directly or indirectly.
- Level 3 — Valuations based on inputs that are unobservable and significant to the overall fair value measurement and involve management judgment. The unobservable inputs reflect the Company's estimates of the assumptions that market participants would use in valuing the assets and liabilities.

The availability of observable inputs can vary from financial instrument to financial instrument and is affected by a wide variety of factors, including, for example, the type of financial instrument, whether the financial instrument is new and not yet established in the marketplace, and other characteristics particular to the financial instrument. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires significantly more judgment. Accordingly, the degree of judgment exercised by management in determining fair value is greatest for instruments categorized in Level 3.

The Company is responsible for the determination of fair value and the supporting assumptions and methodologies. The Company gains assurance on the overall reasonableness and consistent application of valuation methodologies and inputs and compliance with accounting standards through the execution of various processes and controls designed to ensure that the Company's assets and liabilities are appropriately valued. For fair values received from third parties or internally estimated, the Company's processes are designed to determine that the valuation methodologies and inputs are appropriate and consistently applied, the assumptions are reasonable and consistent with the objective of determining fair value, and the fair values are accurately recorded. For example, on a continuing basis, the Company assesses the reasonableness of individual fair values that have stale security prices or that exceed certain thresholds as compared to previous fair values received from valuation service providers or brokers or derived from internal models. The Company performs procedures to understand and assess the methodologies, processes and controls of valuation service providers. In addition, the Company may validate the reasonableness of fair values by comparing information obtained from valuation service providers or brokers to other third party valuation sources for selected securities.

The Company used the following methods and assumptions in estimating the fair value of its financial instruments as well as the general classification of such financial instruments pursuant to the above fair value hierarchy:

Fixed Maturities
At each valuation date, the Company uses various valuation techniques to estimate the fair value of its fixed maturities portfolio. The primary method for valuing the Company's securities is through independent third-party valuation service providers. For positions where valuations are not available from independent third-party valuation service providers, the Company utilizes broker quotes and internal pricing methods to determine fair values. The Company obtains a single non-binding price quote from a broker familiar with the security who, similar to the Company's valuation service providers, may consider transactions or activity in similar securities, as applicable, among other information. The brokers providing price quotes are generally from the brokerage divisions of leading financial institutions with market making, underwriting and distribution expertise regarding the security subject to valuation. The evaluation and prioritization of these valuation sources is systematic and predetermined resulting in a single quote or price for each financial instrument. The following describes the techniques generally used to determine the fair value of the Company's fixed maturities by asset class:

U.S. Government and Agency Securities
U.S. government and agency securities consist primarily of bonds issued by the U.S. Treasury and mortgage pass-through agencies such as the Federal Home Loan Bank, the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation. As the fair values of the Company's U.S. Treasury securities are based on active markets and unadjusted market prices, they are classified within Level 1. The fair value of U.S. government agency securities is generally determined using observable market inputs that include quoted prices for identical or similar assets in markets that are not active, benchmark yields, reported trades, bids, offers and credit spreads. Accordingly, the fair value of U.S. government agency securities is primarily classified within Level 2.

Mortgage-Backed Securities
The Company's portfolio of residential and commercial MBS is originated by both agencies and non-agencies, the majority of which are pass-through securities issued by U.S. government agencies. The fair value of MBS is generally determined using observable market inputs that include quoted prices for identical or similar assets in markets that are not active, benchmark yields, contractual cash flows, prepayment speeds, collateral performance and credit spreads. Accordingly, the fair value of MBS is primarily classified within Level 2.

Asset-Backed Securities
ABS include mostly investment-grade bonds backed by pools of loans with a variety of underlying collateral, including automobile loan receivables, credit card receivables, and collateralized loan obligation securities originated by a variety of financial institutions. The fair value of ABS is generally determined using observable market inputs that include quoted prices for identical or similar assets in markets that are not active, benchmark yields, contractual cash flows, prepayment speeds, collateral performance and credit spreads. Accordingly, the fair value of ABS is primarily classified within Level 2.

Municipal Securities
The Company's municipal portfolio is comprised of bonds issued by U.S. domiciled state and municipal entities. The fair value of municipal securities is generally determined using observable market inputs that include quoted prices for identical or similar assets in markets that are not active, benchmark yields, binding broker quotes, issuer ratings, reported trades and credit spreads. Accordingly, the fair value of municipal securities is primarily classified within Level 2.

Corporate Debt and Other Securities
Corporate debt securities consist primarily of investment-grade debt of a wide variety of corporate issuers and industries. The fair value of corporate and other securities is generally determined using observable market inputs that include quoted prices for identical or similar assets in markets that are not active, benchmark yields, new issuances, issuer ratings, reported trades of identical or comparable securities, bids, offers and credit spreads. Accordingly, the fair value of corporate and other securities is primarily classified within Level 2. In the event third-party vendor valuation is not available, prices are determined using non-binding price quotes from a broker familiar with the security. In this instance, the valuation inputs are generally unobservable and the fair value is classified within Level 3.

Foreign Government Securities
Foreign government securities include bonds issued or guaranteed by foreign governments. The fair value of foreign government securities is generally determined using observable market inputs that include quoted prices for identical or similar assets in markets that are not active, benchmark yields, binding broker quotes, issuer ratings, reported trades of identical or comparable securities and credit spreads. Accordingly, the fair value of foreign government securities is primarily classified within Level 2. In the event third-party vendor valuation is not available, prices are determined using non-binding price quotes from a broker familiar with the security. In this instance, the valuation inputs are generally unobservable and the fair value is classified within Level 3.

Equity Securities
Equity securities include common and preferred stocks. Common stocks with fair values based on quoted market prices in active markets are classified within Level 1. Common stocks with fair values determined using observable market inputs that include quoted prices for identical or similar assets in markets that are not active are classified within Level 2. The fair value of preferred stock is generally determined using observable market inputs that include quoted prices for identical or similar assets in markets that are not active. Accordingly, the fair value of preferred stock is primarily classified within Level 2.

Short-Term Investments
The fair value of short-term investments is generally determined using observable market inputs that include quoted prices for identical or similar assets in markets that are not active, benchmark yields, new issuances, issuer ratings, reported trades of identical or comparable securities, bids, offers and credit spreads. Accordingly, the fair value of short-term investments is primarily classified within Level 2 of the fair value hierarchy.

Other Investments
Other investments include primarily foreign cash deposits, equity investments in privately held businesses and limited partnerships where the Company has elected the fair value option. Cash deposits are primarily valued using quoted prices for similar instruments in active markets; these assets are categorized within Level 2 of the fair value hierarchy. Equity investments in privately held businesses are valued using internal management estimates; they are categorized within Level 3 of the hierarchy. Loans, limited partnership and other equity method investments, which represent the remainder of the other investment balance on the accompanying consolidated balance sheet are not subject to these disclosures and therefore are excluded from the table in this note.

Other Assets and Other Liabilities
Other assets primarily consist of fixed maturities, short-term investments, and equity securities of captive companies sponsored by the Company. These assets are measured based on the methodology for individual securities as discussed above.

Additionally, other assets and other liabilities classified within Level 2 and Level 3 represent the Company's derivatives which can be exchange-traded or traded over-the-counter ("OTC"). OTC derivatives are valued using market transactions and other market evidence whenever possible, including market-based inputs to models, model calibration to market clearing transactions, broker or dealer quotations or alternative pricing sources with reasonable levels of price transparency. When models are used, the selection of a particular model to value an OTC derivative depends on the contractual terms of, and specific risks inherent in the instrument, as well as the availability of pricing information in the market. The Company generally uses similar models to value similar instruments. Valuation models require a variety of inputs, including contractual terms, market prices and rates, yield curves, credit curves, measures of volatility, prepayment rates and correlations of such inputs. For OTC derivatives that trade in liquid markets, such as generic forwards, swaps and options, model inputs can generally be corroborated by observable market data by correlation or other means, and model selection does not involve significant management judgment.

(dollars in millions)

Life Insurance Obligations
Life insurance obligations include certain variable annuity contracts that provide guaranteed minimum income benefits. These benefits are accounted for as embedded derivatives and are bifurcated from the host contract and carried at fair value. The fair value of these embedded derivatives is computed on a recurring basis using assumptions predominately classified as Level 3 (significant unobservable) inputs. While some inputs are observable in the market, such as risk free rates, volatility and historical equity returns, the underlying future policyholder behavior inputs are highly unobservable. The significant policyholder behavior assumptions include lapse and the underlying annuitization rate.

The following tables summarize the Company's assets and liabilities that are measured at fair value on a recurring basis as of September 30, 2022 and December 31, 2021:

	As of September 30, 2022			
Assets, at Fair Value	**Level 1**	**Level 2**	**Level 3**	**Total**
U.S. government and agency securities	$7,748	$262	$-	$8,010
Residential MBS	-	5,915	-	5,915
Commercial MBS	-	4,093	106	4,199
Other MBS and ABS	-	4,447	94	4,541
U.S. state and municipal	-	6,898	468	7,366
Corporate and other	-	29,775	459	30,234
Foreign government securities	-	4,918	23	4,941
Reedemable Preferred Stock	-	-	40	40
Total fixed maturities, available for sale	7,748	56,308	1,190	65,246
Common stock	1,068	18	607	1,693
Preferred stock	-	-	1	1
Total equity securities	1,068	18	608	1,694
Short-term investments	16	404	27	447
Other investments	43	136	1,337	1,516
Other assets	-	-	10	10
Total assets	$8,875	$56,866	$3,172	$68,913
Liabilities, at Fair Value				
Life insurance obligations	$-	$-	$(52)	$(52)
Other liabilities	-	(109)	-	(109)
Total liabilities	$-	$(109)	$(52)	$(161)

	As of December 31, 2021			
Assets, at Fair Value	**Level 1**	**Level 2**	**Level 3**	**Total**
U.S. government and agency securities	$11,393	$63	$-	$11,456
Residential MBS	-	5,368	-	5,368
Commercial MBS	-	4,100	116	4,216
Other MBS and ABS	-	5,469	82	5,551
U.S. state and municipal	-	8,435	345	8,780
Corporate and other	-	31,574	1,062	32,636
Foreign government securities	-	5,093	6	5,099
Total fixed maturities, available for sale	11,393	60,102	1,611	73,106
Common stock	2,918	29	76	3,023
Preferred stock	1	2	8	11
Total equity securities	2,919	31	84	3,034
Short-term investments	6	186	26	218
Other investments	32	146	1,108	1,286
Other assets	-	-	19	19
Total assets	$14,350	$60,465	$2,848	$77,663

(dollars in millions)

Liabilities, at Fair Value				
Life insurance obligations	$-	$-	$(91)	$(91)
Other liabilities	-	(2)	-	(2)
Total liabilities	$-	$(2)	$(91)	$(93)

The following tables summarize the fair values of assets on a recurring basis classified as Level 3 within the fair value hierarchy:

	As of September 30, 2022			**As of December 31, 2021**		
	Purchases	**Transfer in to Level 3**	**Transfer out of Level 3**	**Purchases**	**Transfer in to Level 3**	**Transfer out of Level 3**
Assets, at Fair Value						
U.S. government and agency securities	$-	$-	$-	$-	$-	$-
Residential MBS	-	-	-	32	-	(98)
Commercial MBS	31	-	(44)	-	28	-
Other MBS and ABS	-	32	(10)	83	-	(12)
U.S. state and municipal	7	181	-	-	257	-
Corporate and other	941	-	(79)	1,024	11	(44)
Foreign government securities	21	-	-	-	6	-
Reedemable Preferred Stock	40	-	-			
Total fixed maturities	1,040	213	(133)	1,139	302	(154)
Common stock	2,486	64	(23)	54	-	(37)
Preferred stock	1	-	-	1	-	-
Total equity securities	2,487	64	(23)	55	-	(37)
Short-term investments	60	-	-	39	-	-
Other investments	552	472	(467)	412	449	-
Other assets	-	-	-	-	-	-
Total assets	$4,139	$749	$(623)	$1,645	$751	$(191)
Liabilities, at Fair Value						
Life insurance obligations	$6	$-	$-	$8	$-	$-
Total liabilities	$6	$-	$-	$8	$-	$-

Transfers into and out of Level 3 were primarily due to changes in the observability of pricing inputs.

The Company had no material assets or liabilities that were measured at fair value on a nonrecurring basis during the three months ended September 30, 2022.

Fair Value Option

The Company has elected to apply the fair value option to certain financial instruments in limited circumstances. The fair value option election is made on an instrument by instrument basis. All periodic changes in the fair value of the elected instruments are reflected in the accompanying consolidated statements of income. The impact of the fair value option election is 1% of total invested assets.

The Company has not applied ASC 820 to non-financial assets and liabilities.

(10) COMMITMENTS AND CONTINGENT LIABILITIES

Various lawsuits against the Company have arisen in the normal course of business. Contingent liabilities arising from litigation, income taxes, and other matters are not considered material in relation to the financial position of the Company.

As of September 30, 2022, the Company had unfunded commitments in traditional private equity partnerships, real estate, private credit, natural resources, and other of $2,320, $3,060, $1,791, $1,041 ($984 of which is related to energy transition and infrastructure), and $76, respectively.

As of September 30, 2022, the Company had commitments to purchase various residential MBS at a cost and fair value of $50 and $47, respectively.

(11) SUBSEQUENT EVENTS

Management has assessed material subsequent events through November 3, 2022, the date the financial statements were available to be issued.